Part III

COMPANIES AND ORGANIZATIONS: Products and areas of research

AUSTRALASIA

A E Stansen & Co

121 Ricketts Rd, PO Box 118, Mount Waverley, Victoria 3149 Australia. Tel: 03 544 8022 Telex: 31836 Fax: 03 543 5604

Supplies immunological and biological reagents. Distributor for Australian Monoclonal Pty Ltd. Subsidiary of Phoenix Scientific Industries Ltd.

Activon Scientific Products Co Pty Ltd

27 Oakleigh Avenue, Granville, NSW 2142 Australia.

Supplies ion-exchange resins and speciality column packings for HPLC, amino acid calibration standards and buffers for amino acid analysis.

Adam Scientific Supplies Pty Ltd

Supplies diagnostics, monoclonal and polyclonal antibodies, serums, antiserums and animal tissues (see Serotec Ltd, UK).

The Adelaide Children's Hospital Inc

72 King William Road, North Adelaide, South Australia 5006 Australia. Tel: 08 267 7284 Telex: 89178 Fax: 08 267 7342

Includes the Lysosomal Disease Research Unit, the Australasian diagnostic reference centre for all lysosomal storage disorders. Carrying out a broad programme of research on areas of lysosome assembly and function, pathophysiology of lysosome storage disorders, diagnosis and treatment.

Advanced Breeding Technology Pty Ltd

PO Box 4, c/o Dept of Biochemistry, Australian National University, Canberra 2601 Australia.

Tel: 062 476 596 Fax: 062 485 641

Consultants offering services in research and development in the application of recombinant DNA technology to animal breeding and other biotechnological areas including DNA probes and sequencing.

Aeration & Allied Technology Pty Ltd

PO Box 301, Kogarah, NSW 2217 Australia. Tel: 02 546 7855 Fax: 02 547 1663

Manufacture waste treatment systems for sewage and wastewater.

Ag-Seed Pty Ltd

PO Box W324, West Tamworth, Sydney, NSW 2340 Australia. Tel: 067 655 200 Telex: 161413 Fax: 067 652 044

Plant breeders specializing in grain and forage crops including dual purpose hybrid Sorghum (both feed and seed) as well as maize and sunflower hybrids.

Agen Biomedical Ltd

formerly MabCo Ltd & Australian Genetic Engineering Ltd
11 Durbell St, PO Box 391, Acacia Ridge, Queensland 4110 Australia.

Tel: 07 273 6266

Telex: 10720745

Fax: 07 273 6224

Has research agreements with a number of companies to develop monoclonal based diagnostics for blood clots, canine heartworm and trypsinogen levels in blood spots as an early diagnostic test for neonatal cystic fibrosis. Carrying out research and development in areas of human diagnostics and immunoassays, coagulation, fibrinolysis, neonatal screening, whole blood immunoassays and veterinary diagnostics. Subsidiary of Agen Ltd, Australia.

Agrimark Consultants Pty Ltd

37 Oxford St, Collingwood, Melbourne, Victoria 3066 Australia. Tel: 03 417 2533

Biotechnology marketing consultants.

Agrimm Biologicals Ltd

PO Box 13644, Christchurch New Zealand. Tel: 03 668 671 Fax: 03 668 671

Offer services in agricultural research in the areas of monclonal antibodies, immunoassay, vaccines and other veterinary products as well as biological control. Produce antimicrobials.

Agrisearch Services Pty Ltd

50 Leewood Drive, PO Box 972, Orange, NSW 2800 Australia. Tel: 063 624 539 Fax: 063 627 844

Offer services in agricultural research, development and product testing in biological control, agrochemicals and plant propagation.

AHS Australia Pty Ltd

Centre Court, 25-27 Paul Street, North Ryde, NSW 2113 Australia. Tel: (02) 888 2655 Telex: 24365

Supplies chemicals and reagents for clinical chemistry, research and molecular biology including lectins and agglutinins, antibodies and antiserums, affinity chromatography supports, carbohydrates, and enzymes and reagents for polypeptide sequence analysis.

Alfa Laval Engineering

Manufacture and supply equipment to the pharmaceutical and biotechnology industries including sterilizers, fermenters, filtration and separation equipment, centrifuges and waste treatment systems, automation and plant installation (see Alfa Laval, Sweden).

Alltech Associates (Australia) Pty Ltd

PO Box 139, North Strathfield, NSW 2137 Australia.

Tel: 02 736 3400 Telex: 126626 Fax: 03 736 3856

Supplies materials and accessories for chromatography including packings and supports, capillary, metal and glass columns, prepacked columns and solvents for high performance chromatography. Also supplies fluorescent detectors for monitoring liquid separations and other laboratory equipment (see Alltech Associates Inc, US).

Alpha Biologicals

PO Box 38-213, Howick, Auckland New Zealand. Tel: 535 9024

Carries out contract research in biotechnology. Subsidiary of the Cawthron Institute New Zealand.

Amcor Ltd

Developing techniques of plant breeding and waste treatment in relation to forestry and agriculture.

Amde

PO Box 114, Eastwood, South Australia 5063 Australia. Tel: 08 372 2700 Telex: 82520

Offer analytical services and research and development to the agricultural, food and environment industries.

Amersham Australia Pty Ltd

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Part III AUSTRALASIA

Amicon Scientific Australia

Supply equipment and materials for separation technology including ultrafiltration, microfiltration, membrane separation and affinity chromatography, products of Amicon Division W R Grace, US.

Amrad Corp Ltd

Unit 6, 663 Victoria St, Abbotsford, Victoria 3067 Australia. Tel: 03 429 1733 Fax: 03 428 3245

Supplies a range of immunological and biological products by fermentation, genetic engineering and mammalian cell culture including monoclonal antibodies, hormones and proteins. Developing diagnostic tests for hepatitis, AIDS and hormones. Offers services in custom production. Has joint venture with Trace Scientific Ltd to produce immunodiagnostics.

Anutech Ptv Ltd

PO Box 4, Canberra City, ACT 2601 Australia. Tel: 06 249 2578 Fax: 06 257 1433

Carries out contract research and development of equipment and products for the agricultural and environmental industries to commercialise technology initiated at the Australian National University in recombinant DNA technology, animal breeding and microbiology.

Applied Biosystems (Australia) Pty Ltd

26 Harker St, Burwood, Melbourne, Victoria 3125 Australia. *Tel:* 03 288 7777 *Fax:* 03 887 1469

Supply equipment and reagents for synthesis of oligonucleotides; products of Applied Biosystems, US.

APV Baker Pty Ltd

10 Blissington St, Springvale, Melbourne, Victoria 3171 Australia. Tel: 03 549 2222 Telex: 30050 Fax: 03 548 1985

Supply process technology to the food, dairy and brewing industries including custom-built plant for all stages of production from ingredients to packaging.

Aquatec-Maxcon Pty Ltd

8 West St, North Sydney, NSW 2060 Australia. Tel: 02 957 4077 Fax: 02 957 5579

Consultant engineers in wastewater treatment. Supply anaerobic and aerobic systems.

Arthur Webster Pty Ltd

Has joint venture with Peptide Technology Ltd to produce veterinary peptide vaccines.

Astral Medical Pty Ltd

Unit 1, 5 Wadhurst Drive, Boronia, Victoria 3155 Australia. Tel: 03 222 2422 Telex: 790 37871

Supplies immunological and biological reagents. Distributor for Atlantic Antibodies, US.

Auspep Pty Ltd

Member of Pharmol Pacific Group

PO Box 806, Parkville, Melbourne, Victoria 3052 Australia. Tel: 03 388 0822 Telex: 38110 spplml Fax: 03 387 3139

Offers contract and custom peptide synthesis, hydrogen fluoride cleavage of peptide-resins, deglycosylation and protein carrier conjugation as well as amino acid and peptide analysis. Carrying out research and development on peptides for the pharmaceutical industry.

Auspharm International Ltd

Level 15, 99 Mount St, North Sydney, NSW 2060 Australia. Tel: 02 457 5877 Telex: 121022 Fax: 02 92 8219

Manufacture pharmaceuticals including vitamins. Develop diagnostic tests, vaccines, drug delivery systems and veterinary products.

Austgen Biojet International Ltd

Develops aerobic and anaerobic industrial and domestic wastewater treatment processes. Carrying out research on amino-acid production by recombinant E coli, protein-enriched animal feed produced by fermentation, and a host/vector system for human recombinant DNA products.

Australian Atomic Energy Commission

Commercial Products Unit Bldg 23, Lucas Heights, NSW Australia. Tel: (02) 543 0111 Telex: 24562

Supplies radiochemicals.

Australian Biosearch Pty Ltd

PO Box 86, Karrinyup, Western Australia 6018 Australia. Tel: 09 344 1200 Fax: 09 345 1259

Distributors of biological reagents, culture media, immunodiagnostics, DNA probes, enzymes and equipment for sequencing, synthesis and fermentation.

Australian Diagnostics Corp

2 Keith Campbell Court, Scorsby, Victoria 3179 Australia. Tel: 03 763 6000 Telex: 32382 Fax: 03 763 6255

Supplies radioimmunoassay systems and other diagnostics of Immunochem Corp and Ciba Corning Diagnostics, US.

Australian Lab Service Pty

188 Princes Hwy, Arncliff, PO Box 193, Rockdale, Sydney, NSW 2216 Australia.

Tel: 02 59 5258 Telex: 25759

Supplies reagents for biochemical and diagnostic work including enzymes, histochemicals and radioimmunoassay materials. Also supplies hormones, antibodies and reagents and materials for peptide synthesis. Distributor for UCB Bioproducts and Kent Laboratories, US.

Australian Monoclonal Development Pty Ltd

65 Dickson Avenue, Artarmon, NSW 2064 Australia. Tel: 02 439 7555 Telex: 73396

Markets monoclonal antibodies from both mouse and human sources. Offers a custom order system for preparation of monoclonal antibodies and develops monoclonal antibodies originating from Australian research laboratories. Developing monoclonal antibodies as research reagents and therapeutic agents as well as a direct immunofluorescent test for Gonorrhea, a fluorochrome system and portable fluorescence reader. Products include a foecal occult blood test and monoclonal assays. Acquired by ICI Australia to be combined with Silenus Laboratories Pty Ltd.

Australian National Reference Laboratory in Medical Mycology

The Royal North Shore Hospital of Sydney

Pacific Highway, St Leonards, Sydney, NSW 2065 Australia.

Holds culture collection containing algae, fungi and yeasts with a special collection of aerobic actinomycetes for medical mycology research and teaching. Offers identification service.

Australian National University

Department of Genetics

PO Box 4, Canberra, ACT 2601 Australia. Tel: 062 476 596 Fax: 062 485 641

Carrying out research on strains of Pseudomonas cepacia that colonize roots of maize giving protection against pathogenic soil fungi.

The Australian Wine Research Institute

Offers analytical services. Carrying out research using recombinant DNA technology. Holds culture collection containing bacteria, fungi and yeasts for general, agricultural, industrial and medical microbiology research and teaching.

B Braun Australia Pty Ltd

Unit 3, 4 Gladstone Rd, Castle Hill, Sydney, NSW 2154 Australia. Tel: 02 680 4111 Telex: 177248 Fax: 02 680 2051

Supply equipment and control systems for fermentation including laboratory and pilot scale fermenters.

AUSTRALASIA Part III

BACTO Laboratories Pty Ltd

Supplies immunochemicals, purified blood fractions, animal blood products and tissues. Distributor for Biomakor, Israel.

Bay Milk Products

Bridge St, Edgecumbe, Bay of Plenty New Zealand. Tel: 76 49011 Telex: 21791 Fax: 76 49081

Manufacture milk protein-based products. Developing lactose fermentation processes and the production of single cell protein for animal feed as well as health foods and flavourings.

BDH Chemicals Australia Pty Ltd

Supplies a wide range of organic compounds as well as separation media, clinical diagnostic kits, reagents and control serums. Subsidiary of Merck, Switzerland.

BDH Chemicals New Zealand Ltd

PO Box 1246, Palmerston North, New Zealand. *Tel*: 82 038 *Telex*: 31476

Supplies a wide range of fine chemicals and biochemical reagents (see BDH Chemicals Ltd, UK).

BDH Diagnostics

270 Colchester Rd, Kilsyth 3137, Melbourne, Victoria 3102 Australia. Supplies immunological and biological reagents. Division of BDH Chemicals, Australia. Distributor for Nycomed Diagnostics, Norway.

Beckman Instruments (Australia) Pty Ltd

PO Box 218, 24 College Street, Gladesville, Sydney, NSW 2111 Australia. Tel: 02 816 5288 Telex: 71582 Fax: 02 816 3158

Supplies high speed centrifuges, radioactivity counting equipment, enzymes and biologicals (see Beckman Inc, US and SmithKline Beckman, US).

Betatene Ltd

71 Taunton Drive, Cheltenham, Melbourne, Victoria 3192 Australia. Tel: 03 584 4588 Telex: 136144 Fax: 03 584 8348

Harvest algae for production of animal feed supplements and food additives including beta carotene.

Binnie & Partners Pty Ltd

180 William St, Melbourne, Victoria 3000 Australia. Tel: 03 670 6391 Fax: 03 602 3993

Engineering consultants in waste treatment.

Bio-Rad Laboratories Pty Ltd

11-112 Talavera Rd, PO Box 371, North Ryde, Sydney, NSW 2113 Australia.

Tel: 02 805 1088 Telex: 70166

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Bio-Scientific Pty Ltd

PO Box 78, Gymca, NSW Australia. Tel: 02 521 2177 Telex: 22959

Supplies serums and antiserums as well as diagnostics for medical research. Distributor for Cedarlane Laboratories, Canada.

Bioassay Pty Ltd

Offer services in microbiological testing.

Bioclone Australia Pty Ltd

54 C Fitzroy Street, Marrickville, NSW 2204 Australia. Tel: 02 517 1966 Telex: 70875 Fax: 02 517 2990

Developing diagnostics and clinical tests based on monoclonal antibodies for pituitary hormones and steroids as well as DNA probes and biosensors. Offer services in product testing and manufacture.

Biocon Australia Ptv Ltd

31 Wadhurst Drive, Boronia, Victoria 3155 Australia. Tel: 03 221 7133 Telex: 37559

Supplies enzymes, natural colours and related products for the following industries: brewing, distilling, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Biocon Biochemicals NZ Ltd

11 Korimako Road, Days Bay, Eastbourne, Wellington New Zealand. Tel: Wellington 627102 Telex: 31483

Supplies enzymes, natural colours and related products for the following industries: brewing, distilling, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Biocontrol Ltd

Developing biopesticides based on Bacillus thuringiensis and on viruses which infect Heliothis species.

Bioenterprises Pty Ltd

28 Barcoo St, PO Box 20, Roseville, NSW 2069 Australia. Tel: 02 407 0271 Telex: 170599 Fax: 02 417 7858

Supply food diagnostic kits for Salmonella, Listeria and Staphylococcus enterotoxin based on ELISA, immunoassays, bioinsecticides and veterinary products including vaccines. Subsidiary of Biotechnology Australia.

Biolink Developments Ltd

6th Floor, NZ House, 58 Queens Drive, PO Box 30584, Lower Hutt, New Zealand.

Tel: 04 662 181 Fax: 04 699 155

Consultants in research, development and marketing of speciality chemicals produced by cell culture techniques.

Biomedical Systems Ltd

Offer services in research and development of diagnostic tests as well as producing immunoassays, hormones and monoclonal antibodies and supplying laboratory and industrial equipment.

Biomediq Pty Ltd

PO Box 106, Doncaster, Victoria 3108 Australia.

Tel: 03 890 2223 Telex: 36066 biomed Fax: 03 899 0642

Supply laboratory equipment and reagents as well as immunodiagnostics.

Bioquest Ltd

3-103 Delhi Rd, PO Box 388, North Ryde, NSW 2113 Australia. Tel: 02 886 4960 Telex: 22970 Fax: 02 888 9271

Supply biologicals, monoclonal antibodies, DNA probes, oligonucleotides, serums and antiserums for research and development.

Biosupplies Australia Pty Ltd

PO Box 835, Parkville, Melbourne, Victoria 3052 Australia. Tel: 03 348 1825 Fax: 03 347 1071

Supply biological stains, monoclonal antibodies, enzymes and enzyme substrates for research. Have joint venture with Sirius Biotechnology, Australia.

Biotech International Ltd

12/1 Sarich Way, PO Box 8272, Bentley, Perth, Western Australia 6102 Australia.

Tel: 09 451 0840 Fax: 09 451 0896

Consultants and contractors in research and development of agricultural and medical products including, cell culture, recombinant DNA technology, fermentation, environmental and waste treatment processes, microbiology of bacteria, yeasts and viruses. Products under development include diagnostic tests and DNA probes. Supply DNA polymerase for research.

Biotech Plants Pty Ltd

RMB 3322 Hendersons Rd, Somersby, NSW 2250 Australia. Tel: 043 72 1210 Telex: 27535 bitech Fax: 043 72 1540

Subsidiary of Calgene Pacific, Australia producing and marketing new plant varieties.

Part III **AUSTRALASIA**

Biotechnology Australia Pty Ltd

28 Barcoo St, PO Box 20, Roseville, NSW 2069 Australia. Tel: 02 407 0271 Telex: 170599 Fax: 02 406 5568

Investigating methods for: vaccine production using recombinant DNA techniques; biological control of insect pests using genetically modified bacteria and parasitic nematodes; microbial leaching of minerals. Involved in collaborative research in universities and with the CSIRO and various research institutions. Products include a vaccine for pig scours, interleukin-3 and a range of medical and veterinary diagnostic kits for pathogens.

Biotechnology Research Enterprises (SA) Pty Ltd

University of Adelaide

Box 498, Adelaide, South Australia 5001 Australia.

Research organization developing commercial activities of the University.

Biotek Supplies

PO Box 14-323, Panmure, Auckland New Zealand. Tel: 576 413

Supplies immunodiagnostic reagents including affinity purified antibodies conjugated with fluorochromes, enzymes and biotin. Distributor for Immuno-Mycologics, US.

Biotox Pty Ltd

14 Technology Drive, Gold Coast Technical Park, Gold Coast, Queeensland 4215 Australia.

Telex: 43479 Tel: 07 537 5499 Fax: 07 537 1562

Offer engineering and microbiological services in waste treatment and detoxification.

Bleakly Ltd

26 Fariola St, Silverwater, Sydney, NSW 2141 Australia. Telex: 22648 Tel: 02 648 3222 Fax: 02 647 1009

Supply adjuvants and antibacterials, amino acids, culture media and enzymes.

Bloomfields Nurseries (Aus) Pty Ltd

PO Box 245, Dural, NSW 2158 Australia.

Fax: 02 652 2348 Tel: 02 652 2235 Telex: 27535 bitech

Subsidiary of Calgene Pacific, Australia producing and marketing new plant varieties.

Boehringer Mannheim Australia Pty Ltd

Unit C,6-8 Byfield Street, PO Box 316, North Ryde, NSW 2113 Australia. Tel: 02 888 2122 Telex: AA 22955 Fax: 02 888 5619

Supplies a wide range of fine chemicals and reagents for research and analysis including enzymes, immunochemicals, antibodies, coenzymes and biochemicals for molecular biology (see Boehringer Mannheim GmbH,

Bresatec Ltd

PO Box 498, Adelaide, South Australia 5001 Australia. Tel: 08 228 5361 Fax: 08 223 3258 Telex: 89141

Produce radioisotope-labelled nucleotides as well as non-radioactive DNA probes, rapid diagnostic kits for pathogens including E coli, and a wide range of equipment and biologicals including DNA and peptide sequencers, cloning vectors, translation kits, linkers, nucleases and nucleosides for molecular biology, medical, veterinary and agricultural use. Distributor for Bio 101, US.

Bruker (Australia) Pty Ltd

PO Box 21, Earlwood, NSW 2206 Australia.

Tel: 02 5589747 Telex: 70880

Supplies mass spectrometers, NMR spectrometers, HPLC systems and data handling systems

Bulkon Australia Pty Ltd

1-4 Carlotta Rd, Double Bay, NSW 2028 Australia. Tel: 02 327 4440 Telex: 27755

Supply veterinary vaccines, pharmaceuticals and blood products. Offer engineering services and equipment for animal and plant breeding, fermentation and cell culture, protein engineering and production of biologically active compounds.

Bundaberg Distilling Co Pty Ltd

Whittred St, Bundaberg, Brisbane, Queensland 4670 Australia. Tel: 07 172 1333 Telex: 49795 Fax: 07 172 4433

Alcohol producers. Carrying out research and development on fermentation processes and endproducts.

Bunge (Australia) Pty Ltd

87-89 Flemington Rd, North Melbourne, Victoria 3051 Australia. Tel: 03 329 0855

Manufacture starch products. Carrying out research and development on starch processing and waste treatment of by products.

Burbank Biotechnology

30 Pacific Highway, Tuggerah, NSW 2259 Australia.

Tel: 04 351 2099 Fax: 04 353 1875

Plant breeder using techniques of cell culture and micropropagation.

Burns Philp & Co Ltd

PO Box 543, Sydney, NSW 2001 Australia.

Tel: 02 259 1111 Telex: 120290 Fax: 02 251 1681

Yeast manufacturer, also supplying other yeast products, starter cultures for cheese making, antimicrobials and food testing diagnostics.

Calbiochem-Behring Australia Pty Ltd

PO Box 200, Kingsgrove, NSW 2208 Australia.

Tel: 02 5023 755 Telex: 20484

Supply immunological reagents and diagnostic test systems of Behring Diagnostics and Calbiochem, US.

Calgene Pacific Pty Ltd

Using methods of micropropagation to produce commercially important forest and horticultural plants and recombinant DNA technology to develop resistance to drought, heat, frost and herbicides as well as new colours, and investigating senescence.

Carina Chemical Laboratories Ltd

PO Box 30/366, Lower Hutt, New Zealand.

Tel: 662 753

Offer services in research and development of pharmaceuticals. Projects include production of agarose

Carlton & United Breweries Ltd

16 Bouverie St, Carlton, Victoria 3053 Australia. Fax: 03 347 7610 Tel: 03 342 5511 Telex: 31518

Major brewer with interests in research of fermentation processes and yeasts.

Carter Chemicals Ltd

PO Box 6845, Auckland, New Zealand.

Tel: 9 569821 Telex: 60478

Supplies affinity purified antibodies and antibodies labelled with enzymes or fluorescent conjugates. Distributors for Kent Laboratories Inc, US and Serotec, UK.

Carter Wallace (Australia) Pty Ltd

6 Aquatic Drive, Frenchs Forest, Sydney, NSW 2086 Australia. Tel: 02 452 5233 Telex: 120990 Fax: 02 452 3093

Supply clinical diagnostic and microbiological tests. Subsidiary of Carter Wallace, US

Cawthron Institute

PO Box 175, 98 Halifax Street, Nelson New Zealand.

Tel: 82319 Telex: NZ 3249

Office and Laboratory:, c/o Marlborough Research Centre, Private bag Blenheim. Tel: 89059

Carries out contract testing and analysis for industry as well as contract research in biotechnology and marine microbiology. Areas of interest include fermentation, anaerobic metabolism, microbial enzymes, microbial antibiotic resistance, bacterial strain selection etc, as well as fermentation design and operation.

AUSTRALASIA Part III

The CB Rhizobium Collection

CSIRO Division of Tropical Crops and Pastures

Holds culture collection containing bacteria including a special collection of Rhizobium of tropical crop and pasture legumes for agricultural microbiology research.

Cel-Labs Pty Ltd

Supply a wide range of diagnostic kits. Offer services in research and development, product testing and manufacture.

Chemtec Australia

1 Oakdene Court, Mt Waverley, Melbourne, Victoria 3149 Australia. Tel: 03 241 7437 Fax: 03 241 1690

Supply diagnostic tests.

Coast Biologicals Ltd

PO Box 58103, East Tamaki, Auckland New Zealand. Tel: 09 274 5622 Fax: 09 274 8043

Manufacture agar and seaweed extracts. Offer consultancy in aquaculture, and research and development of marine products for agriculture and the food industry.

Commonwealth Industrial Gases Ltd

Manufacture speciality gases as well as producing crop plants by tissue culture and supply services in design, construction and equipment of laboratory and industrial plant.

Commonwealth Serum Laboratories

Laboratory Products Marketing Group

45 Poplar Rd, Parkville, Victoria 3052 Australia.

Tel: 03 389 1911 Telex: 32789 Fax: 03 389 1434

Manufactures and distributes pharmaceutical, veterinary and laboratory products. Develops, produces and markets products for human and veterinary use in the fields of vaccines, blood products, peptide synthesis, hormones and hormone analogues, antivirals, drugs, allergens and diagnostic agents. Activities include the use of recombinant DNA technology and expression of genes coding for products of pharmaceutical interest. Distributor of monoclonal antibody test kits for Synbiotics, US. Also distributor for Kirkgaard & Perry Laboratories, US and Sera-Lab,

Coopers Animal Health NZ Ltd

33 Whakatiki St, Upper Hutt, New Zealand.

Tel: 04 287 139 Telex: 31265 Fax: 04 279 144

Manufacture veterinary products including vaccines. Subsidiary of ICI, New Zealand.

Corrs Pavey Whiting & Bryne Pty Ltd

350 William St, Melbourne, Victoria 3000 Australia. Tel: 03 320 5555 Telex: 30322 Fax: 03 329 7701

Offer consultancy in legislative aspects of biotechnology including patenting and licensing of products.

CSIRO Division of Plant Industry

PO Box 1600, Canberra, ACT 2601 Australia.

Division of Soils: same address.

Tel: 062 46 4911 Tx: 61452 Fax: 062 47 5883, Division of Horticulture: PO Box 350, Adelaide SA 5001.

Tel: 08 274 9244 Tx: 88000 Fax: 08 274 9247

Carry out research and development in plant breeding and improvement. Also the repository of information on the management and utilisation of the Australian flora and vegetation. Hold culture collection of bacteria including a special Rhizobium collection for agricultural microbiology research. Other research units include the Cotton Research Unit at Myall Vale, the Drylands Crops and Soils Research Unit in Perth, the Wheat Research Unit at North Ryde. Research activities include plant genetics and cell and tissue culture, biological control, diagnostics for cereal and other crops, soil microbiology and nitrogen fixation. Division of Horticulture at Hartley Grove also uses recombinant DNA technology in plant breeding and develops DNA probes and diagnostics for use in horticulture and agriculture. breeding of

CSIRO Division of Animal Health

Animal Health Research Laboratory

Australian Animal Health Laboratory: PO Bag 24, Geelong, Victoria 3220

Tel: 052 26 5222 Tx: 388933 Fax: 052 26 5400

Carries out research and development of techniques for diagnosis and control of the major endemic diseases of farm livestock in collaboration with the industry. The laboratory at Geelong is primarily concerned with control of exotic livestock disease outbreaks. Research centres on gene sequencing and cloning, protein sequencing and synthesis and monoclonal antibodies, immunogenetics, recombinant DNA technology and vaccines.

CSIRO Division of Animal Production

PO Box 239, Blacktown, NSW 2148 Australia.

Tel: 02 631 8022 Telex: 27450 Fax: 02 688 2340

Headquarters and Australian Feeds Information Centre. Main research is in genetic engineering to produce improved livestock and also the milking of transgenic animals to obtain hormones and growth factors.

CSIRO Division of Biotechnology

North Ryde Laboratories

PO Nox 184, North Ryde, NSW 2113 Australia.

Tel: 02 886 4888 Telex: 22970 Fax: 02 888 9271

Parkville Laboratories: 343 Royal Parade, Melbourne, Victoria 3052

Tel: 03 342 4200 Tx: 33983 Fax: 03 347 5481

Includes the Laboratory of Molecular Biology, with other laboratories at Clayton and Parkville. Carrying out research, development and consulting services in molecular and cell biology including DNA probes, diagnostics, enzymes, fermentation and cell culture, immunoassay, recombinant DNA technology etc. Work includes contract research and collaboration with industry. Research at Parkville is concentrated on protein engineering and chemistry. Industrial fermentation processes are being developed mainly at Clayton.

CSIRO Division of Entomology

PO Box 1700, Canberra, ACT 2601 Australia.

Developing strategies and techniques for the management and control of insect and other pests of crops, livestock and man. Biotechnology activities include pheromone research and the development of biopesticides.

CSIRO Division of Food Processing

PO Box 52, North Ryde, NSW 2113 Australia. Tel: 02 887 8333 Telex: 23407 Fax: 02 887 3107

Includes the Food Research Laboratory at North Ryde, the Dairy Research Laboratory at Highett and the Meat Research Laboratory in Brisbane. Developing improved food handling, processing, nutritional value, quality, safety and utilization of wastes. Research areas include steroids, amino acid analysis, protein sequencing and peptide synthesis.

CSIRO Division of Forestry and Forest Products

Banks St, Yarralumla, Canberra, ACT 2601 Australia. Tel: 062 818 211 Tx: 62751 Fax: 062 818 312

Objective is to develop balanced management of forest resources including optimization of wood production, water supply and conservation. Developing techniques of micropropagation and cell culture of forest species as well as utilization of forest end products. Biotechnology research activities include recombinant DNA technology, gene sequencing and development of DNA probes.

CSIRO Division of Industrial Technologies

Clayton Laboratories

Carrying out research in production scale fermentation and industrial microbiology.

Part III AUSTRALASIA

CSIRO Marine Laboratories

Division of Fisheries

Castray Esplanade, Hobart, Tasmania 7001 Australia. Tel: 002 20 6222 Telex: 57182 Fax: 002 24 0 Fax: 002 24 0530

Developing improved techniques for exploitation and preservation of the fishing resources as well as mariculture. Holds culture collection containing algae mainly for marine micro-algae research of mariculture. Also has laboratories in Cleveland and Marmion.

Daratech Pty Ltd

Ashley House 6th Floor, 409 St Kilda Road, Melbourne, Victoria 3004

Australia. Tel: 03 820 0588

Telex: 34261

Fax: 03 267 8560

Commercial arm of DARA (Department of Agriculture and Rural Affairs) to encourage links between the private sector and research in the areas of animal health and production, plant production and pathology for horticulture and crops as well as food processing.

Diagnostica Australia

PO Box 86, Waverly, NSW 2024 Australia. Tel: 02 358 4200 Telex: 71018

Telex: 71018

Supplies diagnostics and other products of Vector Laboratories Inc, US. Also distributes products of Cistron Biotechnology and One Lambda, US.

DSIR Biotechnology Division

Private Bag, Palmerston North Zealand. Fax: 063 61130

Tel: 063 68019 Telex: 31285

Carries out research and offers analytical services in areas of biochemical processing, the food industry, fermentation and industrial microbiology. The Division of Plant Physiology at the same establishment carries out research relating to molecular biology, recombinant DNA technology, micropropagation and environmental aspects of production of improved

DSIR Division of Industrial Processing

Box 31-310, Lower Hutt New Zealand.

Tel: 4 690 788 Telex: 31678

Fax: 4 690 132

Carriesd out research on process development, enzymes, fermentation and food technology as well as cell culture and microbiology, the development of biosensors and biological control.

Dutec Pty Ltd

33 Myrtle Street, PO Box 518, North Sydney, NSW 2060 Australia. Tel: 928671 Telex: 20310

Supplies blood grouping and tissue typing reagents, immunological reagents and bacterial growth media.

Dynatech Australia

PO Box 1535, North Sydney, NSW Australia.

Supplies immunodiagnostic reagents; products of Dynatech Diagnostics

Edwards Instrument Co

29 Bellingham Street, PO Box 60, Narellan, NSW 2567 Australia. Telex: 790 10101 Tel: 02 605 6777

Supplies equipment and chemicals for biomedical research and clinical applications including agarose and other products of FMC Corp, US.

EKATO Pty Ltd

c/o Felser Russel, 140 Philip St, Sydney, NSW 2000 Australia. Tel: 221 1655 Fax: 22 33 86 16 Telex: 22922

Supply industrial fluid agitators and plant; products of EKATO, Germany.

Enterovax Research

62 Dew St, Thebarton, South Australia 5031 Australia. Tel: 08 439 952/228 5827 Telex: 89248

Carrying out research and development on veterinary vaccines including live oral piglet enteric colibacillus vaccine and oral delivery system as well as a hybrid cholera-typhoid vaccine.

Ethnor Ptv Ltd

PO Box 134, North Ryde, NSW 2113 Australia. Tel: (02) 888 1233 Telex: 24704

Supplies diagnostics and other biologicals, including monoclonal antibodies; products of Ortho Diagnostic Systems Inc, US.

Eurotherm International Pty Ltd

Suite 1A, 44-46 Oxford St, Epping, Sydney, NSW 2121 Australia. Tel: 02 869 1099 Telex: 74362

Supply temperature recording, monitoring and controlling equipment.

4 Eastgate Court, Wantirna South, Victoria 3152 Australia. Tel: 03 221 1331

Supplies a wide variety of micro-pipettors with variable settings and fixed

F H Faulding & Co Ltd

Fax: 08 267 5182

Carrying out research and development in the area of drug delivery. Products include erythromycin capsules.

Fiske Research Services Pty Ltd

c/o PO, Geelong, Victoria 3220 Australia. Tel: 02 652 2023

Supplies insect extracts including bee and wasp venoms.

Flow Labs Australasia Pty Ltd

140 Wicks Rd, Box 132, North Ryde, NSW 2113 Australia. Tel: 02 887 3211 Telex: 25325 Fax: 02 887 3795

Supplies media for cell culture, serums, biochemicals and immunodiagnostics as well as equipment including filter systems and immunoassay plate readers; products of Flow Laboratories Inc, US.

Forest Research Institute

Biotechnology Section

Private Bag, Rotorua, New Zealand. Tel: 073 475899 Telex: 21080

Fax: 073 47 9380

Developing fermentation of hexoses and pentose by hydrolysis of wood, as well as plant tissue culture research and plant breeding.

Foxboro Pty Ltd

PO Box 181, Lilydale, Victoria 3140 Australia. Telex: 790 31097

Supplies gas chromatographs and accessories for gas chromatography and mass spectrometry as well as spectrophotometers (see Analabs, US).

Garvan Institute of Medical Research

St Vincent's Hospital

Darlinghurst, NSW 2010 Australia. Tel: 02 361 2050 Fax: 02 232 4

Fax: 02 232 4876

Research programme includes basic and clinical research studies on insulin action, secretion and neuroregulation as well as molecular genetics of Type II diabetes. Affiliated with University of New South Wales.

General Diagnostics

Box M187, Sydney Mail Exchange, Sydney, NSW Australia. Tel: 555 7722

Supplies immunodiagnostics, affinity-purified antibodies and other products of Tago Inc, US.

Genesearch Pty Ltd

14 Technology Drive, Gold Coast Technology Park, Labrador, Queensland 4215 Australia.

Tel: 07 537 5499 Telex: 43470 Fax: 07 537 1562

Supplies laboratory diagnostics and reagents for molecular biology including restriction enzymes and other products of New England Biolabs Inc, US. Developing microbial cultures for waste treatment, chemical production from micro-algal mass culture and biopesticides.

Genestock New Zealand Ltd

Ingram Rd, Drury Bombay, New Zealand. Tel: 085 20616

Carrying out biotechnology research.

Gibco Australia Pty Ltd

93-101 City Rd, Box 422, South Melbourne, 3205 Victoria Australia. Tel: 61 0362 3581 Telex: 79032486

Supplies products for cell biology, tissue culture and microbiology; products of Gibco Life Technologies Inc, US.

AUSTRALASIA Part III

Gibco New Zealand Ltd

Supplies products for cell biology, tissue culture and microbiology; products of Gibco Life Technologies Inc, US.

Gradipore Ltd

200 Harris St, PO Box 65, Pyrmont, NSW 2009 Australia. Tel: 02 692 9999 Fax: 02 692 8659

Manufacture and supply equipment for gel electrophoresis and related techniques.

Hardie Trading Ltd

1-17 Euston Road, Alexandria, NSW 2015 Australia. Tel: 51 0351 Telex: 25587

Supplies biocides, pharmaceutical intermediates and anti-oxidants.

ICI Australia Operations Pty Ltd

Manufactures animal health and plant protection products. Part of Imperial Chemical Industries plc, UK.

ICI Scientific Instruments

5 Lake Drive, Redwood Gardens Estate, Dingley, Victoria 3172 Australia. Tel: 03 551 7277/008 33 5292 Telex: 151524 Fax: 03 551 7440 Supplies analytical instrumentation. Subsidiary of ICI Australia Operations Pty Ltd.

IDT (Australia) Pty Ltd

PO Box 4, Miller, NSW 2168 Australia. *Telex:* 70315 Supplies immunochemicals and purified proteins.

Immuno-Chemical Products Ltd

PO Box 1607, Auckland 1, New Zealand. Tel: 09 396 356 Fax: 09 373 657

Purifies and markets blood and tissue proteins (BSA, IgG and pituitary hormones). Produces fractionates and labels polyclonal antibodies. Manufactures media and hormones for animal embryo transplant work and carries out quality control tests for the dairy industry.

Integrated Sciences

212 Willoughby Rd, Crows Nest, NSW 2065 Australia. Tel: 02 436 2611 Telex: 176482 Fax: 02 436 4442

Supplies reagents and systems for molecular biology; products of Stratagene Cloning Systems and Collaborative Research, US.

Invermay Agricultural Research Centre

Ministry of Agriculture & Fisheries

Private Bag, Mosgiel, New Zealand.

Tel: Mosgiel 3829

Developing methods for the production of methane by anaerobic digestion from crops as well as methods of gas cleaning, based on pressure water scrubbing, and compression and storage for use in vehicle engines.

John Morris Scientific Pty Ltd

Supplies immunological and biological reagents and laboratory equipment including cell culture and fermentation equipment. Distributor for Polysciences, US and Gilson Medical Electronics, France.

Kallestad Australia Ltd

4th Floor ADC House, 189 Kent St, Sydney, NSW 2000 Australia. Supplies immunological and biological reagents. Distributor for Kallestad Diagnostics, US.

Kinhill Engineers Pty Ltd

200 East Terrace, Adelaide, South Australia 5000 Australia. Tel: 08 223 7011 Telex: 82364 Fax: 08 232 0163

Provides engineering and construction management services over a wide range of industrial applications, including pharmaceutical and biotechnical plant construction. A subsidiary of Air Products and Chemicals Inc, US.

Kontron Pty Ltd

Analytical Division

PO Box W, 176 Warrington Mall, Brookvale, NSW 2100 Australia. Tel: (02) 938 3433 Telex: 27012

Supplies analytical instruments for biochemistry and clinical chemistry, as well as medical instruments and related chemicals.

Lab Supply

Sydenham Road, Marrickville, NSW 2204 Australia.

Tel: 02 519 6626 Telex: 790 20043

Supplies immunological and biological reagents. Distributor for Genzyme,

Laboratory of Microbiology and Pathology

Department of Health

PO Box 495, Brisbane, Queensland 4000 Australia.

Holds culture collection of bacteria including special collection of Leptospira for medical microbiology research. Offers identification service.

Laboratory Software Associates Pty Ltd

Suite 6, 19-35 Gertrude St, Fitzroy, Victoria 3056 Australia. Tel: 03 419 7400 Telex: 38578

Supply data acquisition and analysis software for laboratory instrumentation.

Lancet Distributors

PO Box 73, Mount Hawthorn, Western Australia 6016 Australia. Telex: 93222

Supplies antiserums for radioimmunoassay and other immunological procedures.

Link Analytical (Australia) Pty Ltd

Supply spectrometers.

Luminis Pty

230 North Terrace, Adelaide, South Australia 5000 Australia. Tel: 08 228 5020

Carrying out research on embryo transfer as well as producing culture media for in vitro fertilization.

Mallinckrodt Australia

PO Box 194, Clayton, Victoria 3168 Australia. Tel: 03 551 7300 Telex: 33963 Fax: 03 551 5942

Supplies immunological and biological reagents. Distributor for Centocor, US and Milab, Sweden.

Massay University

Department of Biotechnology

Private Bag, Palmerston North, New Zealand. Tel: (69) 099 089

Developing packed-bed column reactors and fluidized-bed systems for fermentations, as well as the production of butanol and use of tower fermenters and selection of species of Kluyveromyces for fermentation of whey for alcohol production.

Materials Research Laboratories Collection of Fungi

Commonwealth of Australia Department of Defence

PO Box 50, Ascot Vale, Victoria 3032 Australia.

Holds culture collection of fungi including a special collection of Curvularia for biodeterioration research.

Mattson Instruments Pty Ltd

88 Station St, Nunawading, Victoria 3131 Australia.

Tel: 03 873 2177 Telex: 151823 Fax: 03 874 4215

Supply infrared spectrometers. Subsidiary of Mattson Instruments, US.

Mauri Foods

PO Box 219, North Ryde, NSW 2113 Australia.

A major international manufacturer of products based on traditional biotechnology such as bakers' yeast, vinegar and lactic acid bacterial cultures for cheese manufacture. Carrying out research aimed at improvement of relevant bacteria and yeasts. Division of Burns Philp & Co Ltd.

Part III AUSTRALASIA

McGaw Ethicals Ltd

PO Box 18-069, Glen Innes, Auckland 6 New Zealand. Tel: 588036 Telex: 7912784

Supplies equipment and chemicals for biomedical research and clinical applications including agarose and other products of FMC Corp, US.

Medic Dos Ltd

Private Bag, Lower Hutt, New Zealand. *Tel*: 693 539 *Telex*: 31171

Suplies reagents and diagnostic kits for immunological purposes. Distributor for Dakopatts AS, Denmark.

Medical Dynamics Australia

Scientific Systems Division

PO Box 662, Neutral Bay Jct, NSW 2089 Australia.

Tel: 02 908 2511 Telex: 121822

Supplies immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories, ${\sf US}$.

Medos Pty Ltd

17 Millicent St, Burwood, Victoria 3125 Australia.

Tel: 03 288 9077 Telex: 32486 Fax: 03 288 0926

Supplies clinical apparatus including platelet aggrenometers as well as biochemicals, enzymes and diagnostic kits and reagents. Distributor for Cambridge Research Biochemicals, UK.

Miles Laboratories Australia Pty Ltd

Research Products Division

Private Bag 5, Mulgrave North, Victoria 3170 Australia. Tel: 03 560 0611 Tx: 31139 Fax: 03 560 0932

Supplies biochemicals and enzymes for research, manufacturing and clinical use as well as diagnostics. Subsidiary of Miles Laboratories Inc, US. Distributor for ICN Immunobiologicals, US.

Millipore Pty Ltd

Private Bag 18, Lane Cove, NSW 2066 Australia.

Tel: 02 427 5055 Telex: 25934 Fax: 02 427 0281

Supplies ultrafiltration systems, filters and tissue culture media; products of Millipore Corp, US.

Monash University

Department of Microbiology

Wellington Road, Clayton, Victoria 3168 Australia. Tel: 03 565 4820 Telex: 32691 Fax: 03 565 4007

Carrying out research on development of monoclonal antibodies, vaccines and diagnostic tests using recombinant DNA technology. Also working in area of industrial microbiology with applications in fermentation processing and waste treatment.

Monash University

Centre for Molecular Biology & Medicine

Wellington Rd, Clayton, Victoria 3168 Australia. Tel: 03 565 3727 Telex: 32691 Fax: 03 565 4699

Carrying out research and development on interferon production culture systems, diagnostics for cancer and thrombosis and yeast expression vectors

Montedison Australia Pty Ltd

4th floor, 189 Kent St, Sydney, NSW 2000 Australia. Tel: 02 275 857 Telex: 25325 Fax: 02 251 1448 Supply speciality chemicals. Affiliated with Montedison, Italy.

Mucan Diagnostics Pty Ltd

20th Floor, 500 Bourke St, Melbourne, Victoria 3000 Australia. Developing cancer diagnostics.

Murdoch University

Murdoch, Perth, Western Australia 6150 Australia. Tel: 09 332 2783 09 332 2507 Cables: 92711

Carrying out a research programme in the following areas of biotechnology: animal cell culture and molecular biology; algal biotechnology; monoclonal antibody production; immunology; ethanol fermentation; development of animal vaccines and radioimmunoassays.

National Health Institute

New Zealand Reference Culture Collection

Kenepuru Drive, PO Box 50-348, Porirua, Wellington New Zealand. Tel: 04 370 149 Fax: 04 378 983

Holds culture collection containing bacteria, fungi, bacterial viruses and yeasts including a special collection of propagating strains for phage typing for medical microbiology research and teaching. Offer identification service.

New South Wales Department of Agriculture Agricultural Engineering Centre

Glenfield, NSW 2167 Australia.

Tel: 02 605 1511 Telex: 20199 Fax: 02 605 2282

Evaluating the technology and economics for on-farm production of ethanol as a fuel using cereal as raw material. Veterinary Laboratories at the same location are developing veterinary products including vaccines and diagnostic kits.

New South Wales University

Department of Biotechnology

PO Box 1, Kensington, NSW 2033 Australia.

Tel: 02 662 2057 Telex: 26054 Fax: 02 662 2918

Offer contract services in research and development. Developing continuous fermentation processes for the production of ethanol using strains of the bacterium Zymomonas mobilis. Also interested in microbial mineral recovery.

New Zealand Reference Culture Collection

Wallaceville Animal Research Centre

Private Bag, Wellington New Zealand.

Holds culture collection for veterinary microbiology research.

New Zealand Reference Culture Collection of Microorganisms, Dairy Section

New Zealand Dairy Research Institute

Private Bag, Palmerston North, New Zealand. Tel: 063 74129 Telex: 31312 Fax: 063 61476

Holds culture collection containing bacteria, bacterial viruses and yeasts including a special collection of Group N Streptococci and their bacteriophages for dairy microbiology research.

New Zealand Reference Culture Collection (Plant & Soil)

DSIR Plant Diseases Division

120 Mt Albert Road (Private Bag), Auckland, New Zealand.

Tel: 893 660 Telex: 21623 Fax: 863 330

Holds culture collection containing bacteria for agricultural microbiology research especially in relation to plant disease.

New Zealand & Far East Ltd

First Floor, 9-11 Blair St, Wellington New Zealand.

Supply diagnostics and immunoreagents; products of Kent Laboratories

Niro Atomizer (A'Asia) Pty Ltd

2 Trade Place, Vermont, Melbourne, Victoria 3133 Australia. Tel: 0387 42 844 Telex: 31444

Supplies dewatering and drying equipment (see Niro Atomizer AS, Denmark).

Novachem Pty Ltd

99 Commercial Road, South Yarra, Victoria 3141 Australia. Tel: 2674470 Telex: 30333

Supplies radiochemicals.

Novo Laboratories Ptv Ltd

PO Box 46, Parramatta, NSW 2150 Australia.

Tel: 02 630 8466

Telex: 70415

Fax: 02 683 3029

Supplies industrial enzymes (see Novo Industri AS, Denmark).

Organon Teknika Australia

45 Whiting St, Artarmon, NSW 2064 Australia. *Tel*: 02 436 1699 *Telex*: 74021

Supplies immunological and biological reagents. Distributor for Organon Teknika, US. $\,$

AUSTRALASIA Part III

Otto Madsen Dairy Researh Laboratory

Dairy Starter Collection

19 Hercules Street, Hamilton, Queensland 4007 Australia.

Holds culture collection containing bacteria, fungi, bacterial viruses and yeasts with special collections of Streptococcus cremoris and Streptococcus lactis strains used for cheese manufacture and their bacteriophages for dairy microbiology research.

Oxoid Australia Pty Ltd

PO Box 220, West Heidelberg, Melbourne, Victoria 3081 Australia. Tel: 03 458 1311 Telex: 36222 Fax: 03 458 4759

Supplies bacteriological culture media and diagnostic tests (see Oxoid Ltd,

Pacific Biotechnology Ltd

PO Box 172, Kings Cross, NSW 2011 Australia. Tel: 02 332 3513 Fax: 02 332 1581

Carrying out research on development of therapeutics for cardiovascular diseases and inflammation associated with aging.

Pacific Diagnostics Australia Pty Ltd

CNR Lombank & Colebard Street, PO Box 658, Acherfield, Brisbane, Queensland 4108 Australia.

Tel: 07 275 2700 Telex: 42840 pacdia Fax: 02 277 9574

Supplies immunobiological and biological reagents. Distributor for Immuno-Mycologics, US and sole distributor for Janssen Biochimica, Belgium.

Pacific Diagnostics NZ Pty Ltd

PO Box 62226, Sylvia Park, Auckland New Zealand. Tel: 08 274 4903 Fax: 09 274 4914

Distributor for Janssen Biochimica, Belgium.

Pacific Enzymes Ltd

PO Box 1496, Hamilton, New Zealand. *Tel*: 071 392 487 *Telex*: 21626

Telex: 21626 Fax: 071 80 554

Carrying out contract research and development on thermophilic microorganisms for the production of thermostable enzymes. Joint venture between Shell Enzymes, New Zealand and New Zealand Enzymes.

Paterson Candy International (UK) Australia

The Permutit Company of Australia Pty Ltd

PO Box 117, Brookvale, Sydney, NSW Australia. Tel: 938 4666 Telex: 24742

Manufactures reverse osmosis and ultrafiltration equipment for downstream processing of fermentation liquors using membranes. Products range from laboratory units to industrial plants (see Paterson Candy International, UK).

Paton Scientific Pty Ltd

35 Henry Street, Stepney, South Australia 5069 Australia. Tel: 424421 Telex: 82863

Supplies scientific and laboratory apparatus including protein dialysis concentrators.

Peptide Technology Ltd

4-10 Inman Rd, PO Box 444, Dee Why, NSW 2099 Australia. Tel: 02 981 3522 Telex: 73397 Fax: 02 982 8046

Carrying out research and development on animal fertility and peptide synthesis as well as producing veterinary peptide vaccines in a joint venture with Arthur Webster Vaccines, Australia.

Pharmacia (Australia) Pty Ltd

Pharmacia LKB Biotechnology Division

4 Byfield St, PO Box 175, North Ryde, NSW 2113 Australia. Tel: 02 888 3622 Telex: 26991 Fax: 02 888 7298

Supplies equipment, instruments and media for electrophoresis, liquid chromatography, isoelectrofocusing and cell studies (see Pharmacia LKB Biotechnology, Sweden).

Pharmaco NZ Ltd

PO Box 7036, Bell Block, New Plymouth, New Zealand. Telex: 31188 Tel: 7285 735286

Supplies immunological and biological reagents. Distributor for Organon Teknika, US.

Philips

Industrial and Scientific Equipment

Centre Court, 25-27 Paul Street, North Ryde, Sydney, NSW 2113 Australia.

Tel: 88 88 222

Supplies analytical instruments including spectrophotometers, gas chromatographs, liquid chromatographs and other products of Philips NV, Netherlands.

Philips Electrical Industries Ltd

Scientific and Industrial Division

PO Box 41 021, Auckland, New Zealand.

Tel: 894 160

Supplies analytical instruments, including spectrophotometers, chromatographs and other products of Philips NV, Netherlands.

Pivet Laboratory Pty Ltd

166-168 Cambridge St, Leederville, Perth, Western Australia 6007 Australia.

Tel: 09 382 1677 Fax: 09 382 4576

Provides both service and research in relation to human infertility including gamete and embryo cryo-preservation.

Plant Growers Australia Pty Ltd

Lot 15 Harris Road, Wonga Park, Victoria 3115 Australia. Telex: 27535 bitech Fax: 03 722 1018 Tel: 03 722 1444

29-35 Knees Road, Park Orchards, Victoria 3114 Australia.

Subsidiary of Calgene Pacific, Australia producing and marketing new plant varieties.

Polychemical Co Pty Ltd

PO Box N129, Grosvenor Street, Sydney, NSW 2000 Australia. Tel: 29 7709

Supplies isotope-labelled compounds and stable isotopes.

Portals Water Treatment (NZ) Ltd

PO Box 13558, Candy House, 11 Spring St, Onehunga, Auckland 6 New Zealand.

Tel: 09 641079 Telex: 21175 Fax: 09 640782

Supply equipment for improving water quality and upgrading industrial effluents, including ion exchange and membrane systems. See Permutit-Boby Ltd, UK.

Promega Pty Ltd

114 Victoria Road, Rozelle, NSW 2039 Australia. Tel: 02 810 8480 Telex: 73870 Fax: 02 810 7096

Supplies immunological and biological reagents. Distributor for Promega,

Promega Pty Ltd

114 Shackleton Road, Mt Eden, Auckland New Zealand. Tel: 09 697 982

Supplies immunological and biological reagents. Distributor for Promega,

Qlone Ltd

PO Box 80, Sherwood, Queensland 4075 Australia. Tel: 07 375 4000 Fax: 07 375 3451

Developing large scale cultivation of microorganisms and animal cell lines including immobilization systems for the production of monoclonal antibodies and recombinant proteins.

Queensland Institute of Medical Research

Bramston Terrace, Herston, Brisbane, Queensland 4006 Australia. Tel: 07 253 6222 Telex: 145420 Fax: 07 252 5499

Has research programmes on the application of gene cloning technology to the identification and isolation of human genes concerned with the predisposition to cancer as well as development of antigens for vaccines as recognised by monoclonal antibodies.

Queensland University

Department of Microbiology

St Lucia, Brisbane, Queensland 4067 Australia Tel: 07 377 3639 Telex: 40315 Fax: 0

Fax: 07 371 5896 Telex: 40315

Maintains culture collection of nitrogen-fixing bacterium Rhizobium. Carryingout research on fermentation, genetic engineering and microbial diagnostics.

Part III AUSTRALASIA

Queensland University

Centre for Molecular Biology and Biotechnology

St Lucia, Queensland 4067 Australia.

Tel: 07 377 4447 Telex: 40

Telex: 40315 Fax: 07 371 7588

Research projects include fermentation technology and cell culture, gene cloning, protein engineering and DNA synthesis.

Regulin Ltd

Developing medical and veterinary diagnostics. Products include a home pregnancy determination kit, herpes test kit, chlamydia culture kit and chlamydia immunofluorescence diagnostics. Also carrying out research on improvement of yield from recombinant culture processes by irradiation, biodegradation of polymers in waste, and biopesticides for use in mushroom culture. Subsidiary of Gene Link Australia Ltd.

Rofin Australia Pty Ltd

149 Parkers Road, Parkdale, Victoria 3194 Australia. *Telex:* 22959 Supplies scientific equipment for gel permeation and liquid chromatography, as well as other laboratory equipment and analytical instrumentation.

The Royal Melbourne Hospital

Department of Haematology and Medical Oncology c/o THE RMH Post Office, Victoria 3050 Australia. Tel: 03 342 7695 Fax: 03 347 4558

Carrying out a research programme on the biochemical mechanisms of anti-cancer drug action and cell cycle regulation in cancer cells.

Ruakura Animal Research Station

Protein Extraction Project Group Private Bag, Hamilton, New Zealand. Tel: 071 62 839

Developing methods for hydrolysis of residual fibres following protein extraction from alfalfa, in order to generate sugar solutions for use as fermentation feedstock for production of fuel alcohol.

Saramane Pty Ltd

Royal Melbourne Hospital, Victoria 3050 Australia. Tel: 03 345 2436 Fax: 03 347 6546

Carrying out research and development to produce a malaria vaccine.

Scansearch

31 Flemington St, Frewville, Adelaide, South Australia 5063 Australia. Tel: 08 372 2735 Telex: 82520 Fax: 08 796 623 Consultants. Offer information services in biotechnology.

Scientific Systems

PO Box 662, Neutral Bay Junction, NSW 2089 Australia. Supplies immunological and biological reagents. Distributor for RIBI Immunochem Research, US.

Sci-Med New Zealand

PO Box 411, Christchurch, New Zealand. Tel: 03 62 199 Telex: 4777

Supplies immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories, US.

Selby Anax

Supplies immunological and biological reagents including diagnostic tests and laboratory equipment.

Silenus Laboratories Ptv Ltd

Supplies immunological and biological reagents and offers custom immunization. Distributor for Sigma Chemical and Immunon/Lipshaw,

Sirius Biotechnology Ltd

Producing citric acid by fermentation.

Starrate Pty Ltd

Starrate Avenue, Bethungra, NSW 2590 Australia. Tel: 069 434 203 Fax: 069 434 243

Specializing in production and use of serum in tissue culture media. Manufacture quality donor animal serum for use in biotechnology, in any volume to specification including low cost donor serums to replace foetal calf serum. Also offer on site contract production and purification of mass cell propagation products for therapeutics and kits etc and other biotechnology activities based on tissue culture media supply.

Stinoc Ltd

Level 3, 31 Ventnor Ave, West Perth, Western Australia 6005 Australia. Tel: 09 321 6311 Telex: 94396 Fax: 09 481 1458

Venture capital company with interests in biologicals, pharmaceuticals, diagnostics, clinical tests within the veterinary, agriculture and food processing industries.

Sulzer Australia Pty Ltd

65 Market Street, South Melbourne, Victoria 3205 Australia. Tel: 3 690 37 88 Telex: 33323 sulzer Fax: 3 696 12 30

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

Sydney University

Department of Microbiology

Sydney, NSW 2006 Australia.

Carrying out research and development using recombinant DNA technology and DNA sequencing to produce vaccines. Holds culture collection containing bacteria, tissue cultures, animal viruses, bacterial viruses and yeasts including a special collection of Corynebacterium pseudotuberculosis, veterinary non-sporing anaerobes and Pasteurella multocida.

Sydney University

Department of Microbiology

Sydney, NSW 2006 Australia.

Holds culture collection containing bacteria including a special collection of non-symbiotic nitrogen fixing bacteria for general, agricultural and microbiology research and teaching. Offers identification service.

Techniche Ltd

410 Queen St, 4th floor, Brisbane, Queensland 4000 Australia.

Tel: 07 221 3233 Telex: 43927 bliman Fax: 07 221 6625

Venture capital company with interests in pharmaceuticals, diagnostics and clinical tests, veterinary, agricultural and food processing products, and computer software.

Trace Scientific Pty Ltd

PO Box 494, Baulkham Hills, NSW 2153 Australia. Tel: 02 899 1122 Tx: 127940 Fax: 02 899 1354

Manufacture biochemical reagents and enzymes including alkaline phosphatase, ALT, AST, cholesterol, CK, gamma GT, glucose, LDH, triglycerides, urea and uric acid. Developing enzyme immunoassay and ELISA techniques for auto antigens and diagnostic kits for research. Has joint venture with Amrad, Australia to produce immunodiagnostics.

Travenol Laboratories Pty Ltd

Box 88, Oakes Rd, Toongabbie, NSW 2146 Australia. Tel: 02 636 2000 Telex: 23126

Supplies radioimmunoassay kits and reagents as well as other diagnostics and pharmaceuticals; products of Baxter Travenol Laboratories Inc, US.

Unichema Australian Pty Ltd

PO Box 773H, Melbourne, Victoria 3001 Australia. *Tel:* 03 647 9311 *Telex:* 30130

Developing chemicals from fats and oils as well as biological and enzymic conversion techniques.

AUSTRALASIA Part III

Venture Management Associates Ltd

36 Jackson St, 3rd floor, Toorak, Melbourne, Victoria 3142 Australia. *Tel:* 03 241 0777 Fax: 03 241 3742

Venture capital company with interests in biologicals, pharmaceuticals, diagnostics and clinical tests for the veterinary and agricultural industries.

Waikato University

Private Bag, Hamilton, New Zealand. Tel: 071 62889 Fax: 071 60115

Carrying out a programme of research on the microbiology, biochemistry and biotechnological applications of extreme thermophiles.

Waitaki International Biosciences Ltd

58 Kilmore St, Christchurch, New Zealand.

Tel: 03 796 100 Telex: 4206 meat Fax: 03 660 595

Supplies serums and bulk reagents for cell culture including aprotinin, fetuin, fibronectin, fibrinogen, transferrin, insulin and trypsin. Developing other cell growth factors.

Waite Agricultural Research Institute

Insect Pathology Pathogen Collection

Private Bag, Glen Osmonde, Adelaide, South Australia 5064 Australia. Tel: 08 372 2444

Hold culture collection containing bacteria, fungi, protozoa and insect viruses for general, agricultural and insect microbiology research and teaching. Offer identification service.

Wellcome Australia Ltd

PO Box 12, Concord, NSW 2127 Australia.

Tel: 02 736 5689 Telex: 122185 Fax: 02 736 5689

Supplies medical and veterinary pharmaceuticals as well as fine chemicals, vaccines, laboratory reagents and agricultural chemicals; products of the Wellcome Foundation, UK.

Wellcome Australia Ltd

Diagnostic Division

PO Box 100, Beaconsfield, NSW 2015 Australia.

Tel: 25927

Supplies clinical laboratory diagnostic reagents; products of the Wellcome Foundation, UK.

Wellcome New Zealand Ltd

Box 22-258, Otahuhu, Auckland 6 New Zealand

Tel: 010 649 276 Telex: 2788

Supplies pharmaceuticals and diagnostics products of the Wellcome Foundation, UK.

Western Australian Culture Collection

State Health Laboratory Service

PO Box F312, Perth, Western Australia Australia.

Holds culture collection containing bacteria, fungi and yeasts for general, medical and veterinary microbiology research and teaching. Offers identification service.

Western Biotechnology Ltd

2-6 Railway Parade, Bayswater, Perth, Western Australia 6053 Australia. Tel: 09 378 1777 Telex: 197094 Fax: 09 378 2562

Producing beta-carotene as well as fertilizer by mass algal culture using Dunaliella salina.

Western University

Department of Biochemistry

Nedlands, Perth, Western Australia 6009 Australia. Tel: 09 380 3324 Telex: 92992 Fax: 09 388 1207

Carrying out research using recombinant DNA technology in areas of bacteriology, DNA separation and sequencing, DNA probes, immunoassay, enzymes, hormones.

Wild Pty Ltd

45 Epping Road, North Ryde, Sydney, NSW 2113 Australia. Tel: 02 888 7122 Telex: 24474

Supplies scientific instruments including fibre optic products of Volpi AG, Switzerland.

William H Terry & Co Ltd

Private Bag, Balmoral, Auckland, New Zealand. Tel: 09 686022 Telex: 2498

Supplies biocides, pharmaceutical intermediates and antioxidants.

Wood Technology and Forest Research Division

Forestry Commission of New South Wales

PO Box 100, Beecroft, New South Wales 2119 Australia.

Holds culture collection of fungi for forest microbiology and timber mycology research.

AUSTRIA

Akras International

12 No Sued Strasse 1, A-2351 Wiener Neudorf. Tel: 02236 83 60 50 Telex: 79212

Manufactures flavours, essences, spray-dried flavours and caramel.

Algensammling am Institut fur Botanik

Universitat Innsbruck

Sternwartestrasse 15, A-6020 Innsbruck.

Hold culture collection of algae for general microbiology research and teaching with main interests in soil, airborne and lichen algae.

Andritz Maschinenfabrik AG

Statteggerstrasse 18, A-8045 Graz.

Tel: 316 69020 Telex: 311313 Fax: 316 6902 2503

Manufactures dewatering machinery for use with municipal and industrial sludges derived from clarification and filtration plant treating wastewaters, sewage or effluents, bioreactors, bioreactor systems with custom designed process measuring and control systems, and turnkey plants for baker's yeast, nutrition yeast, yeast extract, fodder yeast and ethanol.

Arcana Chem Pharm Fabrik GmbH

Postfach 43, Hosslgasse 20, A-9802 Spittal an der Drau. Tel: 047 62 34 77 Telex: 48108

Supplies pharmaceuticals and disinfectants.

Arge Biotechnologie

A-2112 Hetzmannsdoff

Tel: 02263 64094 Telex: 3222 154 biotech

Manufactures and supplies fermentation control equipment and fermenters. Offers consultancy in fermentation technology.

Austrian Research Centre Seibersdorf

Institute of Biology

Lenaugasse 10, A-1082 Wien.

Tel: 022 54 80 Telex: 014353 fzs

Studying production of hydrogen by the green alga Chlorella. The research centre is jointly funded by government and industry, and deals mainly with aspects of nuclear physics.

Bayer-Pharma GmbH

Postfach 516, Biberstrasse 15, A-1011 Wien.

Tel: 0222 52 76 86 Telex: 12492

Supplies pharmaceuticals, disinfectants, cosmetics, antibiotics, organic acids, antiseptics, alkaloids, vaccines and dietary products of Bayer AG, Germany.

Bender & Co GmbH

Dr Boehringer-Gasse 5-11, Postfach 103, A-1121 Wien.

Tel: 022 1843601 Telex: 132430

Supplies pharmaceuticals, clinical diagnostics, medical equipment, veterinary products, agrochemicals and food additives. Distributor for Dakopatts, Denmark and Organon Teknika, US.

Bio-Rad Laboratories GmbH

Auhofstrasse 78D, A-1130 Wien, Tel: 0222 82 89 01 Telex: 136565

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio Rad Laboratories Inc, US).

Biochemie GmbH

Bulkmarketing

A-6250 Kundl.

Tel: 05338 511 Telex: 051107 bioch Specialities:, Brunnerstrasse 59, A-1235 Wien.

Tel: 0222 86 75 11 Tlx: 133466

Manufactures and distributes bulk antibiotic products as well as enzymes related to biotransformation of such products, including penicillin, penicillamine, amoxicillin, ampicillin, etc.

Biolab GmbH & Co KG

Lindengasse 1, A-1070 Wien.

Tel: 0222 93 63 65 Telex: 11743

Supplies equipment and reagents for HPLC and spectrometry including HPLC columns of Bischoff, Germany.

Biologische Verfahrens Technik GmbH

Bergstrasse 8, A-6900 Bregenz. Tel: 05574 25 925 Telex: 5

Telex: 57683

Manufacture anaerobic digesters for the treatment of agriculture manures (cow, pig or chicken), over a range of 50 to 1800 cubic metres; systems suitable for treatment of industrial wastes from distilleries, potato and fruit processing; and systems for sewage sludge treatment in the range of 1600 to 4000 cubic metres.

Biomedica Handelsgesellschaft mbH

Rennweg 2, A-1030 Wien. Tel: 0222 787 154 Tel

Telex: 135885

Supplies research and diagnostic reagents and fine chemicals including growth factors and hormones etc, for the growth of mammalian cells under defined conditions, enzymes, defined sequence oligonucleotides, linkers, immunoassay kits for cyclic nucleotides and drugs of abuse. Distributes products of Collaborative Research, Southern Biotechnology Associates and Centocor, US, Biomakor, Israel and Immunotech, France.

Biotest Pharmazeutika GmbH

Einsiedlergasse 58, A-1053 Wien.

Tel: 0222 54 15 610 Telex: 134544

Supplies blood grouping and tissue typing reagents as well as immunological reagents and bacterial growth media (see Biotest Serum Institut GmbH, Germany).

Biotrade

Testarellogasse 11/3, A-1130 Wien. Tel: 0222 8284694 Telex: 11449

Telex: 114496

Supplies immunological and biological reagents. Distributor for Janssen Life Sciences Products, Belgium

Boehringer Mannheim GmbH Wien

Diagnostica Abteilung

Pasettistrasse 64, A-1201 Wien.

Telex: 75675 bm wien Tel: 0222 35 65 26

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

C A Greiner u Soehne GmbH

Postfach 6, A-4550 Kremsmuenster.

Tel: 07583 72 51 0 Telex: 23370 Fax: 07583 72 51 282

Supply tissue culture apparatus.

C Richter & Co KG

Feldgasse 19, A-4600 Weis.

Tel: 07242 44 04 Telex: 25576

Supplies veterinary pharmaceuticals and veterinary instruments.

AUSTRIA Part III

Cambridge Instruments GmbH

Frauenhofner Strasse 40, A-3430 Tulln. Tel: 02272 3177 Telex: 135556

Supplies scanning electron microscopes and other products of Cambridge Instruments, UK.

Carl Reissigl Testsera Reagenzien

2 Franz-Fischerstrasse, A-6020 Innsbruck. Tel: 052 222 4482 Telex: 533489 reisi Distributor for Janssen Biochimica, Belgium,

Cerestar Industrievertrieb

C H Knorr GmbH

Schlosstrasse 31, A-4600 Wels

Tel: 07242 4013 Telex: 025460 Fax: 07242 4498 33

Supplies glucose syrups and other starch derivatives.

Chemie Linz AG

Postfach 296, St Peterstrasse 25, A-4021 Linz.

Tel: 073 25 91 Telex: 021324

Manufacturers, process plant engineers and contractors serving most aspects of the chemical industry including organic chemicals, pharmaceuticals, agrochemicals etc.

Ciba-Geigy GmbH

Breitenfurterstrasse 251, A-1231 Wien. Tel: 0222 84 26 11 Telex: 021324

Supplies pharmaceuticals including antibiotics, steroids and other hormones, etc; products of Ciba-Geigy AG, Switzerland.

Dr L Holinger

Matznergasse 17, A-1140 Wien.

Produces cultures of soil bacteria which are sold for the purpose of converting organic wastes into a fertilizing humus.

Dragoco Schimme & Co GmbH

Postfach 45, Mellergasse 4, A-1235 Wien. Tel: 0222 86 96 65 Telex: 11831

Produces fragrances and flavours (see Dragoco, Germany).

EKATO Ruehr- und Mischtechnik GmbH

PO Box 7, Margaretenstrasse 56, A-1052 Wien. Tel: 0222 56 76 96 0 Fax: 0222 5 87 03 58

Supply industrial fluid agitators and plants; products of EKATO, Germany.

Epignost GmbH

Herrenstrasse 2, A-4020 Linz. Tel: 073 22 82 122 Telex: Telex: 21132

Supplies immunological and biological reagents. Distributor for Milab,

ERBA Science GmbH

Schottenfeldgasse 79, A-1072 Wien Tel: 0222 93 26 11 Telex: 35021

Supply analytical instruments for gas chromatography, electrophoresis, GC/mass spectroscopy, etc; products of Carlo Erba, Italy; Finigan Mat, US; Spectrophysics, US.

Graier-Wagner Chemische Fabrik

Neubaugasse 53, A-8020 Graz. Tel: 0316 91 42 34 Telex: 3 Telex: 31574

Supplies raw material for the leather, textile, paper and pesticide industries, as well as animal fats and vegetable oils.

Heraeus Wien

Pichlergasse 1, A-1090 Wien.

Tel: 0222 34 36 50

Supplies incubators, centrifuges, analyzers, viscometers etc.

Hewlett-Packard GmbH

Eastern Europe Division

Lieblgasse 1, PO Box 72, A-1222 Wien. Tel: 0222 2365110 Telex: 134425

Supply chromatographic systems, data processing hardware and software, etc as well as radioactivity counting systems of Hewlett Packard, US.

Hoffmann-La Roche GmbH

Jaquinggasse 16-18, A-1103 Wien. Tel: (0222) 73 45 51 Telex: 131779

Supplies pharmaceuticals and related products of Hoffmann-La Roche & $\,$ Co AG, Switzerland.

ICI Osterreich GmbH

Schwarzenbergplatz 7, A-1037 Wien. Tel: 0222 74 46 81 Telex: 131446

Supplies alginates, pharmaceuticals and other chemical products of Imperial Chemical Industries plc, UK.

ict Handelsgesellschaft mbH

Trazerberggasse 76, A-1130 Wien. *Tel*: 0222 82 69 41 *Telex*: 61 3

Telex: 61 3222289 ict

Supply reagents for immunoassay and histology as well as chromatography columns and equipment for gas chromatography, HPLC etc. Subsidiary of Sepragen Corp, US.

Immuno AG

Industriestrasse 72, A-1220 Wien. Tel: 0222 230 00 Telex: 134865

Supplies blood products and diagnostic kits. Carrying out research on antibodies, Pseudomonas fermentations, microbial antigens, microbial immunology and infectious diseases (see Immuno Ltd, UK).

Jungbunzlauer AG

Postfach 546, Schwarzenbergerplatz 16, A-1010 Wien.

Tel: 0222 65 76 36 0 Telex: 133396

Produces citric acid and citrates as well as xanthan gum. Also developing products using recombinant DNA technology.

Karl Franzens Universitat Graz

Institut fur Biochemie

Schubertstrasse 1, A-8010 Graz.

Tel: 0316 31 3 30

Carrying out research on the production of cellulase by Trichoderma and saccharification of lignocellulose.

Kelomat

Sterilizer Division

A-4050 Traun.

Tel: 7229 33036 264 Telex: 21919 Fax: 7229 62470

Manufacture steam sterilizers.

Labin GmbH

Diehlgasse 37, A-1050 Wien.

Tel: 0222 55 83 73 Telex: 134032

Manufacture freeze dryers and accessories.

Labor fur Bio-Analytik

Schwarzspanierstrasse 15, A-1090 Wien.

Tel: 0222 48 54 33 Telex: 15064

Offers analytical services for biological materials as well as pharmacology, toxicology testing and medical chemistry.

Labsystems GmbH

Leitermayergasse 36, A-1180 Wien. Telex: 136487 Tel: 0222 43 59 010

Supplies discrete analyzers for use in chemical and enzymic analysis. Distributor for Labsystems, US.

Labsystems GmbH

Obkirchergasse 17, A-1190 Wien.

Tel: 0222 36 21 36 Telex: 136487

Supplies monoclonal antibodies, clinical instruments and pipette systems; products of Labsystems OY, Finland.

Laevosan GmbH & Co KG

Postfach 316, Estermannstrasse 17, A-4021 Linz.

Tel: 07222 782 31 Telex: 21803

Produces fructose and anhydrous glucose.

Part III **AUSTRIA**

Leitz Austria

Backenbrunnigasse 7b, A-1183 Wien. Tel: 0222 47 15 11 Telex: 34839

Supplies light microscopes and related optical products as well as

Leopold & Co Chem Pharm Fabrik GmbH

Hatnerstrasse 36, A-8055 Graz-Puntigam. Telex: 31299

Manufactures pharmaceuticals. Subsidiary of Chemie Linz AG, Austria.

Loba Chemie

Dr Low-Baer & Co GmbH

Fehrgasse 7, A-2401 Fishamend. Tel: 02232 334 Telex: 136238

Supplies amino acid derivatives, enzyme substrates, organic reagents and pH indicators.

Mallinchrodt Diagnostica Austria

Cottagegasse 94, A-1191 Wien.

Telex: 116869 Tel: 0222 36 21 12

Supplies immunodiagnostics and other products of Mallinckrodt Diagnostica GmbH, Germany.

Merck Sharp & Dohme GmbH

Spittelaurelande 45, A-1091 Wien.

Tel: 0222 34 46 43 Telex: 75924

Supplies chemicals and pharmaceutical products of Merck & Co, US.

Miles International GmbH

Peter Jordans Strasse 19, A-1190 Wien. Tel: 0222 3415160 Telex: 115700 miles

Distributes a wide range of biochemicals and enzymes for research, clinical and industrial use (see Miles Laboratories Inc, US).

Neuroth Hopfenhandels GmbH

Mariahilfer Strasse 1d, A-1016 Wien. Telex: 01 12426 Tel: 0222 576 793

Supplies hop extracts and pellets for brewing.

New England Nuclear GmbH

Lassallestrasse 2/20, A-1020 Wien.

Tel: 0222 244176

Supplies immunological and biological reagents. Distributor for Du Pont NEN Research Products, US.

Osterreichische Agarindustrie GmbH

Postfach 1470, Hollanstrasse 2, A-1020 Wien.

Tel: 0222 26 25 32 Telex: 076761

Manufactures starch, starch products, adhesives and glues.

Osterreichische Philips Industrie GmbH

Breitenfurterstrasse 219, A-1230 Wien.

Tel: 0222 83 15 01

Supplies a wide range of analytical equipment including electron microscopes, spectrophotometers (ultraviolet, visible, atomic absorption etc), gas and liquid chromatographs, pH and conductivity meters, selective electrodes and other products of Philips BV, Netherlands.

Perkin Elmer

Rotenhofgasse 17, A-1100 Wien.

Tel: 0222 62 31 01

Supplies analytical instruments including HPLC and gas chromatographs, spectrophotometers, integrators, data systems, elemental analyzers and other products of Perkin Elmer, US.

Pfizer Corp Austria GmbH

Postfach 459, Mondscheingasse 16, A-1017 Wien.

Tel: 0222 93 35 21 Telex: 133479

Trades in chemicals, pharmaceuticals and other products of Pfizer Inc, US.

Pharmacia GmbH

Eisgrubengasse 2, A-2331 Wien Voesendorf. *Tel*: 0222 67 05 07 *Telex*: 131766

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectrofocusing and cell studies (see Pharmacia, Sweden).

R & A Rost

Marzstrasse 7, A-1151 Wien.

Telex: 13731 Tel: 0222 92 32 31

Supplies microscopes, fibre optics, illuminators and other optical devices.

Raiffeisen-Bioforschung GmbH

Reitherstrasse 21-23, A-3430 Tulln. Tel: 02272 25 52 0 Telex: 1125

Telex: 112540

Developing fermentation technology, immobilized enzymes and cellulase systems for saccharification of agricultural wastes.

Reichert-Jung

Hernalser Haupstr 219, A-1171 Wien.

Tel: 0222 461641 Telex: 11487

Produce rapid freezing cryofixation systems for use with tissues, viruses or macromolecules suitable for freeze fracture or freeze substitution applications.

Rudolf Heintel GmbH

Josefstadter Strasse 82, A-1080 Wien.

Tel: 0222 438 956 Telex: 847 114102

Supplies immunological and biological reagents. Distributor for Atlantic Antibodies and Jackson Immunoresearch Laboratories, US.

Rumpel GmbH

Seillerstrasse 16, A-1015 Wien.

Tel: 0222 52 15 74 Telex: 011429

Supplies water treatment plant, filtration plant and sewage treatment

Ruthner Industrieanglagen AG

Aicholzgasse 51-53, A-1120 Wien. Tel: 0222 83 95 01 Telex: 131273

Manufactures, designs and constructs process plant for food products, fermentation and water treatment, as well as composting or treatment of garbage and sewage.

Sanabo GmbH

A-6250 Kundle.

Telex: 051231 Tel: 05338 511

Supplies pharmaceutical products including hormones, enzymes and general biochemicals. Subsidiary of Biochemie GmbH, Austria.

Sandoz Research Institute

Sandoz Forschungsinstitut

Brunnerstrasse 59, A-1235 Wien.

Develops new therapeutics for the treatment of infectious diseases and cancer based on monoclonal antibodies. Also undertaking basic studies in tissue culture, protein synthesis and purification, immunology, etc.

Sartorius Vertriebs GmbH

Leberstrasse 108, A-1110 Wien.

Tel: 0222 74 37 07

Supply membrane filters and filtration systems.

Scandic Handelsgesellschaft mbH

Salierigasse 17, A-1180 Wien.

Tel: 0222 477 491 Telex: 847 136620

Supplies immunological and biological reagents. Distributor for Genzyme and Vector Laboratories, US

Serono Pharmazeutische Praeparate GmbH

Huetteldorfer Strasse 175, A-1140 Wien.

Supplies diagnostic test kits based on monoclonal antibodies using a magnetic separation technique. Part of Ares-Serono Group.

Stefan Sztatecsny GmbH & Co KG

Postfach 12, Lohnergasse 3, A-1215 Wien.

Tel: 0222 38 85 01 Telex: 075525

Supplies filters and speciality papers, DEAE membranes and diazotized media for transfer of nucleic acids and proteins, glass fibre filters, ultra and microfiltration membranes and apparatus, and products for chromatography. Agent for Schleicher & Schuell GmbH, Germany.

AUSTRIA Part III

Voest Alpine

Vereinigte Osterreichische Eisen und Stahlwerke-Alpine Montan AG

Postfach 2, A-4010 Linz. Tel: 0722 585 Telex: 21421

Major manufacturer of steel and coal chemicals. Parent company of Vogelbusch, Voest-Alpine and Bohler Brothers of America Inc, who offer technology for power alcohol (ethanol), yeast and chemicals on a worldwide hasis

Voest-Alpine Bausysteme GmbH

Vereinigte Osterreichische Eisen und Stahlwerke

Wienerstrasse 17, A-4020 Linz.

Manufactures composting plants and clarifying plants for industrial wastewaters including electrodialysis for separation of emulsions.

Vogelbusch GmbH

Postfach 52, Blechturmgasse 11, A-1053 Wien. Tel: 0222 54 16 61 Telex: 132144

Provides engineering and technical services for fermentation and distillation applicable to power alcohol (ethanol) production. Also offers plant for yeast (bakers' fodder), vinegar, potable alcohol, water treatment, anaerobic digestion, citric acid, acetic acid, single cell protein, example alcohol, water treatment, anafactures a deep jet process for microbial treatment of sewage. Produces an analytical detection system for on-line analysis of ethanol concentration during fermentation.

Wander GmbH

Handelskai 52, A-1205 Wien 20. Tel: 0222 35 35 07 Telex: 74898

Manufactures organic chemicals and pharmaceutical preparations.

Wellcome Pharma GmbH

Koestlergasse 7, A-1061 Wien. Tel: 0222 57 41 85 Telex: 113793

Supplies pharmaceutical products and diagnostic reagents of the Wellcome Foundation, $\mathsf{U}\mathsf{K}.$

Westfalia Separator Austria GmbH

Wallackgasse 4, A-1234 Wien. Tel: 0222 69 46 21 Telex: 131519 Supplies industrial centrifugal separators.

Zeiss Osterreich GmbH

Postfach 96, A-1096 Wien. Tel: 0222 42 36 01 Telex: 115715

Supplies light microscopes and related optical equipment.

Zinsser Analytic GmbH

Assmayergasse 60, A-1120 Wien 12. *Tel*: 0222 832 172

Supplies a wide range of laboratory equipment and reagents including automated pipetters, liquid dispensers, radioactivity counters, scanners for ELISA and EIA assays, colony counters, homogenizers, roller apparatus, systems for cell culture, peptide synthesizers, etc.

Zoltan Szabo

Kalbeckgasse 5, A-1180 Wien. Tel: 0222 473 195 Telex: 116667

Supplies immunological reagents and diagnostics; products of Janssen Life Sciences Products, Belgium. Also distributor for Zymed Laboratories and Genzyme, US and UCB Bioproducts, Belgium.

BELGIUM

Abbott SA

Chemical/Agricultural Products Division

Parc Scientifique, rue du Bosquet 2, B-1348 Louvain-la-Neuve.

Manufactures reagents and analytical systems based on various immunoassays for use in clinical chemistry, immunology, hormone assay and pharmacological testing. Developing new systems using recombinant DNA technology amd monoclonal antibodies. Subsidiary of Abbott Laboratories, US.

Acade Diagnostic Systems SA/NV

17 passage de le Vequee, Boite Postale 4100, B-1200 Bruxelles. Tel: (02) 762 89 75 Telex: 65867

Supply a range of kits for estimation of T4, TBG ferritin, alpha-fetoprotein (AFP) and human placental lactogen (HPL) based on particle counting immunoassay, a fully-automated, non-isotopic technique of high sensitivity which they manufacture as the IMPACT system. The determinations are used in the diagnosis of thyroid disorders, allergies gynaecology, obstetrics, neonatal infectious disease, cancer etc. Kits include T4, TSH with TBG saturation, ferritin, AFP and HPL.

Agriben SA/NV

Boite Postale 3, 203 galerie Porte Louise, B-1050 Bruxelles. Tel: (02) 513 41 40 Telex: 64218

Distribute agrochemical products of Rhone-Poulenc, France.

Aldrich Europe

c/o Janssen Pharmaceutica, B-2340 Beerse. Tel: (014) 61 14 31 Telex: 84632540

Supply a very wide range of organic and inorganic chemicals for research and industry, as well as specialist solvents, glassware and reagents for spectroscopy in particular. Distributor for Aldrich Chemical Co Inc, US.

All Plastics Applications SA

Accurate Division

440 chaussee de Bruxelles, B-1410 Waterloo. Tel: (02) 554 87 05 Telex: 26387 gold

Supply biological reagents, biochemicals, cell separation media and fine chemicals for Accurate Chemical and Scientific Corp, US.

Alltech Europe

Begoniastraat 5, B-9731 Nazareth Eke. *Tel*: (091) 85 55 11 *Telex*: 12657

Supply materials and accessories for chromatography including packing materials and supports, capillary, glass and metal columns; reagents, solvents and prepacked columns for high performance liquid chromatography; fluorescent monitors for liquid chromatography. Subsidiary of Alltech Associates Inc, US.

American Hospital Supply

rue Colonel Bourg 105-B, B-1140 Bruxelles. Tel: 02 4653000 Telex: 84625273

Supplies radioimmunoassay kits and reagents, diagnostic enzymes, biologically active peptides, amino acids and derivatives etc as well as antibodies and antiserums; products of Radioassay Systems Laboratories Inc, US.

Amersham Belgium SA/NV

rue St Lambert 133, B-1200 Bruxelles Tel: 02 770 00 75 Telex: 64812 Ambel B Fax: 02 762 93 10

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Amylum NV

Burchstraat 10, B-9300 Aalst. Telex: 12363 Tel: 53 763333

Manufacture high fructose, glucose syrups and other starch derivatives from wheat and maize.

Applied Research Sprl

Parc Industriel, Ch de Charleroi 115, B-5900 Jodoigne. Tel: 010 81 02 73

Manufacture chromatography adsorbents.

Arbios SA

Boite Postale 4, B-6000 Charleroi. Tel: (071) 44 22 73 Telex: 51227 acec

Engineering contractors specialising in environmental and biotechnological processes, including industrial effluent treatment and renewable energy from wastewater by methane fermentation. Designers of Biotim A, a flexible anaerobic digestion process to suit a wide variety of liquid organic

Association Internationale de Developpement Rural AIDR

Boite Postale 9, 20 rue de Commerce, B-1040 Bruxelles. Tel: (02) 512 87 19

Developing anaerobic digesters for use on pig manure, cattle wastes, slaughterhouse wastes etc, in association with various groups in African countries, including Upper Volta, Rwanda and Burundi.

Association Of Belgian Industries

Association des Industriels de Belgique

29 avenue Andre Drourt, B-1160 Bruxelles.

Tel: (02) 673 80 90 Telex: 23166

Provides consultancy services in water and air pollution, solid waste disposal etc, including sampling, analysis and control measures.

Atlas Chemical Industries NV

Everslaan 45, B-3078 Everberg.

Tol. (02) 731 68 50 Telex: 26153

Produce speciality chemicals for agricultural, pharmaceutical, cosmetic and other applications (see Imperial Chemical Industries Plc, UK).

Avebe Belgium NV

Boite Postale 25, Van Putlei 53, Antwerpen.

Tel: (031) 16 11 76 Telex: 71073

Supply glucose and starch derivatives (see Avebe BV, Netherlands).

Bachmann Favereau Glover & Associates

Hekstraat 30, B-1540 Herne.

Carry out multiclient studies on areas which include immunoassay methods, diagnostic products, biological reagents etc.

Bacterial Culture Collection

Institute Tropical Medicine

Nationalestraat 155, B-2000 Antwerpen.

Holds culture collection of bacteria for medical microbiology research and teaching. Offers identification services.

BASF Chimie SA

12-14 avenue Hamoir, B-1180 Bruxelles. Tel: (02) 375 24 00 Telex: 22016

Distributes pharmaceuticals and agrochemicals; products of BASF AG, Germany.

BELGIUM Part III

Bayer Belgium SA/NV

143 avenue Louise, B-1050 Bruxelles. Tel: (02) 538 60 55 Telex: 21372

Markets pharmaceuticals for human and veterinary use as well as agrochemicals, etc; products of Bayer AG, Germany.

Becton Dickinson Immunocytometry Systems

PO Box 13, Denderstraat 24, B-9440 Erembodegem. Tel: (053) 78 78 30 Telex: 12337

Markets cytometry products of Becton Dickinson & Co, US.

Beecham 1980 Products NV

Leuvensesteenweg 4, B-1980 Tervueren. Telex: 23404

Distribute pharmaceutical products, including antibiotics, vaccines and vitamins (see Beecham Pharmaceuticals Co Ltd, UK).

Belgamerck SA

24 avenue Brugman, B-1060 Forest Bruxelles. *Tel*: (02) 345 39 00 *Telex*: 22720

Distributes pharmaceuticals and fine chemicals; products of E Merck, Germany.

Belgolab SA

Overijse, B-0180 Bruxelles.

Tel: (02) 687 76 20

Supply fermentation equipment (see LH Fermentation, UK), and centrifuges etc of International Equipment Co, US.

Bio-Rad Laboratories Ltd

Dreve du Senechal, 19 Landvoogddreef, B-1180 Brussels. Tel: 02 375 5970 Telex: 26864 Fax: 02 374 6162

Supplies separation equipment and biological reagents. Member of Bio-Rad Group.

Biocon SA

Scheldestraat 145, B-9110 St Amandsberg Gent. Tel: (091) 28 49 71 Telex: 12199

Supply enzymes, natural colours and related products for the following industries: brewing, distilling, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Biolab SA

19 rue de la Station, B-1350 Limal. Tel: 010 41 98 00 Telex: 59209 biolab

Supply radioimmunoassay kits, as well as immunofluorescent chemical diagnostics and related products. Agent for Luminescence Laboratory, Advanced Magnetics, and Gull Laboratories Inc, US.

BioMerieux Benelux

91-93 avenue du Diamant, B-1040 Bruxelles.

Telex: 61909 Tel: 02 736 59 49

Distribute clinical diagnostics (see BioMerieux SA, France).

Biosurvey SA

15 rue d'Egmont, B-1050 Bruxelles.

Tel: 02 517 23 68

Offer the following services in the field of biotechnology: studies, surveys and monographs and organization of seminars and symposia; assessment of investment projects including scientific technical and financial as well as marketing and management aspects; recruitment of technicians and managers.

Biotec SA

Boite Postale 47, 479 avenue Louise, B-1050 Bruxelles. Tel: 02 649 01 73 Telex: 25229

Working in the area of plant cell and tissue culture, the development of bioluminescent diagnostic kits and the role of dehydro-amino acids as anti-cancer agents.

Biotest Seralco SA/NV

115/121 Rue Anatole France, B-1030 Brussels. Tel: 02 242 8730 Telex: 63878

Supplies blood-grouping and tissue-typing reagents, immunological reagents and bacterial growth media; products of Biotest-Serum-Institut GmbH, Germany.

Boehringer Pharma NV/SA

90 avenue des Croix de Guerre, B-1120 Bruxelles.

Tel: (02) 242 64 20 Telex: 25259 bru

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Boterdael & Zonen PVBA

Steenweg op Mechelen 660, B-1800 Vilvoorde. *Tel:* 02 251 0646 *Telex:* 20139

Telex: 20139

Supplies liquid handling equipment including dose dispensers suitable for corrosive liquids.

Brocades-Belga SA/NV

Jaqueslaan 26, B-1050 Bruxelles.

Tel: (020) 648 64 90 Telex: 24453

Supply clinical diagnostics kits and reagents for autoanalyzers and immunoanalysis (see Mercia-brocades Ltd, UK). Subsidiary of Gist-brocades NV, Netherlands.

Brussels Free University

Laboratory of Biological Oceanography

B-1050 Bruxelles.

Studying production of marine green algae in coastal waters and their culture in ponds enriched with wastewater.

Brussels Free University

Institute of Interdisciplinary Research

115 boulevard de Waterloo, B-1640 Bruxelles.

Projects covered include affinity chromatography and radioimmunoassays.

Brussels Free University

Department of Molecular Biology

Rhode-St-Genase, B-1640 Bruxelles.

Tel: (02) 58 35 30

Carrying out studies on the transformation of cells by SV40 virus, biochemistry of protozoa, recombinant RNA and protein synthesis.

Brussels Free University

Department of Biochemistry

50 avenue Franklin D Roosevelt, B-1050 Bruxelles.

Tel: 02 649 00 30 Telex: 23069 unlib

Carrying out studies on secondary metabolites.

Brussels University

Department of Immunology & Blood Bank

St Pierre Hospital, 322 rue Haute, B-1000 Bruxelles.

Tel: (02) 88 00 00

Studying cellular immunology, blood group immunology, coagulation etc. Developing methods in immunodiffusion.

Bureau Europeen de Recherches SA

173 Rue Stevin, B-1040 Bruxelles. Tel: 02 230 3449/3481 Telex.

Telex: 62748

Consultancy dealing with policy issues related to food and agriculture in Europe.

BYK Belga SA

115-120 rue Anatole France, B-1030 Schaerbeek.

Tel: (02) 215 48 75 Telex: 24512

Produce pharmaceuticals, veterinary products and essential oils; products of Mallinckrodt Inc. US.

Cerestar

formerly CPC Europe

Boite Postale 13, 149 avenue Louise, B-1050 Bruxelles. Telex: 22121 Fax: 02 537 8554 Tel: 02 539 01 12

Produces glucose and starch derivatives.

Chemical Research Institute

Institute de Recherches Chimique

Molenstraat 5, B-1980 Tervuren.

Tel: (02) 57 53 02

Carrying out studies on plant alkaloids and pigments and effects of herbicides on enzyme activity in plants.

Part III BELGIUM

Chrompack Belgium NV

Waterwilgweg, B-2050 Antwerpen. Tel: 03 219 5969 Telex: 34898

Specializes in equipment and accessories for gas, liquid and high performance liquid chromatography; products of Chrompack International BV, Netherlands.

Ciba-Geigy NV/SA

Noordkustlaan 18, B-1720 Groot Bijgarden. Tel: (02) 465 74 00 Telex: 21559

Manufacture pharmaceuticals (antibiotics and steroids) and supply other products (pesticides, herbicides, industrial chemicals etc) of Ciba-Geigy AG, Switzerland.

Citrique-Belge NV

Pastorijstraat 249, B-3300 Tienen. Telex: 22329 Tel: (016) 81 32 31

Manufacture citric acid, calcium citrate and other salts.

Clinical Assays

Parc Industriel, Rue du Progres 7, B-1400 Nivelles. Telex: 57344 Tel: 607 228911

Supplies immunological and biological diagnostic kits including radioimmunoassays; products of Clinical Assays Division of Travenol Laboratories Inc, US (see Laboratoires Travenol, France).

Collection Laboratorium voor Microbiologie

Fakulteit Wetenschappen, Rijksuniversiteit

Ledeganckstraat 35, B-9000 Gent.

Holds culture collection of bacteria containing a special collection of aerobic heterotrophs for general, agricultural, microbiology and biotechnology research, especially on plant pathogens.

Consort pyba

Parklaan 36, B-2300 Turnhout.

Tel: 014 41 12 79 Telex: 73476 Fax: 014 42 91 79

Manufacture laboratory apparatus and analytical equipment including electrophoresis power supplies, pH meters, ion-selective analyzers, oxygen meters, conductivity meters etc.

Continental Pharma

Rafaelstraat 20-22, B-1070 Bruxelles. Tel: (02) 523 00 70 Telex: 64570

Supply products for testing sensitivity to antimicrobial and antifungal substances, as well as kits for identification of bacterial infections. Agent for Rosco AS, Denmark. Manufacture fine chemicals and pharmaceutical intermediates, as well as offering a custom synthesis service.

Degremont Benelux SA

Parc Industriel de Hauts-Sarts, B-4400 Herstal.

Tel: (041) 64 44 50 Telex: 41421

Design and construct plant and equipment for waste water and effluent treatment, including drinking and industrial water installations as well as wastewater purification and industrial effluent treatment plants.

Diagnostics Pasteur/Eco-Bio NV

Woudstraat 25, B-3600 Genk.

Tel: 011 384 252 Telex: 38087 Fax: 011 384 392

Supply equipment for enzyme immunoassay, monoclonal antibodies, antibiotic sensitivity tests, bateriological detection systems, diagnostic tests, reagents, culture media and controls, as well as microscopy accessories.

Dorr Oliver SA

6 boulevard de Berlaimont, B-1000 Bruxelles. Tel: (02) 219 00 30 Telex: 22774

Supply equipment for dewatering and separation, including industrial filtration equipment, vibration and screening plant and equipment for water purification.

Du Pont De Nemours (Belgium) NV

Mercure Centre, 100 rue de la Fusee, B-1130 Bruxelles. Tel: (02) 722 07 16

Distribute instruments for thermal analysis and process applications, high performance liquid chromatography etc, as well as centrifuges and microtomes. Also supply radiochemicals, enzymes and products for molecular biology of E I Du Pont de Nemours & Co, US.

Eli Lilly Benelux SA

52 rue de l'Etuve, B-1000 Bruxelles. Tel: (02) 512 38 52 Telex: 242. Telex: 24226

Distribute pharmaceutical products of Eli Lilly & Co, US.

Elscolab NV

Van Averbekelaan 9, B-2050 Antwerpen.

Supply laboratory and fermentation equipment.

Essex Laboratories NV

Industriepark 30, B-3100 Heist-op-den-Berg. Tel: (015) 24 46 85 Telex: 26333

Produce pharmaceuticals.

ETS A DeBournonville

Parc Industrial de le Valles du Hain, B-1430 Br Wauthier Braine. Supply immunological and biological reagents. Distributor for Immuno-Mycologics, US.

Eurogenetics NV

Industriepark 24, Industriezone West, B-3980 Tessenderlo.

Tel: 013 66 88 30 Telex: 39112 eurgen

Luikersteenweg 232, B-3500 Hasselt.

Tel: 011 274430

Develop and market diagnostic products and computer software packages. Products include microreaders and microtitre plates as well as programs for analysis of ELISA tests which may be networked through RS232C using IBM systems. Markets ELISA assays and microtitre strips for quantitative determination of CNV, TOXO, CRF, RF, ASLO, ferritin, IgE, LH, FSH, HCG, prolactin and TSH. Also distributor for Cistron Biotechnology, US.

Fisons NV/SA

Halleboomstraat 6, B-3020 Herent. Tel: (016) 23 60 21 Telex: 252

Telex: 25215

Distribute pharmaceuticals and other products of Fisons Ltd, UK.

Flow Laboratories SA/NV

39-41 avenue du Suffrage Universal, B-1030 Bruxelles.

Tel: (02) 215 19 67 Telex: 64870

Supply products for cell culture, research and clinical diagnostics, including immunoassay reagents and kits (see Flow Laboratories Inc, US).

Frankignoul & Cie SA

Zone Industriel de Grace-Hollogne, B-4330 Grace-Hollogne.

Tel: (041) 63 39 20 Telex: 41815

Supply instruments for the analysis and control of gases as well as control and regulation of pressure, temperature, flow etc for liquids.

Ghent University

Department of Microbiology & Microbial Genetics

K L Ledeganckstraat 35, B-9000 Gent.

Tel: (091) 22 78 21

Studying T1 plasmids and opine synthesis. Supply bacterial cultures.

Ghent University

Department of Plant Biochemistry

K L Ledeganckstraat 35, B-9000 Gent.

Tel: (091) 22 78 27

Undertaking synthesis of amino acids and phenol- containing peptides, isolation of peptides and protein biosynthesis in plants.

Ghent University

Laboratory of Microbial Ecology

Coupure 553, B-9000 Gent.

Evaluating capacity of anaerobic phototrophic bacteria, cyanophytes and fermentative heterotrophic bacteria to produce hydrogen gas. Designing bioreactors for continuous production of hydrogen gas by anaerobic fermentative heterotrophs.

Ghent University

Laboratory of Molecular Biology

K L Ledeganckstraat 35, B-9000 Gent.

Studying replication of DNA in synthesis of SV40 RNA.

BELGIUM Part III

Ghent University

Department of Medicine

Depintelaan 135, B-9000 Gent.

Tel: (09) 22 59 41

Research covers electron microscopy, immunology and biochemistry.

Gibco Europe SA/NV

Drongensesteenweg 68, B-9000 Gent. Tel: (091) 277 031 Telex: 12101

Supply products for tissue culture, microbiology, clinical chemistry and immunology (see Gibco Division, US).

Komvest 43, B-8000 Brugge, B-8000 Brugge.

Tel: (05) 33 65 51 Telex: 81207

Produce fresh yeast and various food ingredients, as well as a wide range of industrial enzymes and related products. Subsidiary of Gist-brocades NV, Netherlands)

Gorsem Research Station

Laboratory of Plant Physiology Brede Akker 3, B-3800 St-Truiden.

Telex: 39719 Tel: (01) 168 20 19

Undertaking technical and economic studies on anaerobic digestion in treatment of agricultural and food industry wastes and effluents.

Henkel Belgium SA

66 avenue du Port, B-1020 Bruxelles Telex: 21294 Tel: (02) 426 98 06

Produce fatty acids, glycerol, soaps, cosmetics, adhesives and related products. Subsidiary of Henkel KG, Germany.

Hoechst Belgium SA

111-113 chaussee de Charleroi, B-1060 Bruxelles.

Telex: 21396 hb Tel: (02) 537 73 35

Supply fine chemicals, radioimmunoassay kits and reagents etc, for clinical chemistry as well as antibiotics and other pharmaceuticals (see Hoechst AG, Germany).

Holurieka NV

Boite Postale 19, B-8600 Menen. Tel: (05) 651 42 51 Telex: 8

Telex: 85101

Manufacture industrial scale stainless steel fermenters and storage vessels.

Hospithera-Labo

Emile Feronstraat 70, B-1060 Bruxelles.

Tel: (02) 538 90 50 Telex: 23604

Supply immunochemicals and clinical diagnostic kits. Agent for Dakopatts AS, Denmark.

Houston Instrument Belgium BV

Rochesterlaan 6, B-8240 Gistel.

Telex: 84681399 Tel: 059 27 74 45

Supplies strip chart recorders. European agent for Houston Instrument,

Hybritech Europe SA

B-4900 Angleur (Liege).

Tel: 041 67 70 00

Produce research monoclonal antibodies, human and animal hybridomas, diagnostic test kits for pregnancy, prostate cancer, Strep A etc, separations, cell identification kits etc, as well as a photon immunoassay analyzer. Subsidiary of Hybritech Inc, US.

ICP

International Institute of Cellular and Molecular Pathology

Avenue Hippocrate 75, B-1200 Bruxelles

Telex: 23722 ucl wol Tel: (02) 764 74 63

Carrying out research in genetic engineering, restriction site vectors, cloning in gram negative bacteria etc.

Immuno SA/NV

1898 rue de Merodestraat, B-1060 Bruxelles, B-1060 Bruxelles. Telex:

Supply blood products and diagnostic kits (see Immuno Ltd, UK).

Imuco SA

64 rue Albert, B-7540 Kain.

Tel: (069) 23 11 81 Telex: 57471

Manufacture antibodies and radioimmunoassay kits for gonadotropins.

Innogenetics SA/NV

Industriepark Zwijnaarde 7, Box 4, B-9710 Gent.

Tel: 091 216266 Telex: 12141 labmed

Kronenburgstraat 45, 10th floor, B-2000 Antwerp. Tel: 03 2164820 Tx: 12141

Research and development company offering services in the areas of human and animal diagnostic and therapeutic health care including genetic engineering and macrophage hybridoma technology with applications in: bioassays for identification of new cytokines, therapeutic enzymes and fertility hormones; determination of toxicity and activity of new drugs, therapeutics and prophylactics; development of new vaccines, DNA probes and antibodies to heart disease markers and for oncology. Products include in vitro diagnostic kits based on monoclonal antibodies against placental alkaline phosphatase. Distributor for Jackson Immunoresearch Laboratories, US. Have agreement with Kanegafuchi Chemical Industry, Belgium to develop new monokines.with

Institut Merieux Benelux

56 rue A de Boeck, B-1140 Bruxelles. Telex: 6300 imebe s Tel: 02 242 48 84

Supplies veterinary vaccines, serums and antigens (see Institut Merieux, France).

Institute of Hygiene & Epidemiology

Institute voor Hygiene & Epidemi-Microbiologie

Juliette Wytsmanstraat 14, B-1050 Bruxelles.

Tel: 02 64 25 514

Studies include investigations of hepatitis antigens.

Institute of Hygiene & Water Control

Nationalestraat 155, B-2000 Antwerpen.

Tel: (03) 38 58 84

Studying metabolic diseases, immunochemistry and water pollution

Institute of Molecular Biology

Department of Plant Genetics

Paardenstraat 65, B-1640 Sintgenesius Rode.

Tel: (02) 58 59 50

Researching into various topics in plant genetics.

Institute of Tropical Medicine

Institut de Medicine Tropicale

Nationalestraat 155, B-2000 Antwerpen.

Tel: (03) 30 64 27/38 58 80

Investigating tropical diseases and studying blood, parasitic protozoa, trypanosoma, amoeba and toxoplasma.

Instrulab SA

Chaussee de Charleroi 51, B-1060 Bruxelles.

Tel: 02 538 62 60 Telex: 26036

Supplies optical and other scientific equipment including fibre optic systems.

IntelliGenetics Inc

Amocolaan 2, B-2440 Geel.

Tel: 32 14 58 99 Telex: 32375

Markets software for molecular biology and biochemistry including cloning simulation and data management as well as protein and nucleic acid sequence analysis, selection and assembly.

IRE

Avenue General Eisenhowerlaan 105-107, B-1030 Bruxelles.

Tel: (02) 215 18 03 Telex: 23195 ire bxl

Supply diagnostics kits based on monoclonal antibodies and radioimmunoassay, including assays for transcortin and TSH.

Part III **BELGIUM**

IRE Celltarg SA

Unite BEPC 3920, Clos Chapelle aux Champs 30, Bte 30/31-7 etage, B-1200 Brussels.

Tel: 02 764 39 20 Telex: 51539

Carrying out research and development of diagnostic kits based on monoclonal antibodies for detection of carcinoma and radiopharmaceuticals for scintillation studies, and for medical imaging and

IRE Medgenix SA

rue du Molin a Papier 51/2, B-1160 Brussels. Tel: 02 660 5060 Telex: 64768

Carrying out research on lymphokines, monokines and cell receptors for development of immunotherapeutics including radioimmunoassays based on monoclonal antibodies for endocrinology, as well as immunomodulators and steroids

Janssen Biochimica

Turnhoutseweg 30, B-2340 Beerse. Tel: 014 602111/60 33 07 Tel Telex: 32540/34103 Fax: 014 602841

Produces T and B-cell markers, human IgG subclass reagents (agglutination, ELISA, RID), free Kapppa and Lambda, DNA probes, monoclonal antibodies, serums, antiserums, enzymes, complex carbohydrates, interleukin-2 to -6, hybridoma growth factor, venoms and toxins, protein A and G, restriction endonucleases, DNA primers and standards, human endothelial cell supernatant and rabbit reticulocyte lyzate. Developing a wide range of similar products for research in immunology and sequence analysis. Division of Janssen Pharmaceutica,

Janssen Life Sciences Products

Lammerdries 55, B-2430 Olen. Telex: 72404 Tel: 014 22 40 15

Supplies diagnostic and other reagents including antiserums and radioimmunoassay kits for drugs as well as carrying out custom synthesis. Major products include immunogold, calmodulin inhibitors, drug-monitoring tools, ultrasensitive dyes and tritium-labelled drugs. Division of Janssen Pharmaceutica, Belgium.

Janssen Pharmaceutica

Turnhoutseweg 30, B-2340 Beerse.

Tel: 014 60 21 11 Telex: 32540 Fax: 014 60 28 41

Supplies laboratory reagents and organic intermediates for synthesis of pharmaceuticals and veterinary products as well as phytopharmaceuticals. Subsidiary of Johnson & Johnson Inc, US.

Kela Laboratoria NV

Postbus 4 Sint Lenaartseb 3, B-2320 Hoogsteaten.

Tel: (031) 14 69 21 Telex: 33509

Produces pharmaceuticals for human and veterinary use.

Koninklijke Nederlansche Gist & Spiritusfabriek BV

Komvet 43, B-8000 Brugge.

Manufactures ethanol and industrial enzymes. Subsidiary of Gist-brocades NV, Netherlands.

Labofina SA

Zone Industrielle, B-6520 Feluy Belgium.

Telex: 57919 Tel: 064 54 00 51

Using recombinant DNA technology to produce enzymes for industrial processing. Subsidiary of Petrofina SA.

Laboratoires Sanders SA

47-51 rue Henri Wafeaerts, Bruxelles 6.

Supplies enzymes for research and analytical purposes.

Lecoca Ets A Lecoca SA

Lazatystraat 46, B-3500 Hasselt.

Tel: (011) 22 33 86

Produces essential oils, flavours and fragrances.

Leo Pharmaceutical Products Belgium SA

1001 chaussee d'Asemberg, B-1180 Bruxelles.

Tel: (02) 376 11 75

Distributes pharmaceuticals; products of Leo Pharmaceutical Products AS, Denmark.

Leuven Catholic University

Department of Plant Biochemistry

Vaarstraat 24, B-3000 Leuven.

Tel: (016) 253 06

Carrying out research into plant carbohydrates, nucleic acids, enzymes, plant growth regulators and synthetic analogues.

Leuven Catholic University

Rega Institute

Munderbroedersstraat 10, B-3000 Leuven.

Tel: (061) 379 21

Undertaking studies on endocrinology, methods of detection of protein hormones, mechanism of hormone action, and cell and transplant immunology

Liege University

Department of Cytogenetics

56 rue des Bonnes Villes, B-4000 Liege.

Tel: (04) 42 02 26

Studying human and animal genetics.

Liege University

Institute of Medicine

23 boulevard Piercot, B-4000 Liege.

Tel: (04) 43 05 25

Carrying out fundamental and medical studies on viruses.

Liege University

Institute van Beneden

22 quai van Beneden, B-4000 Liege.

Tel: (04) 43 49 18

In Laboratory of Plant Biology studying plant hormones and plant peroxidases. In Laboratory of Biology researching muscle proteins with the determination of amino acid sequences.

Louvain Catholic University

Biotechnology Unit

1 place Croix du Sud, B-1348 Louvain la Neuve.

Tel: 010 47 36 55

Studying microbiological and technical aspects of anaerobic digesters.

Louvain Catholic University

Mycology Laboratory

Place Croix du Sud 3, B-1348 Louvain-la-Neuve.

Tel: 010 47 36 55

Offer services in identification, screening and isolation of fungi as well as patent and safe deposits and facilities for preservation, biodeterioration testing and contract work.

Medatom Sarl

96 chaussee de Charleroi, B-1060 Bruxelles.

Tel: (02) 538 32 44 Telex: 64305

Supplies diagnostic laboratory reagents radioimmunoassay kits for steroids, bile acids, placental proteins, ferritin and prostatic acid phosphatase. Agent for Nordiclab OY, Finland.

Medichim SA

21 rue de France, B-6000 Charleroi.

Tel: 07 131 40 05 Telex: 51225

Supplies immunological and biological reagents. Distributor for Immunotech SA.

Microgon Inc

Rue Montoyer 31, Bte 2, B-1040 Bruxelles.

Tel: 02 511 72 90 Fax: 02 512 21 65

Supply equipment for cell culture and filtration.

Micromeritics SA

Unit 2 Excelsiorlaan 45, Zaventem, B-1930 Bruxelles.

Tel: 02 725 0909 Telex: 25888 Fax: 02 725 0620

Supplies a surface area/total pore volume analyzer, amino acid analyzers, chromatography accessories and detectors.

BELGIUM Part III

Miles Scientific

c/o Bayer Belgium Diagnostics Division, 143 avenue Louise, B-1050 Bruxelles.

Distributes a wide range of biochemicals and enzymes for research, clinical and industrial use (see Miles Laboratories Inc US).

Milton Roy Co Analytical Products Division

Rochesterlaan 6, B-8240 Gistel.

Supplies equipment for UV/VIS spectrophotometry including portable spectrophotometers, refractometers, image analysis systems and diffraction gratings (see Milton Roy Co Analytical Products Division, US).

Ministry of Agriculture

Plant Pathology Institute

8 avenue Marechal Jiun, B-5800 Gembloux.

Tel: (08) 16 20 99

Studying plant fungal and viral diseases.

Ministry of Agriculture

Plant Breeding Station

4 rue du Boreia, B-5800 Gembloux.

Investigating plant breeding and genetics.

Mons University

Department of Biochemistry

21 avenue Maistrian, B-7000 Mons.

Tel: (06) 51 51 71

Carrying out studies on protein conformation, immunochemistry and protein synthesis.

Mycopharm Belga

26 General Jacqueslaan, B-1050 Bruxelles. *Tel*: (02) 648 64 90 *Telex*: 24453

Supplies animal health care products including antibiotics, steroids, poultry vaccines, pig vaccines, feed additives, rabies vaccine and pet products. Subsidiary of Gist-brocades NV Netherlands.

Naarden SA

87 avenue G Clemenceau, B-1070 Bruxelles.

Tel: (02) 521 90 70 Telex: 24246

Supplies essential oils, flavours and fragrances (see Naarden International NV, Netherlands).

National Veterinary Institute

Groeselenberg 99, B-1180 Bruxelles. *Tel*: (02) 74 59 98

Investigating microbiology and bacteriology of disease of large animals. Also studying animal blood groups, pathology of cattle diseases, role of plasmids in animal disease, parasitology and diseases of fish, domestic birds and bees.

Niro Atomizer (Benelux) NV

Rue de Geneve 10 bte 18, B-1140 Bruxelles.

Tel: 02 215 1902 Telex: 62799

Distributes equipment for separation and dewatering; products of Niro Atomizer, Denmark.

Nordic Immunological Laboratories NV

De Merodelei 24/5 Box 62, B-2300 Turnhout. Tel: 014 426280

Supplies diagnostic reagents, both human and animal antiserums, monoclonal antibodies and other immunological products of Nordic Laboratories BV, Netherlands.

Novo Industri SA NV

Enzymes Division

Ave Charles Quint 345, B-1080 Bruxelles.

Tel: (02) 465 24 00 Telex: 63022

Keizer Karellaan 345, B-1080 Bruxelles.

Tel: 02 4652400 Tx: 63022

Supplies industrial enzymes; products of Novo Industri AS, Denmark.

Nycomed SA/NV

Ave Albert Giraudlaan 1, B-1030 Bruxelles.

Supply diagnostic products of Nycomed AS Diagnostics, Norway.

Nyegaard SA/NV

Avenue Albert Giraudlaan 1, B-1030 Bruxelles.

Telex: 64082 Tel: (02) 215 92 00

Supplies cell separation media, clinical diagnostic kits, reagents and control serums. Subsidiary of Nyegaard & Co AS, Norway.

Organon Teknika NV

Veedijk 58, B-2300 Turnhout.

Telex: 71939 Tel: 014 41 0461/3893

Produces pharmaceuticals, including tetracycline steroids, insulin and other hormones as well as enzymes, diagnostic reagents and apparatus, and dialyzers and other related clinical equipment. Has developed a monoclonal antibody test for HCG. Member of Organon Teknika Group.

Ortho Diagnostic Systems

Antwerpsesteenweg 19-21, B-2340 Beerse. Tel: 014 61 16 24 Fax: 014 61 51 58

Distributor for Janssen Biochimica, Belgium.

Parke-Davis & Cie SA

Rijksweg 13, B-2680 Bornem. Telex: 34777 Tel: (031) 29 11 11

Distributes pharmaceutical products.

Pasture SA

154-156 avenue Rogier, B-1030 Bruxelles.

Tel: (02) 216 96 26 Telex: 22912 pasture

Supplies materials for culture of cells and microorganisms. Agent for KC Biologicals Inc, US.

PB Geletines SA

Marius Duchestraat 260, B-1800 Vilvoorde.

Tel: (02) 216 96 26 Telex: 21131

Produces edible, pharmaceutical and industrial gelatins.

Petrofina Research Group

Siege de Feluy Zoning Industriel, B-6520 Feluy.

Tel: 3406 4540051 Telex: 57919

Carrying out research and development of enzymes and proteins using recombinant DNA technology.

Pfizer Chimie SA

102 rue Leon Theodor, Jette.

Tel: (02) 217 45 41 Telex: 21438

Distributes pharmaceuticals, organic acids and other products of Pfizer Inc, US.

Pharmacia Belga

Avenue General Lartiguelaan 30, B-1200 Bruxelles.

Tel: (02) 7369990 Telex: 24453

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectrofocusing and cell studies (see Pharmacia AB, Sweden).

Pharmacia LKB Instrument NV/SA

Belgielei 90 PB 10, B-2018 Antwerp.

Tel: 03 218 93 35 Telex: 71837

Supplies instruments for biomedical research, for separation of macromolecules by chromatographic and electrophoretic methods as well as detection and counting of radioactive samples. Also produces equipment for ultramicrotomy (see Pharmacia LKB-Produkter AB, Sweden).

Philips Industrie SA

Scientific and Industrial Equipment Division

80 Rue des Deux Gares, B-1070 Bruxelles.

Tel: (02) 525 62 76

Blvd de l'Europe 131, B-1301 Wavre.

Tel: 010 41 65 11 Tx: 59058

Distributes analytical equipment including spectrophotometers and chromatographs (see Philips NV, Netherlands).

Part III BELGIUM

Plant Genetic Systems NV

Kunstlaan 46, BP 17, B-1040 Bruxelles. *Tel*: 02 513 67 55 *Telex*: 65307

Jozef Plateaustraat 22, B-9000 Gent.

Tel: 91 358440/358448 Tx: 11361 Fax: 91 240694

Carrying out research and development of products for recombinant DNA and protein technology in relation to developing plant strains with improved stress resistance, nitrogen fixation, herbicide tolerance, pest resistance and protein engineering as well as applications of microbiology in industrial and agricultural processes.

Pleuger NV

511 Turnhoutsebaan, B-2110 Wijnegem. *Tel*: 03 353 85 51 *Telex*: 31575

Supplies light microscopes.

Polylab pyba

Postbus 116, B-2060 Merksem. Tel: 031 46 55 11 Telex: 72244 pollab

Supplies reagents for cell culture and immunology including serums, antiserums and monoclonal antibodies. Agent for Sera-Lab Ltd, UK.

Probio SA

39 rue de Roucourt, B-7600 Peruwelz. *Tel:* (069) 77 20 75 *Telex:* 57622

Produces proteases, porcine and bovine blood plasma and haemoglobin as well as porcine, bovine and equine serums and other blood derivatives.

Raffinerie Tirlemontoise SA

182 avenue de Tervueen, Woluwe St Pierre Bruxelles. Tel: (02) 771 00 30 Telex: 24523

Produces ethanol and sugar.

Rousselot Benelux NV

Boite Postale 3, 123A chausse de Charleroi, B-1060 Bruxelles. Tel: (02) 538 83 50 Telex: 22556

Produces chemicals from bones, including fats, bone meal, calcium phosphate, collagen, gelatin and ossein, as well as chemicals, plastics, resins, adhesives and glues. Subsidiary of Rousselot SA, France.

RSL

Begoniastraat 5, B-9731 Eke.

Supplies ion exchange resins and special column packings for high performance liquid chromatography, as well as calibration standards and buffers for amino acid analysis by liquid chromatography. Agent for Benson Co, US.

Sanki Engineering Ltd

Rayguy House 22, Place de Brouckere, B-1000 Bruxelles. Tel: 02 425 75 59

Supplies industrial separation and dewatering equipment, including filtration, centrifugation and fluidized bed processing. Also supplies a haemo cyto screener for measurement of haemolysis and a small cell counter for individual use.

Skalar Belgium pvba/sprl

Statiestraat 36, B-2650 Boom.

Tel: 03 888 96 72

Supplies analytical equipment including segmented flow analyzers, process analyzers, automatic digestion systems and sample processors; products of Skalar Analytical BV, Netherlands.

SmithKline RIT

13 rue du Tilleul, B-1320 Genval. Tel: (02) 653 88 11 Telex: 23632

Manufactures human and veterinary vaccines, antibiotics and pharmaceutical products. Developing the use of monoclonal antibodies for purification of vaccines. Subsidiary of SmithKline Beckman, US.

Socser

Supplies immunochemicals, reagents for electrophoresis and affinity chromatography, as well as fine chemicals for research and industry. Agent for Polysciences and Kent Laboratories Inc, US.

Solvay & Cie

rue du Prince Albert 33, B-1050 Bruxelles. Tel: 02 516 61 11 Fax: 02 516 66 05

Produce veterinary vaccines, biopesticides based on Bacillus thuringinensis wnd B sphaericus, industrial enzymes (amylases, glucose isomerase, proteases), and milk derivatives (lactose, whey proteins). Associated research projects include recombinant DNA technology, fermentation and immunology for production of peptides, biopesticides, immunomodulators and antigens.

Sopar-Biochem SA

rue Jules Besme 124, B-1080 Brussels.

Tel: 02 425 14 55 Telex: 23941 Fax: 02 425 23 51

Supplies immunological and biological reagents. Distributor for Atlantic Antibodies and Wien Laboratories, US, Serotec, UK and Biomakor, Israel.

State Faculty of Agricultural Science

Faculte des Sciences Agronomiques de l'Etat Gembloux

place St Ginbert, B-5800 Gembloux.

Tel: (08) 16 29 61

Carrying out studies on tissue culture, plant hormones, microbial antigens, viruses, polysaccharides, methods of analysis and plant breeding and genetics.

Stauffer Chemical BV

Parc Industriel, Tyberchamps, B-6198 Seneffe.

Tel: (064) 55 53 15 Telex: 57481

Manufactures fine chemicals including agrochemicals. Subsidiary of Stauffer Chemical Co, US.

Sulzer Belgium SA/NV

92 Square Plasky (Boite 13), B-1040 Bruxelles.

Tel: 02 734 9606/02 734 3161 Telex: 21039 sulz Fax: 02 733 9040

Supplies bioreactors and biotechnical equipment for the laboratory pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR BioReactor AG, Switzerland).

Sweco Europe SA

10 chemin de la Vieille Cour, Parc Industriel, B-1400 Nivelles. *Tel:* (067) 22 51 91 *Telex:* 57482

Produces separation and dewatering equipment including centrifugal separators, hydrocyclones and industrial filters.

Techland SA

Parc Indust de Rech Sart Tilman, Allee des Noisetiers, B-4900 Angleur/Liege.

Tel: 041 67 44 64 Telex: 42364

Supply immunological and biological reagents including polyclonal antibodies, radioimmunoassay diagnostic kits, Protein A, affinity chromatography technology for purification of proteins and hormones. Associated with University of Liege.

Techmation

Werkuizenkaai 8, B-1020 Bruxelles. Telex: 84625361

Supplies gas chromatographs, high performance liquid chromatographs, fraction collectors, infra-red spectrographs, organic vapour analyzers etc (see Analabs, US).

Travenol Laboratories SA

boulevard d'Houraing, B-7860 Lessines. Tel: (068) 33 41 61 Telex: 57226

Manufactures pharmaceuticals. Subsidiary of Baxter Travenol Laboratories Inc, US.

HCI

Major manufacture of pharmaceuticals, fine chemicals biological reagents and immunological products. Also licences processes worldwide.

BELGIUM Part III

UCB Bioproducts SA

Chemin du Foriest, B-1420 Braine l'Alleud. Tel: 02 384 00107/385 0010 Telex: 65549

Supplies amino acids, enzymes and biologically active peptides as well as hormones and monoclonal and polyclonal antibodies. Division of UCB, Belgium.

Upjohn SA

Lichterstraat, B-2670 Puurs.
Tel: (031) 89 28 11 Telex: 32268
Manufactures pharmaceuticals (see Upjohn Co, US).

Vel SA

Geldenaaksebaan 464, B-3030 Leuven. Tel: (016) 28 18 11 Telex: 846 22352 vel

Supplies fine chemicals and reagents for laboratory and diagnostic use. Agent for Fluka AG, Switzerland.

Vincotte VZW Association

Rodestraat 125, B-1630 Linkebeek. *Tel*: (02) 858 35 80 *Telex*: 22550

Inspection organization licenced by the Belgian government for inspection, measurement and control related to safety of individuals and to environmental protection. Provides pollution control consultancy services for microbiological, biological and organic pollutants in air or water as well as most other areas such as radioactivity, oil spillage, fumes, odours etc.

Wellcome SA/NV

Industriezone 3, B-9440 Erembodegem. Telex: 12451 wellc

Supplies a wide range of medical and veterinary pharmaceuticals, fine chemicals, medical diagnostics and laboratory reagents for use in research, hospitals, industry etc (see Wellcome Diagnostics, UK).

BRAZII

Acatec

Supplies scientific equipment for gel permeation and liquid chromatography, as well as other laboratory equipment and analytical instrumentation.

Acesita SA

Rua Tupis 38, 15 Andar Centro, Belo Horizonte MG 30 000. *Tel:* 031 226 1366

Produces fine chemicals.

Acoplast Industria e Comercio Ltda

Supplies industrial filters.

AGA SA

Supplies biotechnology equipment.

Agar Brasileira

Rua B Quadra 09 S/N Distrito Industrial, Joao Pessoa, PB 58 070. Developing products for the biomass energy and food industries.

AGROBAHIA

Empreendimentos Agroindustriais da Bahia SA

Av Magalhaes Neto Ed Fundacentro S/N, 2 Andar, Salvador BA 41 820. Tel: 071 231 4118

Developing agricultural products.

Agroceres

Av Dr Vieira de Carvalho 40, 2 Andar, Sao Paulo SP 01 210. Tel: 011 222 8522/222 3620

Developing agricultural products including hybrid seeds and new plant and animal strains. Carrying out research on in vitro culture and cell fusion.

Agroceres-PIC

Rua Alfena, 405 Bairro Cruzeiro, Belo Horizonte MG 30 310. Tel: 031 227 6799

Working in area of animal genetics.

Agropecuaria Bonfiglioli SA

Facenda Sao Marcos km 272 ROD, Francisco Alves Negrao, Itapeva SP 18 400.

Tel: 0155 22 2239/22 1313

Working in agriculture in area of artificial insemination.

Agropecuaria Lagoa da Serra Ltda

Fazenda Lagoa da Serra, Rodivia Carlos Tonani, Sertaozinho SP 14 160. Tel: 016 642 2299/642 2775

Working in agriculture in area of artificial insemination.

Ajinomoto Interamericana Industria e Comercio Ltda

Rua Joaquim Tavora 541 CP 5789, Sao Paulo, SP 04 015. Tel: 011 572 6322 Telex: 011 21476

Supplies products for the food and chemical industries including monosodium glutamate.

Alamar Tecno-Cientifica Ltda

Rua Ciridiao Durval 138, Sao Paulo, SP 04 360. Tel: 011 542 0193

Supplies biotechnology equipment.

Alem-Mar Comercial Industria SA

Supplies biotechnology equipment.

Alfa-Laval Equipmentos Ltda

Supplies biotechnology equipment.

Algicol Produtos Quimicos Comercio Representacao Ltda

Supply xanthan gums and alginates.

AMF do Brasil SA

Supply biotechnology equipment.

APV do Brasil Industria e Comercio Ltda

Supplies industrial filters (see APV Co Ltd, UK).

APV do Brasil Industria e Comercio Ltda

Supply biotechnology equipment.

Aracruz Celulose SA

Avenue Augusto Severo 8-5 Andar-Lapa, 20 021 Rio de Janeiro. Tel: 021 224 5122/232 7010 Telex: (021) 22256

Barra do Riacho, 29190 Aracruz, Espirito Santo.

Tel: 027 250 1344 Tx: 0273242

Produces paper pulp from Eucalyptus. Has carried out an extensive programme of clonal propagation of selected trees which has resulted in very high productivities. Continuing development of new clones by techniques which include plant tissue culture. Also developing methods of biological control using fungi for treatment of pests and ants in particular.

Arafertil

Industria de Fertilizantes Araxa

Usina Tericles Nestor Lochi CP 199, Araxa, MG 38 180. Tel: 034 661 3100

Produce agricultural fertilizers. Carrying out research on fungal hydrolysis in collaboration with CETEC, Brazil.

Asplana

Rua SA e Albuquerque 502, Jaragua, AL 57 030. Tel: 082 221 7388

Carrying out research on biological control of pests of sugar cane.

Associacao Sao Pedro de Pesquisas Científicas

Estrada Sorocaaba-Salto de Pirapora km 107, Sorocaba, SP.

Association of groups working in the field of veterinary agriculture on transfer of embryos.

Bahiafarma

Empresa de Produtos Farmaceuticos da Bahia SA

Municipio Simoes Filho km 04 S/N SIA, Salvador, BA 43 700. Tel: 07 i 594 7122

Supply biochemical products for healthcare.

Bayer do Brasil SA

R Domingos Jorge 1100, 04761 Sao Paulo SP. Tel: (011) 247 7722 Telex: 22295

Supplies pharmaceutical and veterinary products of Bayer AG, Germany.

Biobras

Bioquimica do Brasil SA

Avenida C 1413 S/N Distrito Industrial, Montes Claros, MG 39 400. Tel: 038 221 5888

Praca Carlos Chagas 49, 3 Andar, Belo Horizonte MG. Tel: 031 337 6677 Tx: 031 1751 bqbr

Manufacturing enzymes and developing fermentation processes, as well as studying genetics and improvement of industrial microorganisms. Enzymes include cellulase, amylases and amyloglucosidases. Developing insulin through recombinant DNA technology. Also involved in or supplies industrial fermentation technology, bacteriological culture media and restriction endonucleases. Major Brazilian producer of interferon.

Biocon Do Brasil Industrial Ltda

Rua Justino de Souza 53, Sao Cristovao, Rio de Janeiro RJ 20 920. Tel: 021 580 2684 Telex: 021 33944

Supplies enzymes, natural colours and related products for the following industries: brewing, distilling, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Biofar Insumos Ltda Quimica Farmaceutica

Av C 1413 Distrito Industrial, Motes Claros, MG 39 400. Tel: 038 221 5888

Developing pharmaceutical products and chemical intermediates using molecular and cell biology.

Bioferm Pesquisa e Desenvolvimento SA

Praca Carlos Chagas 49, Belo Horizonte, MG 30 170.

Carrying out research and development of immobilized enzymes.

Biofill

Produtos Biotecnologicos

Rua Dr Murici 970 Conj 34, Curitiba, PR 80 000. Tel: 041 222 4090/224 6055 Telex: 041 9732

Supply biomedical products including microbially produced compounds.

Biolab Merieux

Estrado do Mapua, 491 Jacarepagua, 20000 Rio de Janeiro RJ. Tel: 021 324 5454

Supplies diagnostic products for routine laboratory use in clinical chemistry, diagnostic work, enzymology, bacteriology virology and various immunological techniques, including radioimmunoassay.

Biomatic Aparalhos Cientificos Ltda

R Col Massot 1241, 9000 Porto Alegro RS. *Tel*: (0512) 49 2722

Supplies laboratory apparatus and analytical equipment.

Biomatrix

Empreendimentos em Biotechnologia Ltda

UFRJ Cidade Universitaria BL G 2, Andar Si G2-043 Ilha do Fundao, Rio de Janeiro RJ 21 941.

Tel: 021 290 5736/280 8193 Telex: 021 21885

Using plant tissue culture for the production of new varieties of plants for food and horticulture.

Biomining

Biotechnologia Mineral Ltda

Rua Pedroso Alvarenga 1208, 4 Andar Itaim, Sao Paulo SP 04 531. Tel: 011 853 2900

Gem mining company; mainly emeralds. Using bacteria to biodegrade rock and loosen gems.

Biopart

Biotecnologia Participações Ltda

Rua Guajajaras 40 Conj 1005 Ed, Mirafiori, Belo Horizonte MG 30 180. Tel: 031 225 1094/227 5763 Telex: 031 3357 dlos

Produce biotechnology equipment and hydrolytic enzymes.

Bioplan

Biotecnologia Planejamento Agricultura

Av Paulista 1765 Conj 31 Centro, Sao Paulo, SP. Tel: 011 288 7533/285 2733

Produce biochemical reagents and bacterial cultures for bioleaching.

Bioplanta

Tecnologia de Plantas Ltda

CP 1141, Campinas, SP 13 100.

Tel: 019 274 3080

Developing new varieties of crop plants including fruit trees as well as horticultural species using tissue culture.

Rua Conde de Iraja 142, Vila Mariana, Sao Paulo SP 04 118. Tel: 011 549 8244

Developing monoclonal and polyclonal antibodies, antiserums, serums, diagnostic reagents and test kits.

Brasalcool

Empresa Brasileira de Alcool SA

rua Hungria 888, 9 Andar, Sao Paulo SP. *Tel*: 011 210 6111

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Brazil-Henkel SA Industrias Quimicas

Av das Nacoes Unidas 10989, V Olimpia CP 30364, Sao Paulo. Tel: (011) 531 8111 Telex: 21685

Supplies antifoams, emulsifiers, biocides and wetting agents.

Bristol Babcock Instruments do Brasil SA

R Major Nathanael 67, 01246 Sao Paulo SP.

Tel: (011) 255 3488 Telex: 21807

Supplies instrumentation for process measurement and control.

Butanta Institute

Avenida Vital Brasil 1500, CP 65, 35503 Sao Paulo SP.

Tel: (011) 211 8211

Produces vaccines using recombinant DNA technology. Also studying viral diseases.

Carfepe SA

Ligada a Valle Nordeste

Rua Tupinambas 360 Conj 1302 S 1501, Belo Horizonte, MG 30 120. Tel: 031 224 9888

Developing biotechnological products for the food industry.

CBPF

Rua Xavier Sigaud 150 Ed Cesar Lattes Urca, Rio de Janiero, RJ 20 280. Tel: 021 541 0337 R 178

Supply biochemical reagents including bacterial cultures for use in bioleaching of minerals.

CBTEC

Centro de Biotecnologia Agricola FEALQ/USP

Av Carlos Botelho 1025 CP 9, Piracicaba, SP 13 400.

Tel: 0194 33 0011/22 6600/22 3491

Developing new plant varieties by tissue culture including horticultural varieties and fruit trees.

Cooperativa Central Gaucha de Leite Ltda

Rua Dona Teodora 1042, Porto Alegre, RS 90 000.

Tel: 0512 421366

Developing food products.

Part III BRAZIL

CEME

Centro de Medicamentos

Developing pharmaceutical products for healthcare.

CENA

Centro de Energia Nuclear na Agricultura/USP

Av Centenario S/N, Piracicaba, SP 13 400.

Tel: 0194 33 5122

Carrying out research in agriculture including production od disease-free bean plants, mycorrhiza and rhizobial nitrogen fixation.

CENARGEN

Centro Nacional de Recursos Geneticos

EMBRAPA Avenida W/5 Norte, Sain Parque Rural, 70770 Brasilia DF. Tel: (061) 273 0100

Involved in plant tissue culture, nitrogen fixation, biological control of pests, cell and protoplast fusion, and energy production from biomass as well as production of chemicals using plant tissue culture.

CENPES/RJ

Centro de Pesquisa e Desenvolvimento

Cidade Universitaria, Q 07 Ilha do Fundao, Rio de Janeiro RJ 21 910. Tel: 021 270 2122 Telex: 021 212 2573

Developing biochemical products including bacterial cultures for bioleaching of minerals.

Center for Non Conventional Energy Ceara

Nucleo de Fontes nao Convencionas de Energia

Centro de Ciencias Campus do Pici, CP 3010, 60.000 Forteleza CE. Telex: 085 1077 Tel: (085) 223 3511

Carrying out research on alternative energy sources derived from biomass including aspects of ethanol fermentation, cellulose hydrolysis and anaerobic digestion.

Central de Tratamento de Effluents Liquidos SA

Rodovia BA-536 Km 19 Est Comacari Monot Gordo, Camacari, BA 42

Tel: 071 832 1186 Telex: 3027

Design and construct plant and equipment for treatment of industrial effluents.

Central Paulista de Inseminacao Artificial Ltda

Rua Prudente de Morais 552, Jau, SP 17 200.

Tel: 0146 22 2447

Developing animal breeding technology.

Centro de Ciencias Biologicas da Saude

Rua Francisco Getulio Vargas 1130, CP 1352, Caxias do Sul RS 95 001. Tel: 054 222 4133

Carrying out research in animal husbandry and healthcare.

Centro de Ciencias Biomedicas

Av Unisinos 950, Cristo rei CP 275, Sao Leopoldo RS 93 100. Tel: 0512 93 6333

Carrying out research in animal husbandry and healthcare.

Centro de Ciencias da Saude

Faixa de Camobi km 9, Santa Maria, RS 97 119. Tel: 055 226 1616

Carrying out research in the area of healthcare.

Centro de Ciencias Naturais e Exatas

Faixa Camobi km 9, Cidade Universitaria, Santa Maria RS 97 119. Tel: 055 226 1616 Telex: 055 230

Carrying out research and development of biochemical products for

Centro de Hematologia e Hemoterapaia de Minas Gerais

Alameda Ezequiel Dias 321, Belo Horizonte, MG 30 130. Tel: 031 226 2233

Carrying out research and development of immunologicals and biological reagents including factor VIII and XI, serums, and immunofluorescent diagnostics.

Centro de Pequisas Goncalo Muniz

Av Augusto de Lima 1715, Belo Horizonte, MG 30 000. Tel: 031 335 3866

Carrying out research and development of immunologicals and vaccines for human healthcare.

Centro de Tecnologia Promon

Praia do Flamengo 154, 2 Andar, Rio de Janeiro RJ 22 210.

Carrying out research and development in the area of energy from biomass to produce bioreactors.

Centro de Pesquisas e Desenvolvimento

km 0 DA BA 536 Estrada de Camacari, CP 09, Camacari BA 42 810. Tel: 071 832 1111/220 832 1119 Telex: 071 1592

Carrying out research and development of biochemicals for the energy and biomass industries as well as bioleaching bacterial cultures for biomining.

CEPLAC

Comissao Executiva do Plano da Lavoura Cacaueira

Rodovia Ilheus-Itabuna km 22 cp 7, Itabuna, BA 45 600. Tel: 073 214 3262/211 4217

Developing biotechnological products for agriculture.

CERS

Coleção de Estirpes de Rhizobium spp

Instituto Agronomio de Campinas, Av Barao de Itapura 148, Campinas Sao Paulo ČEP 13 100.

Holds culture collection of bacteria for agricultural microbiology research. Offers identification service

CESHMT Com & Repr Ltda

V Joao Teodoro 32, 2 Andar Vila Rezende, Piracicaba SP 13.400. Tel: 0914 33 1509/34 9692

Biotechnology engineering consultants specializing in fermentation systems for alcohol production.

Companhia Energetica de Sao Paulo

Alameda Ministero Rocha Azevedo 25, 8 Andar, 01.410 Sao Paulo. Tel: (011) 285 3111 Telex: (011) 23824

Developing alternative sources of fuels including production of methane by anaerobic digestion.

CETEC

Centro Tecnologia de Minas Gerais

Av Jose Candido da Silveira 2000, Cidade Nova, Belo Horizonte MG 30

Tel: 031 461 5619/461 7933

Carries out biochemical research and offers consulting services to the food, waste treatment, biometallurgy, and fermentation industries.

Centro de Tecnologia Mineral

Rua 4 Quadra D Cidade Universitaria, Rio de Janeiro, RJ 20 000. Tel: 021 2607222 R 216/113

Developing biochemical products including bacterial cultures for bioleaching for the recovery of minerals.

CETESB

Companhia de Tecnologia de Saneamento Ambiental

Av Prof Frederico Herman Junior 345, Alto de Pinheiros, Sao Paulo SP 05459.

Tel: 011 210 1100 Telex: 011 22246

Offer consultancy and financing services in the energy and biomass industries. Carrying out biotechnological research in areas of waste treatment and anaerobic digestion processes and digester design for industrial effluents and solid wastes including sludge digestion.

Cialgas

Companhia Industrial de Algas

Avenida Paulo Ayres 250 KM 19 BR 116, Tabao da Serra, SP 06 750. Tel: 011 491 4940/491 6255

Produce alginates, carrageenans and agar.

CIBRAN

Companhia Brasileira de Antibioticos

Rua Conde de Bonfim 604, Sobreloja Tijuca, Rio de Janeiro RJ 20 250. Tel: 021 208 4395 Telex: 021 21946

Developing healthcare products including antibiotics.

Coalhobras Industria e Comercio Produtos Quimicos Ltda

Rua 2 de Novembro 468, Carapicuiba, SP 06 300. Tel: 011 429 3470 Telex: 011 23273

Produces fine chemicals.

CODETEC

Companhia Para o Desenvolvimento Tecnologico

Estrada Telebras Unicamp km 1, Cidade Universitaria, Camoinas SP 13

Developing healthcare products including antibiotics.

Codistil

Construtora de Distilarias Dedini SA

Rodovia Rio Clara Piracicaba km 26/3 CP 1249, 13400 Piracicaba Sao

Tel: (0194) 33 3222 Telex: (019) 1109

Ave Paulista 777/13, 01311 Sao Paulo SP. Tel: 011 283 1233 Tx: 23264

Engineering and construction company offering complete turnkey alcohol distilleries for the production of fuel alcohol from sugar cane as well as effluent treatment systems using anaerobic digestion. Also active in the areas of engineering and construction for the alcohol production, chemical, petrochemical, fertilizer, food, pulp and paper industries. Licensee for the Biostil process (see Alfa Laval, Sweden).

Comercial e Agropecuaria Rodrigues da Cunha SA

Rodovia Marechal Rondon S/N, Aracatuba, SP 60 016.

Developing agricultural products with applications in artificial insemination.

Companhia de Tecnologia Industrial

av Venezuela 82, Rio de Janeiro RJ.

Tel: 021 253 9294

Offers engineering and consultancy services to sugar and alcohol

Companhia Suzano De Papel E Celulose

Alameda Franca 1050-8 Andar, 01422 Sao Paulo SP. *Tel:* (011) 852 9177 *Telex:* (011) 31279

Paper pulp producer working on genetics and forestry as well as enzymes including cellulases, amylases and amyloglucosidases

Conterma

Constructora Industrial e Termotecnica SA rua Capote Valente 1336, Sao Paulo SP.

Tel: 011 864 1155

Offers engineering and consultancy services to sugar and alcohol manufacturers

Cooperativa Agricola dos Produtos de Cana do Vale do Ivai

Praca do Cafe 214, Jandaia do Sul, PR 86 900

Tel: 043 32 2058/32 1968

Cooperative of cane growers.

Copersucar

Cooperativa Central dos Produtores de Acucar e Alcool do Estado de Sao Paulo

Bairro Santo Antonio CP 162, Piracicaba, SP 13 400. Tel: 019 433 3199

Cooperative association of the major sugar and fermentation alcohol producers responsible for about 40% of the national production. Produce anhydrous power alcohol, hydrated power alcohol and hydrated industrial alcohol. Carry out a major programme of research and development in all aspects of sugar cane production, milling and processing at the Copersucar Technology Center.

Dedini SA

Av Limeira 222, Piracicaba, SP 13 400. Telex: 011 34 5612

Supply biotechnology equipment.

Degremont-Saneamento e Tratamento de Aquas Ltda

Al Santos 1827/19, 01419 Sao Paulo SP.

Tel: (011) 283 1188 Telex: 24993

Design and construct plant and equipment for treatment of industrial effluents and purification of water (see Degremont, France).

Destilarias Melhoramento SA

CP 67, Jussara, PR 87230. Tel: 0447 28 1230 Tel

Telex: 041 6782

Developing products for the energy and biomass industries.

Dorr Oliver Brasil Ltda

R Car Valhino 35, 09900 Diadema SP.

Tel: (011) 445 3355 Telex: 4193

Plant construction and equipment suppliers in areas of alcohol production, filtration, water purification and water treatment.

Dow Corning do Brasil Ltda

R Francisco Tramontano 1007/8, 05686 Sao Paulo SP. *Tel:* (011) 531 5199 *Telex:* 022843

Supplies agrochemicals and other products of Dow Corning Corp, US.

Embrabio

Empresa Brasileira de Biotechnologia Ltda

Rua Marques de Itu 58 5 Andar, Sao Paulo, SP 01 223.

Tel: 011 258 9866 Telex: 011 35970

Rua Apinages 1081, 05017 Sao Paulo. Tel: 011 262 5511

Research and development company using advanced technologies. Supplies immunologicals; products of Vector Laboratories, US. Products include monoclonal bodies and diagnostic kits as well as products for embryo transfer.

EMBRAPA

Coronel Pacheco, Minas Gerais.

Tel: 032 212 8550

Carrying out research in cell and tissue culture to produce new varieties of crop plants including genetically improved seed potatoes.

ENALSA

Energia Alternativa SA

Praco do Centenario 1169, Maceio, AL 57 000.

Tel: 082 221 7883

Working in area of biomass energy.

Equipamentos Cientificos Superon

Rua Vitorio Laerte Furlame 877, Piracicaba, SP 13 400.

Tel: 0194 33 2234

Supply biotechnology equipment.

Equiplan

Consultoria e Planejamento S/C Ltda

av Reboucas 2066, Sao Paulo SP.

Tel: 011 881 8111

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Escola Superior de Agricultura de Lavras

Campus Universitario, CP 37, Lavras MG 37 200.

Tel: 035 821 3700 R 328

Carrying out research on endomycorrhiza and Rhizobium.

Escola Superior de Agricultura Luiz de Queiroz

Av Padua Dias S/N CP 09, Piracicaba, SP 13 400. Tel: 0914 33 0011/254

Carrying out research in agriculture in the areas of biomass energy and production of alcohol as well as working on biological pest control using Metarhizium anispliae as a killer of cigarinha, a sugar cane pest.

Part III **BRAZIL**

Escola Paulista de Medicina

Rua Botucatu 720 Vila Clementino, Sao Paulo, SP 04 023. Tel: 011 549 6722/572 6033

Carrying out research on immunological and biological reagents including treatments for malaria and other parasitic infections, monoclonal antibodies, synthesis of peptides, surface antigens and the renal system using DNA recombinant technology.

ESTRAL

Empresa de Semen e Transferencia de Embriao Ltda Estrada Londrina/Bela Vista do Paraiso km 412, Cambe, PR. Tel: 0422 50 2288

Laboratories, CP 1095, Londrina, PR 86100

Developing products and technologies for reproductive animal husbandry.

Faculdade de Engenharia Industrial

Av Humberto de Alencar Castelo Branco 3740, Sao Bernardo do Campo, SP 09 700.

Carrying out research on industrial fermentation processes.

Faculdade de Veterinaria

Av Luiz de Camoes 2090, Lages, SC 88 500. Tel: 0492 23 2866

Carrying out research in animal breeding and veterinary care.

Fazanaro SA

Industrial e Comercial

rua Bom Jesus 1663, Piracicaba SP.

Tel: 019 33 9255

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Fermasa Maquinas e Equipmentos SA

Ave Brasil 49901, 23000 Rio de Janeiro RJ. Tel: (021) 395 4733 Telex: 23123

Constructs alcohol distilleries.

Fermenta Produtos Quimicos Amalia SA

Rua Joly 273, CP 10705, Sao Paulo SP 03 016. Tel: 011 291 4564

Produce chemicals by fermentation processes.

Firace Firace & Cia Ltda

Rua Garibalde 150/Barra Funda, Sao Paulo, SP 01135. Tel: 011 826 7533

Rua Cachoeira de Goias 210 (Bonsuceso), Guarulhos, SP Produce natural colours and additives for the food industry.

Frigostrella do Brasil Industria e Refrigeracao Ltda

Rua Vicosa do Ceara 89, Sao paulo, SP 04 363. Tel: 011 542 9600 Telex: 011 22776

Supplies biotechnology equipment including freezers.

Fundação Centro de Pesquisa de Oncologia

Rua Oscar Freire 2396, Sao Paulo, SP 01 000.

Carrying out cancer research.

Fundação de Tecnologia Industrial

Centro de Biotechnologia e Quimica

Rodovia Itajuba, Lorena km 74.5 CP 016, SP 12 600. Tel: 0125 52 3922 R 242/212 Telex: 125579 ftei

Carrying out research in biotechnology in the areas of chemical production, healthcare, agroindustry, energy and biomass. Involved in enzyme hydrolysis, fermentation and waste treatment with production of fuel alcohol, fertilizers and pesticides, acetic acid and other organic acids and compounds.

FUNDEP

Fundação de Desenvolvimento da Pesquisa/UFMG

Av Antonio Carlos 6627 Campus DA, Pampulha CP 1856, Belo Horizonte MG 30 000.

Tel: 031 441 2429/441 5611

Carrying out research and development of enzymology, the scale up of fermentation, separation, concentration and purification processes for the production of biological substances, waste treatment systems, production of amylase, interferon, vaccines, genetic improvement of animal breeds and treatment for parasitic diseases.

Gaf do Brasil Industria e Comercio Ltda

Av Tambore 1253 CP 1253, Alphaville, Barueri SP. Tel: 011 259 1422 Telex: 011 23361

Supply biotechnology equipment.

Germantown do Brasil Industria e Comercio Ltda

Rua Guapiacu 328, Sao Paulo, SP 04 024. Tel: 011 579 2753

Supply biotechnological products to the food industry.

Granja Rezende

Rua Indianopolis 2138, Bairro Oswaldo CP 567, Uberlandia MG 38 400. Tel: 034 235 2191

Developing biotechnological products for the agroindustry.

Grinsted do Brasil Industria e Comercio Ltda

Rodovia Regis Bittencourt km 275.5, CP 172, Embu SP 06 800. Telex: 011 35250 Tel: 011 494 3899

Supply food additives, industrial enzymes and vitamins (see Grinsted Products, Denmark).

Hewlett-Packard do Brasil Industria e Comercio Ltda

A Rio Negro 750, 06400 Barueri SP. *Tel*: (011) 421 1311 *Telex*: 3387

Telex: 33872

Supplies analytical and laboratory instruments as well as data acquisition and control systems (see Hewlett Packard Co, US).

IAA

Instituto de Acucar e do Alcool

Rua Boa Morte 1367, CP 88, Piracicaba SP 13 400. *Tel:* 0194 335077

Carrying out research on the production of sugar and fuel alcohol.

Instituto Agronomico de Campinas

Av Barao de Itapura 1481, CP 28, Campinas SP 13 100. Tel: 0192 31 5422 Telex: 19 1059

Carrying out biotechnological research on hybrid embryo culture, endomycorrhizal interractions with other microorganisms, Rhizobium, soil fungi, selection of new varieties of agriculturally important species etc.

IAL.

Coleção de Culturas Adolfo Lutz

Instituto Adolfo Lutz, Av Dr Arnaldo 355 CP 01246, Sao Paulo SP.

Holds culture collection containing bacteria and other cultures including fungi and yeasts (Leveduras) for general, industrial, medical and veterinary microbiology research and teaching. Offer identification services.

IAPAR

Fundação Instituto Agronomico do Parana

Rodovia Celso Garcia Cid km 375, CP 1311, Londrina PR 86 100. Tel: 0432 26 1525/23 2525/239 Telex: 043 2122

Carrying out research on the improvement, selection and production of hybrids.

IBDF

Instituto Brasileiro de Desenvolvimento Florestal

Av L4 Norte Setor de Areas Isoladas Norte, Brasilia, DF 70 800. Tel: 061 321 2324

Carrying out research on energy forestry.

Part III BRAZIL

IBSBF

Culture Collection of Phytobacteriology Section

Instituto Biologico, Rodovia Heitor Penteado km 4, CP 70 Campinas 13 100 Sao Paolo.

Holds culture collection of bacteria for agricultural microbiology research. Offers identification service.

INCIBRAS

Instrumentacao Cientifuca Brasileira Ind e Comercio Ltda Rua Coronel Melo de Oliveira 65, Sao Paulo, SP 05 011. Tel: 011 864 1411

Laboratories, Rua Desembargador Vale 574, Sao Paulo, SP 05 010 Supplies biotechnology equipment.

Indusem Ltda

Av Rui Barbosa 816, Sertaneja-Parana. Telex: 433 075 ids Tel: 4 35 62 11 40

Select, produce and market seeds of cereals, soybean and maize. Associated with variety selection trials of KWS AG, Germany.

Industria Klabin de Papel e Celulose SA

Rua Formosa 367 12 Andar, Sao Paulo, SP 01 049. Tel: 011 222 1044 Telex: 011 21078 Tel: 011 222 1044

Supplies chemicals and offers consulting services in the area of waste treatment.

Industrias Quimicas de Sintese e Fermentacao

Praca Pio XI 15 9 Andar, Rio de Janeiro, RJ 20 040. Tel: 021 263 7292 Telex: 021 30299

Produce chemicals by fermentation.

INGA

Companhia de Desenvolvimento Industrial

Rua Joaquim Nabuco 80, Maringa, PR 87 013. Tel: 0442 24 4335

Developing natural products including stevioside for use in the food

Ingold Ind e Com Ltda

Av Francisco Matarazzo 1055, BR-05001 Sao Paulo. Tel: 872 0055 Telex: 011 21668

Supplies pH/redox electrodes, industrial probes and sensors (see Ingold Messtechnik AG, Germany).

Inoxil Ltda

Av Atalaia do Norte 1050, Guarulhos, SP 07240. Tel: 011 572 2467

Supplies biotechnology equipment.

Instituto Butantan

Av Vital Brasil 1500, Sao Paulo, SP 05 504. Tel: 011 211 8211

Developing healthcare products using recombinant DNA technology etc, including vaccines and fermentation products as well as working on poliovirus and gene regulation.

Instituto Evandro Chagas

Av Almirante Barroso 492, Belem, PA 66 000. Tel: 061 226 2187/228 1022

Carrying out research in immunology.

Instromentos Cientificos CG Ltda

Rua Domingos de Morais 2423-2444, 04035 Sao Paulo SP. Tel: (011) 571 3666 Telex: 34446

Supplies laboratory equipment and instruments.

Avenue Rio Branco 156 Suite 1324, 20040 Rio de Janeiro. Tel: (021) 262 3386

Provides consultancy services in the area of fuel ethanol production.

Interlab SA

Rua Luis Goes 853, Vila Mariana CEP 04043, Sao Paulo.

Telex: 1125357 Tel: 4773311

Supplies immunological reagents. Distributor for Jackson Immunoresearch Laboratories, US. Also supplies high purity chemicals for use in research and industry; products of Polysciences, US.

ITAL Food Technology Institute

Banco de Fermentos Lacticos

Avenue Brasil 2880, Campinas, Sao Paulo.

Holds culture collection containing bacteria and fungi for industrial microbiology research. Offer identification services.

Jaakko Poyry Engenharia Ltda

Rua Verbo Divino 1061, Sto Amaro CP 60502, 04719 Sao Paulo. Tel: (011) 524 4422 Telex: 1124320

Offers engineering services to the alcohol and forest products industries.

Johnson & Johnson

Rua Guirativa 207, Butanan, Sao Paulo SP 05 501.

Supply healthcare products (see Johnson & Johnson, US).

Kienast & Kratschemer Ltda

Telex: 011 24550

Produce chemicals for the food industry.

Klabin Florestal Guaiba Ltda

Vila Residencial Riocell Rua 01 S/N, Guaiba, SP 99 500.

Tel: 0152 80 1823/1777/2301

Supply products for agroindustry.

Laboratorio Bruch Ltda

Rua Monsenhor Alfredo Pereira Sampaio 420, Santo Amaro, Sao Paulo

SP 04 676. Tel: 011 284 9275

Developing products for agroindustry.

Laboratorio Leivas Leite

Rua Benjamin Constant 1637, CP 91, Porto Pelotas RS.

Tel: 0532 25 3666

Developing agricultural products including animal vaccines and agents for biological control.

Laboratorio Miles do Brasil Ltda

Rua Maria Candida 468, Sao Paulo, SP 02 071.

Tel: 011 298 4822

Supply chemical and food products including enzymes and additives (see Miles, US).

Laboratorio Okochi Ltda

Rua Climaco Barbosa 171 B, Cambuci CP 15151, Sao Paulo SP 01 521. Telex: 011 32558 Tel: 011 279 8711

Supply biochemical products to the food and pharmaceutical industries including enzymes, provitamin A, beta carotene, natural additives and flavours.

Laboratorio Zanonato

Rua Prof Annis Dias 154 5 Andar, Porto Alegre, RS 90 020. Tel: 0512 24 7966

Supply healthcare products including blood coagulation reagents, thromboplastin and thrombin.

Laboratorios Wellcome SA

CP 503, 06700 Cotia Sao Paulo.

Tel: (011) 492 3155 Telex: (011) 33674

Supplies medical and veterinary pharmaceuticals and fine chemicals including vaccines, laboratory reagents and agricultural chemicals.

Macro Energetica SA

Rua da Aurora 295 s/1410, CP 527 Recife PE.

Tel: (081) 223 3284 Telex: 1120 BR

Manufactures small plastic gas holders for storage of methane generated by anaerobic digestion.

Part III BRAZIL

Mark-Pack Maquinas para Embalagens Ltda

Rua Sao Bernadino 8, Parque Anhanguera, Sao Paulo SP 05 120. Tel: 011 832 9496

Supply scientific equipment

Metalurgica Barbosa Ltda

rua Zeferino Bacchi 288, Piracicaba SP. Tel: 019 33 2991

Offers engineering and consultancy services to sugar and alcohol

Microbiologica

Rua Dr Nicanor 238 Inhauma, 20761 Rio de Janeiro RJ. Tel: (021) 591 0493

Supplies agar and bacterial culture media, tissue culture media and foetal calf serum. Developing fermentation technology.

Microbiologica-Consultoria, Analises e Produtos Biologicos

Rua Dr Nicanor 238 Inhauma, Rio de Janeiro, RJ 20 761. Tel: 011 832 9496

Supply biotechnology reagents and equipment for fermentation, tissue culture and bacterial cell culture. Offer consultancy and analytic services.

Minas Gerais Federal University

Department of Microbiology

30000 Belo Horizonte, Minas Gerais.

Tel: (031) 441 8077

Investigating blood parasites, developing interferon and using recombinant DNA technology.

Monsanto SA

Rua Paes Leme 524, CP 8134/61535, Sao Paulo SP 05 425. Tel: 011 815 0211/815 9211 Telex: 011 21883

Supplies biotechnology equipment.

Monsanto SA

Rua Barao Paranapanema 146, Campinas 13 100. Tel: 0192 52 0466

Supplies agricultural products including bovine somatotropin.

Montreal Engenharia SA

rua Sao Jose 90, 7 Andar, Rio de Janeiro RJ. Tel: 021 291 6116

Offers engineering and consultancy services to sugar and alcohol manufacturers.

National Institute of Technology

Centre of Industrial Technology FTI

Av Capitao Messias Ribeiro 625, 12.6000 Lorena Sao Paulo. Tel: (012) 552 3922

Developing methods for the production of sugar and lignin from cellulosic materials as well as the production of ethanol, single cell protein and charcoal.

Natron Consultoria e Projetos SA

rua Teofilo Ottoni 61/63, 11 Andar, Rio de Janeiro RJ. Tel: 021 233 0322

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Niro Atomizer Industria & Comercio Ltda

Supplies dewatering and filtration equipment.

Novo Industri do Brazil Industria e Comercio Ltda

Avenida Republica du Libano 671, Sao Paulo, SP 01 000 Tel: (011) 852 1986/881 2385 Telex: 011 30519

Supplies pharmaceuticals and enzymes; products of Novo Industri AS, Denmark.

NUCLEBRAS

Campo do Cercado km 20.6, CP 961, Pocos de Caldas MG 37 700. Tel: 035 721 9222

Carrying out research and development in the area of bioleaching of minerals including uranium.

Oswaldo Cruz Foundation

Carrying out research over a wide area of applied aspects of biotechnology including infectious disease (blood parasites and viral diseases), surface antigens, monoclonal antibodies, restriction enzymes, vaccines, and computer analysis related to molecular biology as well as fermentation technology.

Paraiba Federal University

Centre of Agricultural Sciences Biomass Energy Laboratory 58.397 Areia-Paraiba.

Developing methods for the production of methane and fertilizer by anaerobic digestion of cattle manures and other wastes.

Perkin-Elmer Industria e Comercio Ltda

Rua Pageu 75, 04139 Sao Paulo SP. Tel: (011) 578 9600 Telex: 21625

Supplies laboratory equipment and scientific instruments, including spectophotometers and chromatographs (see Varian Associates Inc, Instruments Group, US).

Pernanambuco Federal University

50000 Recife PE.

Developing fermentation processes.

Pharmacia Biotechnology International AB

01307 Sao Paulo SP, 011 284 5815.

Supplies equipment for separation and analysis of biological materials (see Pharmacia Biotechnology AB, Sweden).

Piracicaba School of Agriculture

Department of Genetics

13400 Piracicaba SP.

Tel: (019) 433 0011

Investigating genetics and molecular genetics of filamentous fungi including aspects of enzyme production and primary metabolism.

Planal Consultoria e Projeto

rue XV de Novembro 944, 6 Andar, Piracicaba SP.

Tel: 019 22 5959

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Promon Engenharia SA

Laboratorio de Biotecnologia

Avenida Nove de Julho 4939, Sao Paulo, SP 01 407.

Laboratories, Rua das Fiandeiras 627, Sao Paulo SP 04 545. Tel: 011 531 7650

Tel: 011 531 7650

Consulting engineering company. Involved in a wide area of en

Consulting engineering company. Involved in a wide area of energy-related technology including alcohol fermentation and anaerobic digestion as well as mathematical modelling and simulation.

Proquip

Projetos e Engenharia Industrial SA

av Reboucas 2258, Sao Paulo SP.

Tel: 011 280 3177

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Quimis Aparelhos Cientificos Ltda

R Gema 278, 09900 Diadema SP.

Tel: (011) 456 2377 Telex: 4065

Supplies laboratory equipment and instruments.

Riacent

R Marco Aurelio 660, 05048 Sao Paulo.

Tel: (011) 31572

Supplies radioimmunoassay kits, reagents and antibodies.

Part III **BRAZIL**

Ribeirao Preto University

Department of Physiology 14100 Ribeirao Preto SP. Tel: (016) 634 6035

Developing continuous fermentation processes using immobilized enzyme

Rio De Janerio Federal University

Institute of Biophysics

20910 Rio de Janeiro RJ.

Tel: (021) 280 8093

Carrying out research over a wide range of topics including immunology, surface antigens, complement, human hybridomas, cell differentiation and gene expression, recombinant DNA technology, virology and energy from biomass.

Rio Grande Do Sol Federal University

Biotechnology Centre

Rua Gonclaves Dias 580, 90000 Porto Alegre RS. Tel: (051) 233 8500

Investigating nitrogen fixation and viral diseases using recombinant DNA technology, expression plasmids and restriction endonucleases.

Rio Lab Productos e Equipamentos para Laboratoires Ltda

Rua 29 de Julho 142, 21040 Rio de Janeiro RJ.

Tel: (021) 270 4899 Telex: 23872

Supplies laboratory equipment and instruments.

Sacarotecnica

Consultoria Estudos e Projetos Ltda

rua Cons Crispiniano 344, 7 Andar, Sao Paulo SP. Tel: 011 222 5311

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Sanofi do Brasil

av 9 de Julho 5617, 9th Andar, CP 5132 CEP 01407, Sap Paulo SP. Tel: 280 0611 Telex: 1132705

Produce enzymes, growth hormones and other reagents for development of therapeutics.

Sao Paulo Institute of Technology

CP 7141, 05508 Sao Paulo SP.

Tel: (011) 268 2211 Telex: 011 22831

Developing anaerobic digestion methods for treatment of stillage from ethanol production plant and other liquid wastes using techniques which include upflow sludge blankets and anerobic filters. Also developing systems for treatment of municipal solid waste. Other activities include development of methods for production of alginates from native seaweeds. development of internal combustion engines to run on alcohol and vegetable oils as well as production of chemicals from various biological raw materials.

Sao Paulo University

Department of Biochemistry

Instituto de Quimia Bloco 10 T, CP 20780, 05568 Sao Paulo SP. Tel: (011) 210 2122

Investigating immunology of parasitic diseases. Working on monoclonal antibodies and surface antigens as well as methods of chemical and enzyme synthesis of peptides, radioactive nucleotides etc and sequencing of nucleic acids. Working on enzymes including amylases, amyloglucosidases and cellulases as well as energy production from biomass.

Sao Paulo University

Department of Chemical Engineering

Bloco 20, 01000 Sao Paulo SP.

Tel: (011) 211 2122

Developing fermentation processes and fermentation technology, including continuous processes with immobilized systems.

Sao Paulo University

Escola de Engenharia de Sao Carlos

Av Dr Carlos Botelho 1465, CP 13560, Sao Carlos SP. Tel: 0162 72 6222/860

Carrying out research and development in area of biomass energy on waste treatment and anaerobic digestion including advanced analytical technologies and bioreactors for treatment of industrial effluents.

Serono Productos Farmaceuticos Ltda

Av Brigadeiro Faria Lima 2003, 5 Andar-Salas 513/514, Sao Paulo.

Supplies diagnostic radioimmunoassay kits and reagents for hormone assays, including novel systems based on magnetic separation techniques that eliminate the need for centrifugation. Part of the Ares-Serono Group.

Servico de Microbiologia e Immunologia

Faculdade de Ciencias Medicas - UERJ

Rua Prof Manuel de Abreu 48, Rio de Janiero, 20550 RJ.

Holds culture collection containing bacteria including a special collection of Enterobacteriaceae for medical microbiology research and teaching.

Setal Instalacoes Industrias SA

Construct alcohol distilleries.

Shell Brasil SA (Petroleo)

Distributors of hydrated fermentation alcohol for use as liquid transport fuel.

Sinop Agrochimica SA

CP 1506, Maringa, PR 87 100.

Tel: 0432 23 0106

Supply products to the agricultural industry.

Snamprojetos Engenharia SA

R Prof Carlos de Carvalho 164/11, 04531 Sao Paulo SP.

Telex: 23346 Tel: (011) 852 8811

Construct alcohol distilleries.

Sondotecnica

Engenharia de Solos Ltda

largos dos Leoes 15, Rio de Janeiro RJ.

Tel: 021 246 4173

Offers engineering and consultancy services to sugar and alcohol manufacturers.

Stauffer Productos Quimicos Ltda

Av Brig Farcia Lima 2000/13, 01452 Sao Paulo SP.

Tel: (011) 212 4983 Telex: 24374

Produce fermentation alcohol and related chemicals. Subsidiary of Stauffer Chemical Co, US.

Assessoria e Projetos para Acucar e Alcool S/C Ltda

praca Jose Bonifacio 799, 3 Andar, Piracicaba SP. Tel: 019 22 3061

Offers engineering and consultancy services to sugar and alcohol manufacturers

Sulzer do Brasil SA Industria e Comercio

Av Brasil 22692, Rio de Janeiro, RJ 21 670. Telex: 021 30819

Tel: 021 359 2830

Supply biotechnology equipment including bioreactors (see Sulzer, Switzerland).

TECPAR

Instituto de Tecnologia do Parana

Rua dos Functionarios 1357 Juveve, CP 357, Curitiba PR 80 030.

Tel: 041 252 6211 Telex: 041 5321

Supply bioreactors, fermentation products, monoclonal antibodies, diagnostics and vaccines.

Part III **BRAZIL**

Topseed Sementes Ltda

Rua Visconde de Piraja 339 4 Andar, Ipanema, Rio de Janeiro RJ 22 410. Tel: 021 232 6222/521 4546

Supply agricultural products including seeds.

Travenol Produtos Hospitalares Ltda

Rua Suzano 73 CEP 01435, Jardim Paulista, Sao Paulo. Telex: 1125845 Tel: 011 280 3666

Supply immunological and biological diagnostic kits including radioimmunoassay systems as well as other pharmaceutical products (see Baxter Travenol Laboratories Inc, Clinical Assays Division, US).

UFPE Department of Antibiotics

Cidade Universitaria, Recife, Pernambuco.

Holds culture collection of bacteria, fungi, tissue cultures, yeasts and others including actinomycetes for general, agricultural, industrial, and medical microbiology and antibiotic research and teaching.

Centro de Biotecnologia

Rua Goncalves Dias 580, Porto Alegre, RS.

Carrying out research and development of healthcare and agricultural products using recombinant DNA technology including monoclonal antibodies and vaccines.

Union Carbide do Brasil Ltda

R Dr Eduardo de Souza Aranha 153, 04543 Sao Paulo SP. Tel: (011) 5312 0977 Telex: 21397

Supplies fine chemicals (see Union Carbide Corp, US).

Varian Industria & Comercio Ltda

Av Dr Cardoso de Melo 6/75//1644, 04548 San Paulo SP. Tel: (011) 533 0444/24314

Supplies laboratory instruments, accessories and materials for analysis (see Varian Associates Inc, US).

Vidy Fabricao de Laboratorios Ltda

Rodovia Regis Bittencourt km 272.5 N 3360, CP 019, Taboao da Serra SP 06 750.

Tel: 011 491 5511 Telex: 011 35600

Supply biotechnology equipment.

Vomm Equipamentos e Processos Ltda

Rua Manoel Pinto Carvalho 161, Sao Paulo, SP 02 712. Tel: 011 266 9888 Telex: 011 30555

Supply biotechnology equipment.

Westfalia Separator do Brasil Industria e Comercio de Centrifugas Ltda

CP 975, Campinas, SP 13 100. Tel: 0192 421555

Telex: 191 078 Laboratories, Rodivia Campinas Monte Mor km 12, Sumare, SP 13 170 Supply equipment for separation and centrifugation (see Westfalia,

Germany).

Yakult SA

Alameda Santos 771 Jardim Paulista, CP 2285, Sao Paulo SP 01 419. Tel: 011 288 6311 Telex: 011 22564

Supply products for artificial insemination.

Zanini SA Equipmentos

CP 139 Via Armando Salles Olivera, Km 4 Bairro Sao Joao, Sertaozinho Sao Paulo SP 14 160.

Tel: 016 642 3111 Telex: 6315 zani

Provides equipment, engineering, construction and commissioning of large-scale distilleries for the production of anhydrous and hydrated ethanol for both potable and fuel use. Production capacities range from 20000 to over 1 million litres per day. Has built a number of distilleries operating on sugar cane juice as part of Brazil's National Alcohol Programme and is developing processes based on cassava.

CANADA

A Lassonde & Fils Inc

170, 5th Avenue, Rougemont, Quebec JOL 1M0. Tel: 514 878 1057 Telex: 05 832553

Research Laboratories: 705 rue Principale, Rougemont, Quebec JOL 1M0 Produce canned fruit juices and other foods. Offer technology and consulting on continuous processes developed for enzymatic clarification of

AB Biological Supplies Inc

PO Box 65, Grimsby, Ontario L3M 4G1. *Tel*: 416 945 9661

Research Laboratories: 20 Mural St, Unit 4, Richmond Hill, Ontario L4B 1K3.

Tel: 416 731 0300

fruit juices.

Research and development company concerned with applications of monoclonal antibodies and diagnostic kits in relation to human disease. Developing solid phase assay kits. Sell unprocessed immunoreagents and offer contract services

Abbott Laboratories Ltd

5400 Cote de Liesse Road, Montreal, Quebec H4P 1A5. *Tel:* 514 341 6880 *Telex:* 05 825662

Manufactures and supplies pharmaceutical products, clinical diagnostics, veterinary preparations and agrochemicals. Subsidiary of Abbott Laboratories, US.

ABI Biotechnology Inc

A-1150 Waverley Street, Winnipeg, Manitoba R3T 0P4. Tel: 204 477 6413 Telex: 07587870 Fax: 204 284 1021

Manufacture UV monitors and diinfectants as well as diagnostics including an alcohol test stick. Carrying out research on the use of recombinant DNA technology in the production of pharmaceutical products such as monoclonal antibody-based diagnostics and human growth hormone. Also carrying out research on factor VIII, interleukin-2 and anti-cancer drugs as well as fractionation and purification of proteins from both animal and plant sources. Offer pilot plant facilities on a contract basis.

Acadian Seaplants Ltd

202 Brownlow Avenue, Tower D, Suite 304, Dartmouth, Nova Scotia B3B 1T5.

Tel: 902 468 2840 Fax: 902 468 3474

Research Laboratories: Charlesville Cultivation Site, PO Box 25, Lower East Pubnico, Yarmouth Co, Nova Scotia BOW 2A0. Tel: 902 742 9159

Carrying out research and development on cultivation of seaweeds, Chondrus crispus and Ascophyllum nodosum, and the marketing of seaweed products.

ADI Ltd

1133 Regent St, Fredericton, New Brunswick E3B 3Z2.

Tel: 506 452 9000 Telex: 01446244 Fax: 506 459 3954

Consulting engineers offering services in design, construction and project management in areas which include anaerobic treatment plants for effluents from food processing, dairy industries, paper and pulp production, peat processing and distilleries as well as aerobic plant for nitrification and denitrification.

ADS Environnement Inc

Developing methods of treatment of wastewaters and hydrocarbon-contaminated oils in collaboration with Laval University, with production of animal feed, protein and beverages using ultrafiltration.

Advanced Biotechnology Ltd

28355 Fraser Highway, Aldergrove, British Columbia V0X 1A0. *Tel:* 604 533 4444 *Fax:* 604 856 8929

Biotechnology investment company carrying out research and development in aquaculture and mushroom culture.

Agriforest Technologies Ltd

2330 Enterprise Way, Kelowna, British Columbia VIX 4H7. Tel: 604 860 5815

Research Laboratories: 2330 Enterprise Way, PO Box 178, Kelowna, British Columbia V1Y 7N5

Contractors in development of techniques of micropropagation and plant tissue culture and suppliers of forest, orchard, agricultural and horticultural species.

Agropur Cooperative Agro-Alimentaire

510 rue Principale, Granby, Quebec J2G 7G2.

Tel: 514 375 1991 Telex: 05832510 Fax: 514 375 2099

Manufacture cheese and other milk products. Carrying out research on lactic acid fermentations and proteases for cheese-making as well as wastewater purification treatment. Supply lactic bacteria cultures.

Aims Biotech Corp

1176 W Georgia St Suite 2100, Vancouver, BC V6E 4A2. Tel: 604 688 0671

Carrying out research and development of AIDS diagnostics.

Alberta Distillers Ltd

1033 Davis Street, Suite 220, Vancouver, British Columbia V6E 1M7. Tel: 604 685 0511 Telex: 04 508824

Produces ethanol. Subsidiary of the National Distillers and Chemical Corp,

Alberta Environmental Centre

Bag 4000, Vegreville, Alberta T0B 4L0. Tel: 403 632 6761 Telex: 037 42783

Government funded agency performing analytical and diagnostic services as well as applied research and technical developments related to pollution and the environment. Activities include studies on the microbial metabolism of toxic materials.

Alberta Research Council

Biotechnology Department

Box 8330 Station F, Edmonton, Alberta T6H 5X2.

Research Facilities:, 2501 Karl Clarke Road, Edmonton, Alberta T6N 1E4.

Tel: 403 450 5111

Provincial crown corporation promoting technology development including aspects of biotechnology: industrial microbiology and strain improvement; fermentation and scale up for biomass production; computer control of fermenters; large scale protein production and purification; genetic engineering for production of speciality chemicals and pharmaceuticals; use of cell culture to develop cold hardiness in plants; tissue culture of cereals for new varieties; in vitro selection of alfalfa; chemical synthesis of genes and plant growth hormones.

Alberta University

Mould Herbarium and Culture Collection

Edmonton, Alberta T6G 2H7.

Collect and preserve fungi.

Part III CANADA

Allelix Inc

6850 Goreway Drive, Mississauga, Ontario L4V 1P1.
Tel: 416 677 0831 Telex: 06 968036 Fax: 416 677 9595

Using recombinant DNA technology, fermentation hybridoma technology, sequencing and other techniques in order to develop new products in the areas of diagnostics, veterinary products, food technology, biomass energy systems, pesticides and soil inoculants. Organized in three divisions: diagnostics, agriculture and speciality chemicals. Diagnostics division undertakes contract research and product development such as monoclonal antibody-based diagnostic tests and kits for clinical, surgery and home use. Products include pregnancy, strep throat and canine heartworm kits for professional use. Manufacturing synthetic peptides and diagnostic reagents for use in enzyme-based immunoassay systems. Agriculture division is developing improved plants and microorganisms including hybrid spring canola and herbicide-resistant varieties. Biochemicals division uses recombinant DNA technology and receptor-based drug design to develop fungal, yeast and plant cell fermentation systems for the production of speciality chemicals including therapeutic proteins, enzymes, vitamins and amino acids. Investors include the Canada Development Corporation, the Ontario Government and John Labatt Ltd, Canada.

Alta Genetics Inc

Site 12, Box 12, RR 4, Calgary, Alberta T2M 4L4.

Tel: 403 239 8882

Telex: 03821172

Fax: 403 239 8886

Involved in advanced livestock reproduction technologies including embryo transfer, embryo cryopreservation and embryo micromanipulation. Carrying out research on related topics including long term preservation of embryos, embryo sexing, in vitro fertilization and genetic manipulation. Producing an inventory of elite genetic material from both dairy and beef cattle available from a frozen-gene bank. Offer consultancy in herd development projects.

Amersham Canada Ltd

1166 South Service Road West, Oakville, Ontario L6L 5T7 Tel: 416 847 1166 Fax: 416 847 7790

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Amicon Canada Ltd

1226 White Oaks Boulevard, Oakville, Ontario L6H 2B9. Tel: 416 842 2520 Telex: 06 982469

Supplies cell culture, chromatography and filtration equipment; products of Amicon Division, W R Grace, US.

Analychem Corp Ltd

7321 Victoria Park Avenue, Suite 16, Markham, Ontario L3R 1J1. Tel: 416 475 1688

Supplies reagents for immunology, electrophoresis and affinity chromatography as well as fine chemicals for research and industry. Agent for Polysciences Inc, US.

APO Diagnostics Inc

Develop and manufacture microbiological test kits for detection, identification and quantification of bacteria, with clinical and industrial applications. Subsidiary of Apotex Inc, Canada.

Applied Bio-Nomics Inc

PO Box 2637, Sidney, British Columbia V8L 4C1. Tel: 604 656 2123

Carrying out research and development of biological control agents for crop protection against spider mite, whitefly, thrips etc and pesticide resistant races.

Aqua Health Ltd

West Royalty Industrial Park, Charlottetown, Prince Edward Island C1E 180.

Manufacture, research and develop vaccines for control of fish disease including furunculosis in fish and gaffkemia in lobsters. Offer consultancy in aquaculture techniques.

Aquaresearch Ltd

Aquarecherche Ltee

CP 208, North Hatley, Quebec J0B 2C0. Tel: 819 842 2890 Fax: 819 842 2902

Supply products and services in relation to aquaculture and water management including fish, spawning control and lake restoration as well as industrial and municipal waste water treatment.

Aquaterre Inc

Developing seaweed composting and ensiling systems as well as supplying seaweed composts and extracts.

Armstrong Monitoring Corp

215 Colonnade Road South, Nepean, Ontario K2E 7K3.

Tel: 613 225 9531

Telex: 0534895 amc ott

Fax: 613 225 6965

Manufactures a range of sensors for hazardous gas sensing and detection.

Atkemix Inc

PO Box 1085, 70 Market Street, Brantford, Ontario N3T 5T2. Tel: 519 756 6181 Telex: 061 81240

Manufactures sorbitol and food emulsifiers.

Atomic Energy of Canada Ltd

Radio Chemical Company

43 March Road, PO Box 13500, Kanata, Ontario K2K 1X8. Tel: 613 592 2790 Telex: 053 4162

Supplies radioactive isotopes, including radioiodine, radiotherapy systems and industrial irradiation equipment. A Government of Canada Crown Corporation.

3 C Research Corporation

'he technical research operation of the British Columbia Research Council, providing contract R&D to industry and government in areas of natural resource extraction and processing as well as specific topics sponsored by industry in food fermentation and biological treatment of wastes and effluents including pulp mill effluents and domestic sewage. Other areas of research include methanation of hydrocarbons, production of polymers from methanol, carotenoids from yeast, diagnostic tests for use in aquaculture, production of exotic mushrooms and biometallurgy.

B2 Enterprises Ltd

PO Box 185, Choiceland, Saskatchewan S0J 0M0. *Tel*: 306 428 2192

Produce bark sawdust, peat moss, soilless mixtures and peat flour as well as developing methods of extracting growth regulators from these materials.

Balco Canfor Reforestation Centre Ltd

RR 3, Kamloops, British Columbia V2C 5K1. Tel: 604 578 7212 Fax: 604 578 8655

Carrying our research and development in afforestation to improve quality of propagated tree seedlings and survival rate by use of biofertilizers and growth regulators.

Bate Chemical Co Ltd

160 Lesmil Road, Don Mills, Ontario M3B 2T7. Tel: 416 445 7050 Telex: 06 966674 Distributes bulk fine chemicals.

Bay D'Espoir Salmon Hatchery Ltd

St Alban's Development Association, St Alban's, Newfoundland A0H 2E0. Tel: 709 538 3236

Carrying out research and development into aspects of salmon farming including gene selection and hybridization, sex control and sterilization and growth stimulation by steroids.

Bayer (Canada) Inc

7600 Trans Canada Highway, Pointe Claire, Quebec H9R 1C8. Tel: 514 697 5550 Telex: 05 821635

Distributes products of Bayer AG, Germany such as pesticides, dyes, synthetic fibres, etc.

BDH Chemicals Canada Ltd

Supplies a wide range of fine chemicals and reagents for use in techniques such as electrophoresis, chromatography, amino acid analysis etc (see BDH Chemicals Ltd, UK).

Beak Consultants Ltd

6870 Goreway Drive, Mississauga, Ontario L4V 1P1. Tel: 416 458 4044 Fax: 416 458 7303

Offer consultancy in bio-process design and bioassay services in relation to environmental contaminants, mutagenicity, natural systems management and regulatory control including aspects of aerobic and anaerobic treatment of industrial wastes, sludges and mill-tailings.

Beckman Instruments Inc

45 Jutland Road, Unit 53, Etobicoke, Ontario M8Z 2G8.

Supplies analytical instruments, centrifuges, radioactivity counters and other laboratory equipment (see SmithKline Beckman, US).

Beecham Canada Inc

1860 Wilson Avenue, Weston, Ontario M9M 1A6. Tel: 416 741 8080 Telex: 06 969557

Manufactures and supplies products of Beecham Pharmaceutical Co Ltd,

Better Yield Insects

PO Box 3451, Tecumseh Station Windsor, Ontario N8N 3C4. Tel: 519 727 6108 Fax: 519 727 5989

Research Laboratories: 1302 Highway 2, Emeryville, Ontario N0R 1C0

Engaged in the rearing, mass production and marketing of beneficial insects for use in biological control in confined environments such as greenhouses. Carrying out research on integration of biological control methods with use of insecticides. Areas of interest include predators to spider mite, white fly, aphids and thrips.

Bio Can Scientific Inc

2368 Dunwin Drive, Mississauga, Ontario L5L 1J9.

Tel: 416 828 2455/800 387 8125 Telex: 06218354 Fax: 416 828 9422

Supply immunological and biological products. Distributor for Jackson Immunoresearch Laboratories, Promega and Bio 101, US.

Bio-Feed Industries Ltd

1580-609 Granville St, PO Box 10334, Vancouver BC V7Y 1G5. Tel: 604 688 9695/687 7767 Telex: 04 54247

Suite 522-625 Howe St, Vancouver, BC V6C 2T6

Developing an agricultural diversification programme for the sugar industry including single cell protein and livestock feed and production.

Bio Field Technologies Research Inc

1311-50 O'Connor St, Ottawa, Ontario K1P 6L2. Tel: 613 563 8105

Carrying out research and development of microscopic algal strains and seaweed extract for soil and crop improvement.

Bio-Frost Inc

14 Duke Street, Hamilton, Ontario L8P 1X1. Tel: 416 522 3031

Carrying out research and development related to the scale up and production of ice nucleating and frost inhibiting bacteria, as well as developing full scale aerobic fermentation facilities.

Bio-Hol Developments

Weston Research Centre

1047 Yonge Street, Toronto, Ontario M4W 2L3. Tel: 416 922 5100 Fax: 416 922 4318

Pilot Plant: 11 Vanley Crescent, Toronto, Ontario M3J 2B7. Tel: 416 638 7088

Developing methods for the production of alcohol for fuel use and other value-added products from hydrolyzed lignocellulose feedstocks using Zymomonas mobilis. Undertake contract research in fermentation technology. Joint venture with St Lawrence Reactors Ltd, Canada.

Bio-Mega Diagnostics Inc

10900 Hamon, Montreal, Quebec H3M 3A2. *Tel*: 514 331 7520

Developing human diagnostics for endocrinology and oncology. Subsidiary of Bio-Mega Inc, Canada.

Bio-Mega Inc

2100 Cunard Street, Chomedey Laval, Quebec H7S 2G5.

Tel: 514 682 4640 Telex: 055 60073 Fax: 514 682 8434

Manufacture bioactive peptides, amino acid derivatives, resins for peptide synthesis, leukotrienes and related biochemicals. Also produce immunodiagnostic kits, monoclonal and polyclonal antibodies and nucleotides and derivatives for use in gene synthesis. Carrying out research related to bioactive peptides, leukotriene antagonists, bioconversion of biologically active substances, microbial metabolites, tissue culture and the production of monoclonal antibodies for use in diagnostic kits. Also carry out mutagenicity (Ames) tests and are evaluating bioinsecticides, bioherbicides and antimicrobials. Acquired by Boehringer Ingelheim, Canada.

Bio-Rad Laboratories (Canada) Ltd

Supplies material, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Bio-Research Laboratories

Offers clinical and research services. Products under development include hormone immunomodulators, thrombolitic agents and monoclonal antibodies. Subsidiary of Connaught Biosciences Inc.

Bio-Response Systems Ltd

PO Box 2564, Station M, Halifax, Nova Scotia B3J 3N5.

Distributor for bacteria-based toxicity test kits.

Biogenie SRDC Inc

4700 boulevard Wilfrid Hamel, Bureau 302, Quebec G1P 2J9. *Tel:* 418 877 1348

Design waste treatment systems for high strength industrial effluents and biodegradation of soil contaminants.

Biomira Inc

9411A 20th Avenue, Edmonton, Alberta T6N 1E5. Tel: 403 450 3761 Telex: 961000 Fax: 403 463 0871

Developing cancer diagnostics and therapeutics. Products include in vitro test kits and radioimmuno imaging and therapy products using synthetic tumour associated glycoconjugates and monoclonal antibodies.

Bionov CNP Inc

81 rue St-Pierre, 4th floor, Quebec, Quebec G1K 4A3. Tel: 418 692 1357

Consultants developing methods of biomass production and bioprocessing for food. Carrying out research on microalgal culture for processing of manures and wastewaters.

Bioprotein Canada Inc

Division of Protein Foods Group Inc

Developing immobilized systems based on clear granular bone for proteolytic enzymes for cheese making and bacteria for wastewater treatment.

Bioquest International Inc

1329 Niakwa Rd East, Suite 3, Winnipeg, Manitoba R2J 3T4. Tel: 204 254 0712

Carry out toxicological testing of complex mixtures from industrial activities using specially developed indicator organisms for evaluation of indoor air quality. Developing indicator strains deficient in aldehyde dehydrogenase for detection of aldehydes in air.

Part III CANADA

Biorex Groupe Conseil Inc

Carry out research and development on aspects of fish farming, marine biotechnology and aquaculture including salmon sterility and hybridization, shellfish and shrimp culture, seaweed extraction, composting and ensiling.

Bioscan Continental Inc

350 boulevard Industriel, Suite 201, 2nd floor, St-Eustache, Quebec J7R 5V3

Tel: 514 491 5807 Telex: 0525134 Fax: 514 491 3069

Carry out research and development in healthcare. Products include carcinoembryonic antigen and hormones.

Bioshell Inc

Process wood wastes to produce pelletised fuel. Subsidiary of Shell International, Netherlands.

BioStar Inc

Develop and test animal health care products. Carrying out research and development programme on application of advanced technologies to develop animal health products on a contract basis. Negotiate the sale of manufacturing rights for products and technologies developed by research organisations to commercial biological production companies. Products and technologies under development include poultry and calf scours vaccine, monoclonal antibodies, immunoregulators, human health care products and diagnostic tests. Associated with the Veterinary Infectious Disease Organization (VIDO) at the University of Saskatchewan, holding the exclusive licensing rights to all technologies and products developed.

Biosyn

51 rue du Moulin, Saint-Juste-de-Bretenieres, Comte de Montmagny, Quebec G0R 3H0

Developing biomass gasification system for production of synthesis gas from biological wastes. Division of Groupe Nouveler Inc, Canada.

Biosystech Consulting Inc

2383 Edenhurst Drive, Mississauga, Ontario L5A 2L1. Tel: 416 279 5337/416 978 7096 Fax: 416 978 8548

Biotechnology consultants.

Biotechnica Canada Inc

170, 6815 8th St NE, Calgary, Alberta T2E 7H7. Tel: 403 295 0383 Fax: 403 295 0386

Developing microbial agricultural products including soil inoculants for enhanced nitrogen fixation in leguminous crops. Collaborating with CSIRO, Australia to develop a new edible vegetable oil from flax seed as an alternative crop to wheat.

Blueberry Acres Ltd

RR 2, Centreville, Nova Scotia B0P 1J0. Tel: 902 582 3832 Fax: 902 582 7755

Produce fruit, fruit bushes and ornamental plants. Carrying out research on use of plant tissue culture in production of ornamentals, soft fruit bushes, fruit trees and garden flowers.

Bocknek Ltd

165 Bethridge Rd, Rexdale, Ontario M9W 1N4.

Produce serums and media for tissue culture. Developing serum substitutes.

Boehringer Mannheim Canada Ltd

Biochemicals Division

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Boojum Research Ltd

21 Dundas Square, Suite 405, Toronto, Ontario M5B 1B7. Tel: 416 861 1086

Carrying our research and development of wastewater treatment in the mining industry including treatment of alkalinity using Chara species.

Bristol-Myers Pharmaceutical Group

411 Roosevelt, Ottawa, ONtario K2A 3X9. *Tel*: 613 725 3561

Manufactures pharmaceuticals. Subsidiary of Bristol-Myers Canada Co.

British Columbia University

Department of Bio-Resources Engineering

2357 Main Mall, Vancouver, British Columbia V6T 1W5. Tel: 604 228 2467

Studying economics, energy and mass balance of a contact anaerobic digester treating poultry manure.

British Columbia University

Department of Microbiology, Vancouver, British Columbia V6T 1W5. Using genetic engineering techniques to develop bacterial strains which secrete cellulase and to transfer genes from Cellulomonas to Bacillus subtilis using the plasmid pBR322 as well as engineering of enzymes for resistance to end product inhibition.

Brookside Farms

Manufacture egg white proteins for use in pharmaceutical, food and confectionery industries.

Bush Boake Allen Corp Ltd

312 St Patrick Street, La Salle, Quebec H8N 2H2. Tel: 514 366 1330 Telex: 05 566311

Manufactures flavours and fragrances. Also distributes food products of Allbright and Wilson Group, UK. Subsidiary of Bush Boake Allen, UK.

BV Sorbex Inc

471 avenue Berkley, St-Lambert, Montreal, Quebec. Tel: 514 671 7534

c/o Chemical Engineering, McGill University, 3480 rue University, Montreal, Quebec H3A 2A7.

Tel: 514 398 4276 Fax: 514 398 3594

Established to develop and market new biosorbent materials based on microbial biomass with applications in the recovery of heavy metals or their removal from wastewaters.

C E Frosst & Co

16717 Trans Canada Highway, Exit 52, Kirkland, Montreal Quebec. Tel: 514 695 7730 Telex: 821533

PO Box 1005 Pointe Claire, Dorval, Quebec H9R 4P8

Produces hormones (oestrogens), radiopharmaceuticals and other pharmaceutical products. Subsidiary of Merck & Co, US.

C-I-L Inc

90 Sheppard Avenue East, PO Box 200, Station A, North York, Ontario M2N 6H2.

Tel: 416 229 7000 Telex: 06986505

C-I-L Research Centre: Sheridan Pk Research Community, 2101 Hadwen Rd, Mississauga, Ontario L5K 2L3.

Tel: 416 823 7160 Fax: 416 823 0044

Manuafacture commodity and speciality chemicals. Developing deep shaft biological wastewater treatment process as well as microbial pesticides and forage inoculants with applications in agriculture and forestry. Parent company is ICI plc, UK.

Caltec (Scientific) Ltd

PO Box 5240, Postal Station E, Edmonton, Alberta T5P 4CS. Tel: 403 428 8026

Supplies fermentation equipment of LH Fermentation, UK.

Cambridge Filter Corporation

5605 McAdam Road, Mississauga, Ontario L4Z 1N4. *Tel:* 416 890 1040

Supply clean room laminar flow systems.

Canada Packers Inc

2211 St Claire Avenue West, Toronto, Ontario M6N 1K4. Tel: 416 766 4311

Large scale manufacturer of animal biological extractives for the industrial mammalian cell culture and biotechnology markets. Products manufactured in bulk include bovine transferrin (Halo and Apo), culture grade bovine serum albumins, bovine fibronectin, trypsin, deoxyribonuclease (high purity), ribonuclease (DNase free) and high purity linoleic acid. Proprietary biological extractives are also available. Carrying out research on techniques of extraction, isolation and purification of animal-derived cell growth factors.

Canadian Bioclinical Ltd

81 Finchdene Square, Scarborough, Ontario M1X 1B4. Tel: 416 293 4955

Produce and develop diagnostic kits. Carrying out research on the production of biochemicals and reagents for use in antibody-based diagnostics and kits.

Canadian Cabinets Co Ltd

Box 11336, Station H, 25F Northside Road, Nepean, Ontario K2H 7V1. Tel: 613 829 1433/3223 Telex: 053 3590

Manufactures containment hoods.

Canadian Canners Ltd

1101 Walker's Line, Burlington, Ontario L7N 2G4. Tel: 416 335 9700

Carrying out research on performance of fixed-film anaerobic digesters for production of biogas (methane) from food-processing wastes.

Canadian Collection of Fungus Cultures

Agriculture Canada Biosystematics Research Institute K W Neatby Building CEF, Ottawa, Ontario K1A 0C6.

Holds culture collection of fungi for agricultural and forest microbiology research. Offers identification services.

Canadian Food Products Development Centre

PO Box 1240, Portage la Prairie, Manitoba R1N 3J9. Tel: 204 857 7861

Provides technical assistance to industry through consultancy on a fee basis. Carrying out research on applications of membrane based separation and by-product recovery systems as well as on the use of recovered macromolecules in development of new products or as ingredients of existing products. Assisting in the implementation of new technologies in the existing food and beverage industry.

Canadian Red Cross Society

Blood Transfusion Service

1800 Alta Vista Drive, Ottawa, Ontario K1G 4J5. Tel: 613 739 3000

Research Laboratories: 85 Plymouth St, Ottawa, Ontario K1S 3E2. Tel: 613 560 7440 Fax: 613 560 7226

Carrying out research and development on human health care. Products include pharmaceuticals, vaccines, monoclonal antibody-based diagnostics and instrumentation for medical use.

Canadian Seed Coaters Ltd

PO Box 219, 210 Wanless Drive, Brampton, Ontario L6V 2L2. Tel: 416 846 5080 Telex: 069 7535 Fax: 416 846 6909

PO Box 1748, North Battleford, Saskatchewan S9A 3W2

Carrying out research and field trials on canola hybrids and seed coating including enzymes, growth regulators etc and rhizobium.

Canber Industries Ltd

6028 Mountainview Rd, Site 34, Box 58, Lantzville, British Columbia V0R 2H0.

Tel: 604 390 3113

Produce microbial cultures for use in seeding anaerobic digesters as well as biocatalysts for enhanced decomposition of organic wastes and residues by aerobic or anaerobic processes. Carrying out research on biogas production and pollution control using anaerobic digestion and offer anaerobic digester designs as well as consultancy in sewage and waste handling, by-product recovery, sanitary engineering etc. Also produce drain cleaners.

Cangene Corporation

3403 American Drive, Mississauga, Ontario L4V 1T4. Tel: 416 673 0200 Fax: 416 673 5123

Research and development organization using recombinant DNA technologies. Developing proprietary gene expression systems for licensing. Market multi-tissue block kits.

Canpolar Consultants Ltd

421 Eglinton Avenue West, Suite 4, Toronto, Ontario M5N 1A4. Tel: 416 487 1581 Telex: 06218813

Research Facilities: Ashley Building, 31 Peet St, St John's, Newfoundland. Tel: 709 722 6067

Carrying out research and development in the area of enzyme mediated sensors for use in fish quality measurement and other food processing as well as fermentation. Also manufacture optical products for use in food quality control systems.

Canpro Laboratories (Research Foods)

77 Champagne Drive, Downsview, Ontario.

Tel: 416 635 8692 Telex: 06218797 Fax: 416 635 8444

Offer custom services to agriculture in development of pesticides and herbicides as well as veterinary and human health care products and instrumentation.

Canviro Consultants

180 King St South, Suite 600, Waterloo, Ontario N2J 1P8. Tel: 519 579 3500 Fax: 519 579 8986

Head Office: Calgary, Alberta T2E 2R2.

Tel: 403 230 0100

Process engineering company specializing in waste water treatment including aspects of anaerobic digestion and biogas utilization as well as aerobic biological waste water treatment. Division of CH2M-Hill Engineering Ltd.

Cape Breton Development Corporation

Cabot House, Kings Rd, PO Box 2500, Sydney, Nova Scotia B1P 6K9. Tel: 902 564 2848 Telex: 01935132 Fax: 902 564 2589

Researching use of methane-oxidising bacteria to reduce explosion hazard in coal mining.

Carl Zeiss Inc

45 Valleybrook Drive, Don Mills, Ontario M3B 2S6. Tel: 416 449 4660

Supplies a wide range of optical equipment, including laboratory and research light microscopes and accessories for photomicroscopy, ultra-violet illumination etc as well as complete interactive image analysis systems for use with photographs and images from both transmission and scanning electron microscopes.

Carratech Inc

West Royalty Industrial Park, Charlottetown, Prince Edward Island C1E 1B0.

Developing methods of extraction and purification of chemicals from algae including carrageenan.

Casco Company

401 The West Mall, Etobicoke, Ontario M9C 5H9. Tel: 416 620 2300 Fax: 416 620 2385

Manufacture starches and starch based sweeteners from the wet milling of corn; products include high fructose corn syrups. Affiliated with The Canada Starch Company Inc, Canada and CPC International Inc, US.

CB Research International Corporation

101-9865 West Saanich Rd, PO Box 2010, Sidney, British Columbia V8L 3S3.

Tel: 604 655 1944 Fax: 604 655 7131

Consultants offering research and development in environmental monitoring. Developing DNA, antibody and chemical probes and methods of biodegradation and mineral binding.

CDC Life Sciences Inc

Suite 2000, 444 Yonge St, Toronto, Ontario M5B 2H4.

Develops healthcare products.

Part III CANADA

Cedarlane Laboratories Ltd

5516 Eighth Line, RR2, Hornby, Ontario L0P 1E0.

Tel: 416 878 8891/800 268 5058 Telex: 06 982340 Fax: 416 878 7800

Supplies monoclonal and polyclonal antibodies, serum and antiserum products for use in medical research, as well as diagnostics. Carrying out research on hybridoma technology. Distributor for Australian Monoclonal Development, Cambridge Medical Diagnostics and Oncor, US, UCB Bioproducts, Belgium and Nordic Immunological Laboratories, Netherlands.

Central Laboratory Collection

Ontario Ministry of Health

PO Box 9000 Terminal A, Toronto, Ontario M5W 1R5.

Holds culture collection of bacteria for medical microbiology research and teaching. Offers identification service.

Centre de Recherche en Sylvichimie de L'Outaouais Inc

11 rue Main, CP 38, Gatineau, Quebec J8P 6J1. Tel: 819 643 9099

Carrying out research and development of cellulosic fermentation feedstocks for food and chemical production including single cell proteins and fuels.

Centre D'Insemination Artificielle du Quebec (CIAQ) Inc

3450 rue Sicotte, CP 518, Saint-Hyacinthe, Quebec J2S 7B8. Tel: 514 774 1141 Telex: 05830542 Fax: 514 774 9318

Supply frozen embryos and bovine semen. Developing techniques of micromanipulation, sexing and cryopreservation.

Champlain Industries Ltd

7200 West Credit Avenue, Mississauga, Ontario L5N 5N1.

Tel: 416 826 0801 Telex: 062128719 Fax: 416 826 0212

Stanbridge Station, Quebec J0J 2J0

Manufacture yeast extracts, hydrolyzed vegetable proteins, casein peptones, milk substitutes, caseinates and gum arabic. Developing enzymic methods of production of new flavours and improved food processing.

Chateau des Charmes Wines Ltd

Creek Road & Line 7, PO Box 280, Saint David's, Ontario LOS 1PO.

Manufactures wine. Has a programme of strain improvement and species development of yeasts and other relevant organisms.

Chembiomed Ltd

PO Box 8050, Edmonton Research and Development Park, Edmonton, Alberta T6H 4N9.

Tel: 403 450 6800 Telex: 0373886

Telex: 0373886 Fax: 403 450 6899

Manufacture monoclonal-based diagnostic reagents for blood group determination as well as synthetic immunoadsorbents and affinity purified monoclonal antibodies. Also produce lectins, haptens, antigens, affinity purified lectins and artificial-antigen coated latex for use in agglutination tests. Carrying out research on the identification of carbohydrates fom natural sources, synthetic procedures for production of artificial haptens, lectins and antigens, modulation of bacterial adherence and the scale-up of in vitro monoclonal antibody production techniques.

Chemfet Canada Ltd

340-342 Saulteaux Crescent, Winnipeg, Manitoba R3J 3T2. Tel: 204 831 8077 Fax: 204 831 8069

Developing medical sensors including pH and potassium electrodes.

Ciba-Corning Canada Inc

28 Fulton Way, Suite 1, Richmond Hill, Ontario L4B 1E6. *Tel:* 416 764 1233

Supply biological reagents and diagnostics; products of Ciba-Corning Diagnostics, US.

Ciba-Geigy Canada Ltd

Agricultural Division

6860 Century Avenue, Mississauga, Ontario L5N 2W5. Tel: 416 821 4420

RR1, Plattsville, Ontario N0J 1S0.

Tel: 519 696 2246

Carrying out research and development in respect of animal health care, plant protection and seeds. Subsidiary of Ciba-Geigy Ltd, Switzerland.

CIP Research Ltd

179 Main Street West, Hawkesbury, Ontario K6A 2H4. Tel: 613 632 4121

Carries out research and development in relation to pulp and paper technology including aspects of mechanical pulping, chemical pulping, pollution control, process control etc. Has a small biotechnical research effort in relation to the use of wood waste.

Clearwater Fine Foods Inc

Clarke's Harbour, Nova Scotia BOW 1P0

Shellfish supplier developing biological storage systems for shellfish, crustaceans and other aquaculture products as well as packaging systems for fresh and frozen produce.

Coastech Research Inc

869 West Third St, North Vancouver, British Columbia. Tel: 604 980 5992 Telex: 04352888 Fax: 604 980 2737

Developing methods of bioleaching for gold recovery from refractory ores.

Connaught Labs Ltd

1755 Steeles Avenue West, Willowdale, Ontario M2R 3T4.

Tel: 416 667 2701/2627 Telex: 06 221844 contox Fax: 416 667 0313

Manufacture human vaccines to viral and bacterial infections, plasma products, insulin and diagnostics. Developing a wildlife rabies vaccine, diagnostics and new vaccines for human use as well as microencapsulation techniques. Carrying out research on the production of recombinant DNA based insulin, recombinant vaccines for pertussis and hepatitis, and monoclonal antibodies for use in diagnostics. Have joint venture with Novo, Denmark.

Consolidated Alcohols Ltd

55 Mill Street, PO Box 372, Toronto, Ontario M5W 1C8. Tel: 416 367 0730

Produce pure and denatured alcohol.

Continental Pharma Cryosan Inc

1625 rue Sherbrooke ouest, Montreal, Quebec H3H 1E2. Tel: 514 935 4004 Fax: 514 935 5370

Supplies plasma and other blood products as well as vaccines through its subsidiary Conpharma Vaccines Ltd. Carrying out research on gene cloning, immobilized enzymes and heparin.

Controlled Environments Ltd

1461 St James Street, Winnipeg, Manitoba R3H 0W9.

Tel: 204 786 6451 Telex: 07 57777 Fax: 204 786 7736

Produce controlled environment growth chambers, cabinets and incubators.

Coolwater Farms Ltd

591 Liverpool Rd, Pickering, Ontario L1W 1R1. *Tel*: 416 831 0697

Fish farming company with R&D interests in fish breeding and fish waste composting as well as aquaculture for production of fish feed.

Corporation BDG

1708 rue de Pont-Grave, Saint Bruno, Quebec J3V 4Y4. *Tel:* 514 653 2205

Biotechnology Research Institute, 6100 avenue Royalmount, Montreal, Quebec H4P 2R2

Consultants in the development and testing of medical diagnostic products.

Cosem Neurostim Ltee

2954 boulevard Laurier, Suite 330, Saint-Foy, Quebec. *Tel*: 418 657 7387

Supply medical instruments and health care products. Developing methods of producing microelectrodes.

Coulter Electronics of Canada Ltd

905 Century Drive, Burlington, Ontario L7L 5J8. *Tel:* 716 852 6736

Supplies cell sorters; computer control systems and software; flow cytometry equipment and reagents.

CSP Foods Ltd

870-360 Main St, Winnipeg, Manitoba R3C 3Z3. Tel: 204 947 6871 Telex: 075 87638 Fax: 204 946 1157

75-33rd St East, Saskatoon, Saskatchewan S7K 3K7

Produce vegetable oils, flour, bakery mixes etc. Carrying out research on related enzymic processes, plant cytogenetics and plant tissue culture.

Cyanamid Canada Inc

88 McNabb St, Markham, Ontario L3R 6E6. *Tel*: 416 470 3600 *Telex*: 06 966602 Fax: 416 470 2167

Supply pharmaceuticals, animal vaccines and crop protection chemicals, plant nutrients etc, products of American Cyanamid, US. Developing human and animal health care products, pesticides and herbicides.

Cyberfluor Inc

179 John St, Toronto, Ontario M5T 1X4. Tel: 416 977 5450 Telex: 0622335

Fax: 416 977 5032

Carrying out research and development in fluorescence in instruments and immunodiagnostic tests for hormones, neonatal screening, anaemia and therapeutic drug monitoring for clinical use.

D McLeay and Associates Ltd

300-1497 Marine Drive, West Vancouver, British Columbia V7T 1B8. Tel: 604 922 0355 Fax: 604 925 1430

Carry out research and development on aquaculture and aquatic toxicology including evaluating vaccines and pharmaceuticals and biotesting techniques for assessing quality of aquatic produce and toxicology testing.

Daymar Laboratories

Supplies immunodiagnostics and immunoreagents; products of Biosoft, France. Also distributor for Serotec, UK.

Dearborn Environmental Consulting Services

Dearborn Chemical Company Ltd

Fax: 416 279 0020

Research Facilities:, 3451 Erindale Station Road, Missassauga Ontario.

Carry out contract research in areas of process technology related to water and effluent treatment. Produce automated process control software for use in aerobic and anaerobic wastewater treatment and supply wastewater treatment chemicals including biocides and polymers. Carrying out research on anaerobic digestion, biogas for energy, the use of enzymes in biotreatments as well as developing analytical protocols. Also sell freeze dried speciality cultures of organisms for treatment of toxic industrial effluents.

Degremont-Infilco Ltee

160-D boulevard St-Joseph, Lachine, Quebec H8S 2L3. Tel: 514 634 8011 Telex: 05 821692 Fax: 514 634 3102

Manufacture biological treatment plant for potable water, industrial effluents and wastewaters. Subsidiary of Degremont SA, France.

Delisle Foods Ltd

100 De Lauzon Street, Boucherville, Quebec J4B 1E6. Tel: 514 665 7331 Telex: 05 25899

Manufacture milk products. Carrying out research on milk fermentation techniques and the use of enzymes in hydrolysis of milk components as well as developing membrane separation processes.

Denison Mines Ltd

Royal Bank Plaza, Box 40, Suite 3000, Toronto, Ontario M8J 2K2. Tel: 416 865 1991 Telex: 067 7511 Fax: 416 865 0632

Elliot Lake Operations, PO Box B2600, Elliot Lake, Ontario P5A 2K2. Tel: 705 461 6200

Mine uranium oxide. Carrying out research on underground biological in-place leaching of uranium ore.

Department of Agriculture

Prince Edward Island

PO Box 1600, Charlottetown, Prince Edward Island C1A 7N3.

Tel: 902 892 5465 Telex: 014 4415

Government department providing information and technical services involved in technology development and transfer with specific interests in tissue testing and nutrition of potatoes, embryo techniques for use in swine and microbiology services.

Desbergers Ltd

PO Box 420, Youville Station, 8480 Boulevard St Laurent, Montreal Quebec H2P 2V8.

Tel: 514 381 5631 Telex: 05 825559

Produces casein hydrolyzates, gluconates and other pharmaceutical products.

Dextran Products Ltd

415-421 Comstock Road, Scarborough, Ontario M1L 2H5. Tel: 416 755 2231 Telex: 06 963599 Fax: 416 755 0334

Produces dextran, dextran sulphate and other derivatives as well as tissue culture media supplements, columns for HPLC and veterinary pharmaceuticals. Carrying out research on improved fermentation procedures for the production of dextran, substitutes for foetal bovine serum in cell tissue culture and new products for use in HPLC.

Diagnostic Chemicals Ltd

16 First St, West Royalty Industrial Park, Charlottetown, Prince Edward Island C1E 1B0.

Tel: 902 566 1396/800 565 0265 Telex: 014 44173 Fax: 902 566

Manufacture speciality chemicals, enzymes and diagnostic kits for the determination of blood chemicals. Products include peroxidase, urease, chlolesterol esterase etc as well as diagnostics for chemicals in blood including glucose and chlolesterol. Developing immunochemical pregnancy tests. Distributor for Damon Biotech, US.

Dimension Laboratories Inc

12 Falconer Drive, Unit 4, Mississauga, Ontario L5N 3L9. Tel: 416 858 8510/800 387 8257 Telex: 623956

Manufacture immunodiagnostic reagents including: monoclonal antibodies against gamma globulins; polyclonal antibodies against immunoglobulins, cells, blood and tissues; histocompatibility antigens; serums; tissue proteins; ricin, avidin and lectins etc as well as immunohistochemical staining kits. Distributor for Zymed Laboratories and Vector Laboratories, US, Sanbio, Netherlands and Sera-Lab.UK.

Diversified Research Laboratories Ltd

1047 Yonge Street, Toronto, Ontario M4W 2L3. Tel: 416 922 5100 Telex: 06528057 Fax: 416 922 4318

Carries out research, development and testing for the parent company as well as for others on a contract basis in areas of membrane technologies, ligno-cellulose hydrolysis, fuel alcohol production, microbial lipids, single cell protein, microbial polysaccharides etc as well as offering laboratory and pilot scale fermentation and bioprocessing facilities. A division of George Weston Ltd, Canada and partner in Bio-Hol Developments, a joint venture with the Ontario Energy Corporation.

Dominion Biologicals Ltd

5 Isnor Drive, Dartmouth, Nova Scotia B3B 1M1. Tel: 902 468 3992 Telex: 019 31414 Fax: 902 468 3599 Cox Institute-NSAC, PO Box 1035, Truro, Nova Scotia B2N 5G9.

Manufacture monoclonal and polyclonal antibodies for use in diagnostic tests. Carrying out research on hybridomas, and the development of immunologicals for infectious diseases and blood.

Domtar Inc

Tel: 902 893 7113

395 boulevard de Maisonneuve ouest, Montreal, Quebec H3R 1L6. Tel: 514 848 5400

Research Facilities:, PO Box 300, Senneville Quebec H9X 3L7. Tel: 514 457 6810

Produce paper and pulp based products. Developing techniques for biological modification of lignin as well as separation processes for use with biological products.

Part III **CANADA**

Du Pont Canada Inc

Box 2200, Streetsville, Mississauga, Ontario L5M 2H3. Tel: 416 821 3300 Telex: 06 22304 Fax: 416 8 Fax: 416 821 5653

Funding university biotechnology research and development including enzymes, membranes, insecticides and tissue healing therapeutics. Supplies laboratory instruments and reagents; products of E I Du Pont, US.

E R Squibb & Sons Ltd

2365 Cote de Liesse Road, St Laurent Montreal, Quebec H4N 2M7. Tel: 514 331 7423

Distributes veterinary products and pharmaceuticals of Squibb Corp, US.

Econotech Services Ltd

852 Derwent Way, Annacis Island, New Westminster, British Columbia. Tel: 604 526 4221 Telex: 35405

Carrying out research on paper and pulp processing as well as biological methods of producing fuel from forest resources and pulping liquors.

Eco-Research Inc

121 Hymus Boulevard, Pointe Claire, Quebec H9H 1E6. Tel: 514 697 3273

Developing aerobic and anaerobic biological effluent treatment systems. Offer services in laboratory analysis of air, soil and water for pollutants as well as consultancy in aspects of pollution and the environment.

Division of Eli Lilly Canada Inc

305-313 Consortium Court, London, Ontario N6E 2S8.

Tel: 519 681 5261

Supplies pharmaceuticals, agricultural chemicals, animal health products and cosmetics. Carrying out research on recombinant DNA products as well as providing research for new product registrations and supplemental registrations for existing products for animal health and agricultural chemical products in Canada. Subsidiary of Eli Lilly and Co, US.

Elite Seed Potato Farm

RR 1, Alberton, Prince Edward Island C0B 1B0.

Tel: 902 853 2619 Telex: 014 44198 Fax: 902 566 4914

Produce disease-free seed potato stocks by tissue culture. Affiliated to the Tissue Culture Association of Atlantic Canada.

Endogro Systems Inc

67 Eaglewood Drive, Bedford, Nova Scotia B4A 3B3. Tel: 902 835 9125

Biology Department, Dalhousie University, Halifax, Nova Scotia B3H 4H6.

Tel: 902 424 3545

Developing technologies for the agricultural use of vesicular-arbuscular mycorrhizal fungi. Affiliated with the Atlantic Institute of Biotechnology.

Enscor Inc

156 Duncan Mill Rd, Don Mills, Ontario M3B 3N2. Tel: 416 449 3535 Fax: 416 449 9887

8 King St East, Suite 105, Toronto, Ontario M5C 1B5. Tel: 416 366 4863 Fax: 416 366 4892

Carrying out research into production of pesticides and biofungicides for agriculture and forestry, medical pharmaceuticals, human viral disease, mushroom culture and ectomycorrhizal fungi.

Envirocon Pacific Ltd

Suite 205, 2250 Boundary Rd, Burnaby, British Columbia V5M 3Z3. Tel: 604 291 0292 Fax: 604 291 2139

Consultants and producers of smolt for salmon farming. Carrying out research and development on the genetics of fish breeding.

Environine Inc

24 rue Viger, Beauport, Quebec G1B 1L4. Tel: 418 666 9430

2575 rue Watt, Suite 6, Sainte-Foy, Quebec G1P 3T2

Carrying out research and development on mining site reclamation, selection of bacteria for biodegradation of toxic wastes including cyanides and the development of bactericides.

Equipement Moniteur Inc

445 boulevard Industriel, Saint-Eustache, Quebec J7R 5R3. Tel: 514 472 6620 Fax: 514 472 9294

Distribute diagnostics and manufacture blood serum analyzers. Developing reagent kits for cancer therapy

ESSA- Environmental and Social Systems Analysts Ltd

PO Box 12155, Nelson Square, 705-808 Nelson St, Vancouver, British Columbia V6Z 2H2. Tel: 604 689 2912

Carrying out research and development on artificial intelligence systems for environmental management in areas of forestry and fish farming.

Euroclean Canada Ltd

Health Care Division

866 Langs Drive, Cambridge, Ontario N3H 2N7. Tel: 519 653 8691

Supply glassware washing machines and sterilizers.

Export Packers Co Ltd

250 Summerlea Road, Bramalea, Ontario L6T 3V6.

Telex: 069 88533 Fax: 416 792 7421 Tel: 416 792 9700

Science and Technology: 70 Irene St, Winnipeg, Manitoba R3T 4E1. Tel: 204 477 1830 Tx: 07 587641

Produce eggs and proteins derived from them. Developing enzymes as well as processing and waste handling systems.

Falconbridge Ltd

Box 40, Commerce Court West, Toronto, Ontario M5L 1B4. Tel: 705 693 2761 Telex: 0677194 Fax: 705 566 2107

Falconbridge, Ontario POM 1S0

Developing methods of bacterial treatment to remove heavy metal contamination from waste streams and polish effluents as well as the use of bactericides to reduce acid generation in connection with the processing of

Fermtech R & D Inc

Provides consulting services in biosystems technology principally in areas related to industrial fermentation processes. Has developed probiotics for animal feed as well as silage inoculants. Subsidiary of Biosystech Consulting, Canada.

Fisher Scientific

Supplies scientific equipment including microprocess controlled fully automated haematology slide stainers, centrifuges, equipment and reagents for chromatography, centrifuges, reagents, materials for cell culture, immunodiagnostics etc (see Fisher Scientific, US).

FMG Integrated Biotechnical Laboratories Ltd

214-7080 River Rd, Richmond, British Columbia V6X 1X5. Tel: 604 273 7157

Carrying out research on fish breeding and development of rDNA probes and polyclonal antibodies for diagnostics with applications in aquaculture.

Forintek Canada Corp

6620 N W Marine Drive, Vancouver, British Columbia V6T 1X2.
Tel: 604 224 3221 Telex: 04 508552 Fax: 604 224 3229

Research Facilities: 800 Montreal Rd, Ottawa, Ontario K1G 3Z5. Tel: 613 744 0963 Tx: 0533606

Non-profit corporation carrying out research and development studies related to Canada's wood products industries. Interests include control of fungal degradation of wood and the maintenance of a collection of wood-destroying fungi; the production of fuels and chemicals from forest biomass; the production of novel products from lignin; production of enzymes for cellulose hydrolysis.

Foxboro Analytical Ltd

707 Dollard Street, La Salle, Quebec H8N 1S5. Tel: 514 366 4210 Telex: 055 66302

Supplies gas chromatographs, fraction collectors, infra-red spectrographs, organic vapour analyzers etc (see Analabs, US).

FPS Computing Canada Ltd

Suite 285, 5945 Airport Rd, Mississauga, Ontario L4V 1R9. Tel: 416 673 0911 Fax: 416 673 2714

Produce computer control systems and analytical software for laboratory workstations.

Frank Maine Consulting Ltd

71 Sherwood Drive, Guelph, Ontario N1E 6E6. Tel: 519 823 1465

Offers consultancy on mushroom technology and production of chemicals

Frappier Diagnostic Inc

527 boulevard des Prairies, Laval, Quebec H7N 4Z9. Tel: 514 687 5010 Telex: 055 62171

Produce monoclonal antibody-based diagnostic reagents for human and animal infectious diseases in association with the Institut Armand Frappier.

FVMPCA Dairyland Foods

Fax: 604 420 9700

Produce dairy products and fruit beverages. Developing new products using milk concentrates and applications of UHT aseptic packaging.

GB Fermentation Industries Inc

2nd Floor, 2055 Bishop Street, Montreal, Quebec H3G 2E8. Tel: 514 820 0161

Supplies a wide range of industrial enzymes and related products. Subsidiary of Gist-brocades NV, Netherlands.

Gelda Scientific and Industrial Development Corp

5266 General Road, Suite 8, Mississauga, Ontario L4W 1Z7 Tel: 416 624 2779 Telex: 0652821 Fax: 416 624 2469

Manufacture fermented and other milk based products. Carrying out research on aseptic systems, fermented food products, animal feed supplements and industrial enzymes. Offer consultancy as well as chemical and microbiological analytical services.

Gemini Biochemical Research Ltd

350-4520 16th Ave NW, Calgary, Alberta T3B 0M6. Tel: 403 288 7771

Contract research and development organization working in areas of methane control in mines by methane oxidizing bacteria, biological nitrogen fixation, polymers, novel fermenters and microbial pesticides.

Gendron Lefebvre

2 Place Laval, Laval, Quebec H7N 5N6. Tel: 514 384 1260

Telex: 0525469 Fax: 514 629 8737

Engineering consultants on environmental management. Developing methods of biotreatment of industrial and agricultural effluents and potable water, automated analysis and biosensors and probes.

Genetic Imaging Inc

432 Scarboro Ave SW, Calgary, Alberta T3C 2H6. *Tel*: 403 244 2802 *Fax*: 403 282 7298

Offer services in computer-aided gel reading and image processing.

Giant Bay Resources Ltd

Discovery Park, Suite 107F, 3700 Gilmore Way, Burnaby, British Columbia V5G 4M1.

Fax: 604 434 9320 Tel: 604 434 6344

Developing bioleaching methods in tanks and heaps of extracting gold and silver from sulphide ores tailings, based on strains of Thiobacillus ferrooxidans. Joint venture with International Biotech, Canada.

Gibco/BRL Life Technologies Inc

2270 Industrial Street, Burlington, Ontario L7P 1A1. Tel: 416 335 2255 Telex: 06 18270

Supplies culture media, injectable pharmaceuticals, veterinary vaccines etc (see Gibco/BRL Life Technologies, US).

Giyandan Ltd

4131 Sherbrooke Street West, Montreal, Quebec H3Z 1B7. Tel: 514 933 3656

Produces flavours and fragrances. Subsidiary of Hoffmann La Roche & Co AG. Switzerland.

Glavo Canada Ltd

1205 The Queensway, Toronto, Ontario M8Z 5S6. Telex: 06 967582 Tel: 416 252 2281

Manufactures and markets products of Glaxo Holdings plc, UK.

Gore & Storrie Ltd

1670 Bayview Ave, Toronto, Ontario M4G 3C2. Fax: 416 485 0014 Tel: 416 485 7715 Telex: 06 23283

Environmental engineers in waste management and process development. Developing aerobic and anaerobic treatment of municipal and industrial wastes and wastewaters. Offer services in design and construction of systems, start-up, training and management.

Guelph University

Animal Biotechnology Centre Guelph, Ontario N1G 2W1. Tel: 519 824 4120 Telex: 069 56645

Carrying out research on embryo and gamete manipulation, development of vaccines and modification of rumen/gut microbes and animal feed microbes for enhanced feed utilisation and efficiency.

Guelph University

Plant Biotechnology Centre Guelph, Ontario N1G 2W1.

Telex: 069 56645 Tel: 519 824 4120

Carries out research with an emphasis on applications of plant biotechnology in crop improvement using techniques such as tissue culture storage, haploidy, micropropagation and germplasm multiplication in vitro. Interests include nitrogen fixation, mycorrhizal associations, vectors for genetic manipulation, protoplast fusion, microinjection, meristem propagation, and metabolite overproduction.

Guelph University

Ontario Veterinary College, Guelph, Ontario N1G 2W1.

Carrying out research in areas of veterinary microbiology, immunology, epidemiology and public health.

H Corby Distillers Ltd

Corbyville, Ontario K0K 1V0. Tel: 613 962 4536 Telex: 05 24476 Produces ethanol.

Hara Products Itd

PO Box 134, Swift Current, Saskatchewan S9H 3V5. Tel: 306 773 2131 Fax: 306 773 0066

Produces insect traps for pheromone bait.

Helix Biotech Ltd

215-7080 River Road, Richmond, British Columbia V6X 1X5. Tel: 604 270 7468 Telex: 04 357742 Fax: 604 270 8208

Manufactures biochemicals and carries out contract research. Markets chemical standards for use in pulp and paper research and has carried out genetic analysis of marine fish populations. Purifies rare proteins and produces enzyme-antibody conjugates and diagnostics. Carrying out research and development on new veterinary and clinical diagnostic systems. Undertakes contract research and collaborative studies with government and industry. Distributor for Scripps Laboratories, US.

Hemosol Inc

253 College St, Suite 199, Toronto, Ontario M5T 1R5. Tel: 416 822 3461

Producing purified haemoglobin using immunoaffinity chromatography.

Hillebrand Estates Winery

Niagara on the Lake, Ontario LOS 1J0. Tel: 416 468 7123

Produce wine and fruit juice. Carrying out research on viticulture and computerization of fermentation

HSC Research Development Corp

88 Elm St, Toronto, Ontario M5G 1X8. Fax: 416 598 7163 Tel: 416 598 5982

Activities include technology transfer and contract research. Developing nonisotopic gene probes, speciality biochemicals and equipment for research

Part III **CANADA**

Hybrisens Ltd

4700 Keele St, York University Campus, Farquharson Building, Suite 104, Toronto, Ontario M3J 1P3.

Tel: 416 736 5504 Fax: 416 736 5594

Offers contract research and development in biotechnology. Projects include stabilization of industrial enzymes, hormones and growth factors and custom production of monoclonal antibodies.

Hypercube Inc

16 Blenheim Road, Cambridge, Ontario N1S 1E6.

Develop hardware and software for molecular modelling. Projects include simulation of proteins and nucleic acids for biotechnical and pharmaceutical industries.

IAF Biochem International Inc

531 boulevard des Prairies, Laval, Ouebec H7B 1V7.

Telex: 05560466 Fax: 514 687 3521 Tel: 514 687 4910

Institut Armand Frappier, 531 boulevard des Prairies, Laval, Quebec H7N

Tel: 514 687 5010 Tx: 05562171

Produce vaccines and diagnostic kits, monoclonal antibodies, peptides, synthesizers and reagents developed at the Institut Armand Frappier. Carrying out research and development of monoclonal antibodies, viral insecticides, synthetic vaccines and viral sub-unit vaccines, molecular probes, transformation of biomass and cell culture. Also carrying out studies in immunology, food irradiation, virology. Offer consultancy in fermentation technology.

ICN Biomedicals Canada Ltd

2485 Guenette St, St Laurent, Quebec H4R 2H2. Tel: 514 745 4244/800 363 2843/2834 Telex: 05824961

Supplies immunological and biological products. Distributor for ICN Biomedicals, US.

Imaging Research Inc

c/o Brock University, 600, Glenridge Ave, St Catherines, Ontario L2S 3A1.

Tel: 416 688 2040

Products include computers and software for image analysis and densitometry and autoradiographic equipment.

Industrial Biotechnology Centre

200 University Avenue West, University of Waterloo, Waterloo, Ontario N2L 3G1.

Tel: 519 885 1211 Telex: 069 55259 Fax: 519 888 4521

Research organization with contracts in anaerobic digestion and fermentation, bioleaching, recombinant DNA technology, production of monoclonal antibodies, cell culture and bioprocessing scale up of biochemicals, antibiotics, enzymes, vaccines, and fermentation products including biogas, alcohol and single cell proteins.

Industrial Technology Centre

Manitoba Research Council

Provincial research organization providing technology transfer, consultancy and research to government and industry in areas of livestock agriculture, animal health care, plant strain development, fermentation and downstream processing.

Ingram & Bell Scientific

20 Bond Avenue, Don Mill, Ontario M3B 1L9. Tel: 416 444 7381

Supplies immunological and biological products. Distributor for Immunon,

Inrad Industrial Research and Development Ltd

128 Adelaide Street, Winnipeg, Manitoba R3A 0W5. Tel: 204 943 6870

Developing techniques of micropropagation and strain improvement for the production of improved plant strains, particularly gymnosperms and orchids.

Institut Armand Frappier

531 boulevard des Prairies, Laval, Quebec H7N 4Z3.

Tel: 514 687 5010 Telex: 05 562171

Affiliated with the University of Quebec. Undertakes research and development of animal and human health care diagnostic and biochemical products in association with six companies attached to the Institut which include: Canadian Radiation Centre; IAF Production Inc; IAF Biochem International Inc; Frappier Diagnostic Inc.

Integrated Protein Technologies

350 Victoria St, Toronto, Ontario M5B 2K3. Tel: 416 979 5158 Fax: 416 979 5157

Offer analytical services in protein purification and micro-sequencing.

Intermedico

150 Consumer Road, Suite 306, Willowdale, Ontario M2J 1P9. Tel: 416 491 8926/800 268 3178

Supplies equipment for electrophoresis as well as diagnostic reagents for immunology, virology and serology. Distributor for Genzyme, US.

Iogen Corp

3870 Cote Vertu, St-Laurent, Quebec. *Tel*: 514 332 6430 *Telex*: 05 824652

Research Laboratories: 400 Hunt Club Rd, Ottawa, Ontario K1G 3N3. Tel: 613 733 9830 Fax: 613 733 5127

Carrying out applied research on biomass conversion to food, energy and speciality chemicals, including alcohol fuels, and the application of steam explosion and related techniques to saccharification of cellulose or woody biomass raw materials. Also carrying out research on cellulases and lignases. Previously known as lotech Corp.

J D Koppernaes Engineering Ltd

1248 Bedford Highway, Bedford, Nova Scotia B4A 1W4. Tel: 902 835 8348 Telex: 019 21669 Fax: 902 835 0134

Engineering company, designs food processing plant, dairies, fish processing plant and anaerobic waste treatment systems. Carrying out research and development studies on air agitation systems for aquaculture as well as testing anaerobic digestion of effluents using a mobile anaerobic digester of the National Research Council, Canada.

John Meunier Inc

6290 rue Perinault, Montreal, Quebec H4K 1K5. Telex: 05 825693 Tel: 514 334 7230 Fax: 514 334 5070

Manufactures water treatment systems. Carrying out research and development on filtration through peat moss, compressed air jets and

John Stone & Associates

19 Saguenay Drive, Aylmer, Quebec J9J 1A3. *Tel:* 819 777 5135

Offer consultancy in biological and chemical processing of wood and agricultural residues. Carrying out research on yeast fermentation of wood sugars, biogas production from wood waste and ethanol production from

Johnson & Johnson Inc

2155 Boulevard, Montreal, Quebec H1V 2E4. Tel: 514 252 5449

Manufactures medical products and pharmaceuticals (see Johnson & Johnson Inc, US).

Joldon Diagnostics

81 Finchdene Square, Scarborough, Ontario M1X 1B4. Tel: 416 292 1699

Develop and manufacture immunodiagnostic kits.

Joseph E Seagram & Sons Ltd

1430 Peel Street, Montreal, Quebec H3A 1S9.

Tel: 514 849 5271 Telex: 05566261 Fax: 514 366 3271

Research Facilities: 225 LaFleur Avenue, Ville LaSalle, Quebec H8R 3H2.

Tel: 514 366 2410

Produce distilled spirits and wine. Carrying out research on the selection and evaluation of yeast strains as well as the use of extracellular enzymes, process development, flavour chemistry and new product development.

Kemic Bioresearch Laboratories Inc

70 Exhibition St, PO Box 878, Kentville, Nova Scotia B4N 4H8. Tel: 902 678 8195 Telex: 019 32199

Supplies reagents and instrumentation in kit form for chemical determination of atmospheric and other forms of pollutants including methods for assay of levels of formaldehyde in air. Also produces a kit for determination of cannabis. Developing new analytical techniques, such as ELISA tests, for determination of drugs, mycotoxins etc. Offers services in biomedical research, testing and consultancy, immunopharmacology and the development of immunoassay procedures for drugs and other xenobiotics as well as conference organization and training courses.

Kilborn (Saskatchewan) Ltd

357 Third Avenue South, Saskatoon, Saskatchewan S7K 1M6. Tel: 306 664 2226 Telex: 0742630 Fax: 306 652 3235

Engineering consultants and contractors. Developing biomass fermentation processes including production of ethanol and animal feed from bananas.

King Agro

PO Box 1088, Chatham, Ontario N7M 5L6.

Tel: 519 354 3210 Telex: 064 78548 Fax: 519 354 8155

Produce seeds, including hybrids, of corn, soybean, rapeseed, cereals and forage crops. Distribute seeds and pesticides. Carrying out research on production of double haploids in breeding rapeseed.

Labatt Brewing Co Ltd

150 Simcoe Street, Box 5050, London, Ontario N6A 4M3 Tel: 519 663 5050 Telex: 064 7244 Fax: 519 667 7304

Produces alcoholic beverages, yeast and related products. Carrying out research on genetic engineering and genetics of yeasts including use of liposomes as vehicles for incorporation of DNA in yeast spherosomes as well as investigating aspects of the physical and flavour stability of beer. Offers consultancy and technology relating to the genetic manipulation of veasts.

Labtronics

2857 Derry Rd E, Suite 305, Mississauga, Ontario L4T 1A6. Tel: 416 791 7299

Supply computer control systems for atomic absorption spectrometry.

Lakefield Genetics Corp

14 Duke St, Hamilton, Ontario L8P 1X1. Tel: 416 522 3031

Carrying out research in the area of environmental biotechnology including the development of bioinsecticides.

Lallemand Inc

1620 rue Prefontaine, Montreal, Quebec H1W 2N8. Tel: 514 522 2133 Telex: 05 24824 Fax: 514 522 2884

Produces yeasts for bakery products. Carrying out research on drying of active yeast, control of yeast fermentation, production of wine yeasts and the mechanisms of resistance of yeast to freezing and high concentrations of ethanol

Langford Laboratories Inc

400 Michener Road, Guelph, Ontario N1K 1E4.

Tel: 519 837 2040 Telex: 06 956673 Fax: 519 837 1876

Research Laboratories: 131 Malcolm Road, Guelph, Ontario N1K 1A8. Tel: 519 823 5490

Manufacture vaccines and other veterinary products. Carrying out research on the development of animal vaccines etc. Offer consultancy and training in vaccine production for developing countries.

Laval University

Department of Chemical Engineering

Cite Universitaire, Ouebey, Quebec G1K 7P4.

Developing methods for production of the alga Spirulina maxima and its conversion to biogas (methane) by anaerobic digestion.

Les Aliments Carriere Inc

540 chemin des Patriotes, Saint-Denis sur Richelieu, Quebec J0H 1K0. Tel: 514 584 2235 Telex: 05560185 Fax: 514 787 3537

143 rue Saint-Francois-Xavier, Saint-Cesaire, Quebec J0H 1K0

Carrying out research and development on extraction of colouring additives from sugar beet wastes and lactic fermentation of vegetables.

Les Clay & Son Ltd

Clay Nurseries

Fax: 604 534 3463

Produce ornamental plants and other horticultural species as well as forestry species. Has a research programme in tissue culture of horticultural and forestry species.

Les Laboratoires Rhizotec Inc

780 rue Commerciale, St-Jean Chrysostome, Quebec G6Z 2C9. Tel: 418 839 5931

Manufacture microbial inoculants including Rhizobium and Frankia and ectomycorrhiza for use in fermentation and biofertilizers for forestry, as well as biopesticides based on Bacillus thuringiensis. Produce seedlings using tissue culture propagation. Carrying out research on the identification and selection of improved relevant microorganisms as well as new plant clones.

Les Services TMG Inc

CP 70, St-Honore, Quebec G0V 1L0.

Tel: 418 673 4694 Telex: 05136226 Fax: 418 673 3157

Developing the use of bacteria to clean up wastewater for recycling in niobium mining operations.

Les Tourbieres Premieres

Chemic Temiscouata, CP 520, Riviere du Loup, Quebec G5R 3Z1. Tel: 418 862 6356 Telex: 051 3964

Produce peat, peat substrates and composts. Developing new peat products and carrying out research on plant endomycorrhiza and biofilters

Maclaren Engineers Inc

320 Adelaide Street South, London, Ontario N5Z 3L2.

Tel: 519 686 5711 Telex: 06 23765

Developing high rate anaerobic stationary fixed film digesters for production of both methane and generation of electricity using swine manure as raw material.

MacMillan Bloedel Ltd

1075 West Georgia, Vancouver, British Columbia V6E 3R9. Tel: 604 661 8000

MacMillan Bloedel Research, 3350 East Broadway, Vancouver, British Columbia V5M 4E6.

Tel: 604 254 5151 Fax: 604 251 6229

Manufacturer of forest products. Carrying out research and development on anaerobic digestion and seedling propagation.

Mallinckrodt-Canada Ltd

600 Delmer Avenue, Pointe Claire, Quebec H9R 4A8.

Tel: 514 695 1220 Telex: 05821610

Supplies radioimmunoassay kits and components for endocrinology and neurobiology, histochemical antibodies, antiserums and other reagents, and fine chemicals for clinical and research applications.

Mandel Scientific Co Ltd

Hanlon Business Park, 2 Admiral Place, RR 6, Guelph, Ontario N1H 6J3. Telex: 069 56651 Tel: 519 763 2145

Supplies equipment and chemicals for biomedical research and clinical applications including agarose and other products of FMC Corp, US. Also distributor for Kirkgaard & Perry Laboratories, US and Gilson Medical Electronics, France.

Manitoba Energy and Mines

Renewable and Alternative Energy

550-330 Graham Avenue, Winnipeg, Winnipeg R3C 4E3. *Tel*: 204 945 3417 *Telex*: 07 55839

Supporting the development of industrial processes for the manufacture of fuel alcohol from cellulosic raw materials.

Manitoba Sugar Co Ltd

555 Hervo Street, Winnipeg, Manitoba R3T 3L6. *Tel*: 204 452 2911 *Telex*: 07 57692

Produces sucrose and carbon dioxide.

Part III CANADA

Mann Testing Laboratories Ltd

5550 McAdam Rd, Mississauga, Ontario L4Z 1P1. Tel: 416 890 2555 Telex: 06 960496 Fax: 416 890 0370

Supply analytical testing services in forensic science and work environments. Produce antibodies and develop and evaluate immunoassays for detection of environment organics and drug screening in horse racing

Maple Leaf Mills Ltd

PO Box 710, Station K, 2300 Yonge Street, Toronto, Ontario M4P 2X5. Tel: 416 484 7400

Produces a wide range of vegetable oils (linseed, soyabean, castor bean, coconut, palm oil, lecithin etc) and chemical derivatives.

Marbicon Inc

PO Box 900, Berwick, Nova Scotia B0P 1E0. Tel: 902 538 7101 Fax: 902 679 1170

Carry out research on pesticide screening and environmental impact studies. Developing herbicide-resistant plant strains by plant tissue culture.

MDS Health Group Inc

100 International Boulevard, Etobicoke, Ontario M9W 6J6. Tel: 416 675 7661 Fax: 416 672 4220

Provide medical and diagnostic services. Developing monoclonal antibody-based diagnostic systems for detection of Neisseria gonorrhea and haemoglobin-based human blood substitutes.

Medicorp Inc

6100 Avenue Royalmount, Montreal, Quebec H4P 2R2. Fax: 514 496 6232 Telex: 6503156922 Tel: 514 496 1922

Produce immunodiagnostics including an AIDS cell test and ELISA Strep A and B tests. Developing cancer diagnostics, bispecific hybridomas and AIDS immunotherapy treatment.

Merck Frosst Canada Inc

MSD/Isotopes Division

16711 Trans Canada Highway, Kirkland, Quebec H9H 3L1. Tel: 514 695 7920 Telex: 05 821533 Fax: 514 630 Fax: 514 630 2670

Supplies prepared isotope-labelled compounds and stable isotopes. Carrying out basic research in drug design against leukotriene receptors and lipoxygenase enzymes.

Microbe Inc

85 Midpark Road, London, Ontario N6N 1B2. Fax: 519 668 3188 Tel: 512 668 1005

Waste treatment company with activities related to microbial degradation of both toxic and non-toxic effluents and pollutants from food processing plants in particular. Carrying out research on plant tissue culture and the development of biological pesticides. Produce bacterial cultures to customer requests and offer biochemical, chemical and microbial analytical services.

Microbix Biosystems Inc

341 Bering Avenue, Toronto, Ontario M8Z 3A8. *Tel*: 416 425 5959 *Fax*: 416 222 5326

Manufacture microbial antigens for serological procedures. Developing ELISA based diagnostics. Undertake contract work for manufacture of diagnostic tests.

Microelite Plant Laboratories inc

15 Chipman Drive, Suite 9, Annapolis Valley Industrial Park, PO Box 308, Kentville, Nova Scotia B4N 3X1.

Tel: 902 679 1170 Fax: 902 679 1170

Produce plantlets by plant tissue culture. Undertake contract plant micropropagation and research.

Microtek Research and Development Ltd

PO Box 2460, 101-9865 West Saanich Rd, Sidney, British Columbia V8L

Tel: 604 655 1455 Fax: 604 655 7131

Carrying out research using recombinant DNA technology and monoclonal and polyclonal antibody production, for development of vaccines and diagnostic kits for aquaculture and agriculture.

Miles Laboratories Ltd

77 Belfield Road, Rexdale, Ontario M9W 1G6. Telex: 06 989399 Tel: 416 248 0771

Distributes a wide range of biochemicals and enzymes for research, clinical and industrial use (see Miles Laboratories Inc, US).

Molson Breweries of Canada Ltd

3300 Bloor St West, Suite 3500, Toronto, Ontario M8X 2X7. Fax: 416 232 1717 Tel: 416 232 1786 Telex: 06 984833

2486 Dunwin Drive, Mississauga, Ontario L5L 1J9

Brewing company. Carrying out research on genetic engineering of yeast.

Monsanto Canada Inc

2330 Argentia Rd, PO Box 787, Streetsville Post Office, Mississauga, Ontario L5M 2G4.

Fax: 416 826 3119 Tel: 416 826 9222 Telex: 06 219651

Manufacture and supply chemicals and pharmaceuticals (see Monsanto,

Montedison Canada Inc

155 Gordon Baker Rd, Suite 209, Willowdale, Toronto, Ontario M2H 3N5.

Tel: 416 497 6440 Telex: 06 966751

Supply speciality chemicals. Affiliated with Montedison, Italy.

Mueller Canada Inc

TCI-Superior Division

6500 Northwest Drive, Mississauga, Ontario L4V 1K4. Fax: 416 677 4988 Tel: 416 677 9000 Telex: 06968814

Manufacture stainless steel process equipment including bioreactors and fermenters for the food and dairy industry.

Mycotech

142 Whitechurch Mews, Mississauga, Ontario L5A 4B3. Tel: 416 279 4154

Research Laboratory: Faculty of Forestry, University of Toronto, Toronto, Ontario M5S 1A1

Tel: 416 978 3849

Undertake research in environmental and industrial microbiology, including biodegradation, and plant metabolism and propagation, including micropropagation of hardwood tree seedlings.

National Research Council (NRC)

Plant Biotechnology Institute

110 Gymnasium Road, Saskatoon, Saskatchewan S7N 0W9.

Carrying out research in cell biology, genetics and biochemistry directed at improvement of forest tree species and agricultural crops.

National Research Council (NRC)

Atlantic Research Laboratory

1411 Oxford Street, Halifax, Nova Scotia B3H 3Z1.

Tel: 902 426 8332

Carrying out research in marine biotechnology and aquaculture.

National Research Council (NRC)

Biotechnology Research Institute

6100 Royalmount Avenue, Montreal, Quebec H4P 2R2. Tel: 514 496 6100

Carrying out research and development in food, health care, waste treatment, pulp and paper production and forestry. Using techniques of cell fusion, genetic engineering, immobilized enzymes, fermentation, biochemistry and process engineering in collaboration with industry with applications in the production of chemicals and cellulosic degradation. Projects include industrial yeasts, protein separators, protein engineering, mammalian cells, anaerobic digestion and electrophoresis.

National Research Council (NRC)

Division of Biological Sciences

100 Sussex Drive, Ottawa, Ontario K1A 0R6. Tel: 613 990 0884

Carrying out fundamental research in molecular genetics, immunochemistry, microbiology, physiology, molecular biophysics, biochemistry and biomathematics.

NCS Diagnostics Inc

130 Matheson Blvd East, Suite 2, Mississauga, Ontario L4Z 1Y6. Telex: 06965572 Tel: 416 890 0177/800 268 2857

Agent for American Type Culture Collection, US which offers custom plasmid DNA purification as well as holding cultures of microorganisms, cell lines and hybridomas. Also distributor for Hemagen Diagnostics, US.

Nelson's Dairy

180 Ormont Drive, Weston/City of North York, Ontario M9L 1N7. Tel: 416 742 6811 Fax: 416 624 2469

Carrying out research and development of methods of purification and immobilization of lactase for the manufacture of lactose reduced dairy products

Neslab Instruments Ltd

PO Box 303, Etobicoke, Ontario M9C 4V3. Tel: 416 283 2524

Supply laboratory equipment including baths, freezers, shakers and temperature controllers. Subsidiary of Neslab Instruments, US.

New Age Devices

PO Box 1809, 740 Baker Crescent, Kingston, Ontario K7M 6P6. Tel: 613 384 1753

Develop automation of research equipment. Working on electroporation methods for genetic engineering.

Noranda Inc

Suuite 4500, Commerce Court West, Toronto, Ontario M5L 1B6. Tel: 416 982 7111 Telex: 06524231 Fax: 416 982 7021

Noranda Research Centre, 240 boulevard Hymus, Pointe-Claire, Ouebec

Tel: 514 697 6640 Fax: 514 697 9589

Activities include minerals, forest products, manufacturing, oil and gas. Carries out research and development in mineral leaching, biological treatment of effluent, sulphide tailings, hazardous wastes and pulp.

Nordic Laboratories Inc

2775 Bovet Street, PO Box 403, Chomedy Ville de Laval, Quebec H7S

Tel: 514 331 9220 Telex: 05 562115

Produces hormones and other pharmaceuticals.

North East Pacific Culture Collection

Department of Oceanography, University of British Columbia 6270 University Boulevard, Vancouver, BC V6T 1W5.

Holds culture collection of algae containing a special collection of Dinophyceae for marine phycology research and teaching.

Nova Chem Ltd

PO Box, 1030 Armdale, Halifax, Nova Scotia B3L 4K9. *Tel*: 902 455 4690

c/o Department of Chemistry, Acadia University, Wolfville, Nova Scotia BOP 1X0.

Tel: 902 542 2201

Carrying out research on the recovery of shellfish pigment and the use of chitosan and derivatives to develop a slow release agent for drugs and hormones and a preservative coating for fruit and vegetables.

Nova Husky Research Corp

2928 16th St North East, Calgary, Alberta T2E 7K7. Tel: 403 250 4700 Fax: 403 290 6379

Carrying out research on petroleum microbiology, biological corrosion, biodeterioration of materials and enhanced oil recovery using microorganisms for the parent companies Nova Corporation of Alberta and Husky Oil Operations Ltd.

Nova Scotia Agricultural College

Box 550, Truro, Nova Scotia B2N 5E3. Tel: 902 895 6497 Telex: 019 34532

Carrying out research on plant strain development and plant propagation. Activities include studies of sexual reproduction of flowering plants, screening for cold stress tolerance using in vitro techniques, techniques of germplasm preservation, screening for water stress and heat stress tolerance in potato varieties, freezing tolerance in white clover and carbon/nitrogen fixation efficiency in alfalfa. Offer introductory courses on plant biotechnology.

Novo Laboratories Ltd

1755 Steeles Avenue West, Willowdale, Ontario M2R 3T4. Telex: 06 218538 Fax: 416 667 1545 Tel: 416 663 6686

Manufacturer of insulin and insulin products and other biologically derived products. Subsidiary of Novo Industries AS, Denmark.

Nowsco Well Service Ltd

1300-801 6th Avenue SW, Calgary, Alberta T2P 3W2. Tel: 403 261 2990 Telex: 03 821370

Research Facilities: 6820 36th St SE, Calgary, Alberta T2C 2G4. Tel: 403 279 8841

Oil and natural gas pumping company carring out research on bacterial degradation of polymers

Nuclepore Canada

30 Fordhouse Boulevard, Toronto, Ontario M8Z 5M3. *Tel:* 416 252 5667 *Telex:* 06 984609

Supplies apparatus and membranes for filtration, ultrafiltration and microfiltration. Subsidiary of Nuclepore Corp, US.

Ontario Paper Company

PO Box 3026, Saint Catharines, Ontario L2R 7G2. Tel: 416 688 5030 Telex: 061 5110

Telex: 061 5110

Research facilities: Allanburg Rd, Thorold, Ontario L2V 3Z5

Manufactures newsprint, ethanol and vanillin. Has joint research project with the University of Toronto, Canada on fermentation of hexoses and pentoses from waste sulphite liquor.

Ontario Research Foundation

Mississauga, Ontario L5K 1B3. Tel: 416 822 4111 Telex: 3 Telex: 311982

Contract and government research organization with activities in technology and process applications including rotating biological contact digesters for treating industrial effluents, ethanol fermentation, mineral leaching and processing and fluidized bed anaerobic digestion systems.

Ontario Tree Improvement & Forest Biomass Institute

Ontario Ministry of Natural Resources

Maple, Ontario L0J 1E0.

Tel: 416 832 2761 Telex: 06 964589

Government research organization developing forest tree species including regeneration of plantlets from explants of mature and juvenile forest trees as well as micropropagation of conifers.

Optikon Corp Ltd

410 Conestoga Rd, Waterloo, Ontario N2L 4E2.

Fax: 519 885 4712 Telex: 069 55373 Tel: 519 885 2551

Manufacture optical equipment, spectrometers, photometers and accessories.

Organon Canada Ltd

30 North Wind Place, Scarborough, Ontario M1S 3R5.

Telex: 06525486 Tel: 416 754 4344

Manufactures clinical diagnostics and other pharmaceutical products (see Organon International BV, Netherlands).

Ortho Pharmaceutical (Canada) Ltd

19 Green Belt Drive, Don Mills, Ontario M3C 1L9.

Tel: 416 449 9444 Telex: 06 966516 Fax: 416 449 2658

Produce human pharmaceuticals and medical devices. Developing antiviral and antifungal agents as well as new contraceptive technology. Carrying out research on mammalian cell culture and the use of recombinant DNA technology for the production of immunopharmacologically active proteins and peptides and therapeutic monoclonal antibodies.

P Lane & Associates Ltd

1046 Barrington St, Halifax, Nova Scotia B3H 2R1. Tel: 902 423 8197 Telex: 019 21745 Fax: 9

Fax: 902 429 9177

Environmental consultants on aquaculture and soil pollution risk analysis, heavy metals and organics, and the application of microbiological and other solutions. Carrying out research on wastewater treatment processes and toxicological modelling, laboratory and field studies.

Part III CANADA

Pacific Pharmaceuticals Ltd

1176 W Georgia Street, Suite 1130, Vancouver, British Columbia V6E 4A2.

Telex: 0454654 Tel: 604 683 8566 Fax: 604 681 0207

Research and development company carrying out trials on the use of alpha interferon against various cancers and viral diseases. Developing other therapeutic biological products.

Paladin Hybrids Inc

210 Wanless Drive, Brampton, Ontario L6V 2L2. Telex: 0697535 Fax: 416 846 6909 Tel: 416 846 3983

Plant breeders developing hybrid canola and systems for cell and anther culture of brassicas.

Pall (Canada) Ltd

1380 California Avenue, PO Box 1496, Brockville, Ontario K6V 5H6. Tel: 613 345 2280 Telex: 06 636546

Supplies a wide range of industrial and laboratory filtration equipment (see Pall Ultrafine Filtration Corp, US).

Palliser Animal Health Laboratories Ltd

PO Box 1327, 2825 12th Avenue North, Lethbridge, Alberta T1J 4K1. Tel: 403 328 1844

Developing ELISA-based diagnostic tests for veterinary use including domestic animal viral infections and leptospirosis. Offer services in large-scale serological monitoring.

Paques Lavalin

2235 Sheppard Ave East, Willowdale, Ontario M2J 5A6. Tel: 416 756 9687 Telex: 0623765 Fax: 416 756 4998

Design and supply anaerobic wastewater treatment systems. Carrying out research into granulation of anaerobic bacteria and energy from waste.

Paracel Laboratories Ltd

8-17 Grenfell Crescent, Nepean, Ontario K2G 0G3. Tel: 613 225 2447

Carrying out research and development on polyclonal and monoclonal antibodies synthesis of hapten conjugates, ELISA systems, monitoring of airborne fungal contamination in buildings.

Pegasus Industrial Specialties Ltd

Pegasus Biotechnology

4490 Sheppard Avenue East, Agincourt, Ontario M1S 4J9 Tel: 416 298 3141 Telex: 065 26147 Fax: 416 291 4948

Design and construction engineers with activities in research, pilot and production units for distillation, extraction, fermentation and evaporation. Carrying out research on bioreactor design and alcohol concentration processes. Manufacture laboratory fermenters, custom designed fluidized bed fermenters and external loop air lift fermenters. Developing a bioprocess controller. Representatives for Chemap AG, Switzerland.

Pfizer Co Ltd

PO Box 800, Pointe Claire, Dorval, Quebec H9R 4V2. Telex: 05 822629

Manufactures and distributes antibiotics, enzymes, bacterial gums, organic acids and other products of Pfizer Inc, US.

Pharmacia (Canada) Ltd

Pharmacia LKB Biotechnology Division

500 boulevard Morgan, Baie d'Urfe, Quebec H9X 3V1. Tel: 514 457 6661 Telex: 05 821607 Fax: 514 457 4616

Supplies a wide range of equipment and reagents for molecular biology including liquid chromatography, electrophoresis, cell culture and affinity chromatography, peptide and DNA synthesis and recombinant DNA technology (see Pharmacia LKB Biotechnology, Sweden).

Phero Tech Inc

1140 Clark Drive, Vancouver, British Columbia V5L 3K3. Tel. 604 255 7381 Telex: 04 351279

Offer pest management services to the forestry sector. Carrying out research in areas of forest pest management including control of bark beetles, ambrosia beetles, flies and nematodes as well as the development of mammal repellants to protect saplings from rabbits and deer etc, and the synthesis and use of pheromones.

Philips Electronics Industrial Ltd

Scientific and Industrial Equipment Division 601 Milner Ave, Scarborough, Ontario M1B 1M8. Tel: 416 292 5161

Supplies analytical and laboratory equipment including spectrophotometers and chromatographs; products of Philips Nederland BV, Netherlands.

Philom Bios Inc

15 Innovation Boulevard, Saskatoon, Saskatchewan S7N 2X8. Tel: 306 665 6211

Research organisation developing biological systems for the agricultural industry including improved insect pest control and problem weed control using bioherbicides, biofertilizers and biofungicides.

Pioneer Hi-Bred Ltd

Highway 2 West, Chatham, Ontario N7M 5L1. Tel: 519 352 6350

Research Facilities: Highway 59, RR 6, Woodstock, Ontario N4S 7W8. Tel: 519 462 2307

Produce seeds of corn, soybeans and alfalfa. Market sorghum, silage inoculant and animal vaccines. Carrying out research on production of hybrids and new varieties of corn, wheat, soybeans and alfalfa. Subsidiary of Pioneer Hi-Bred International Inc, US.

Pisciculture des Alleghanys Inc

2755 chemin Grande Ligne, Saint-Philemon, Comte de Bellechasse, Quebec G0R 4A0. Tel: 418 469 2823

Fax: 418 681 7806

Carry out research and development and production of trout including all-female, sterile, hybrid and disease-free strains.

Plant Biotechnology Institute

110 Gymnasium Rd, Saskatoon, Saskatchewan S7N 0W9. Tel: 306 975 4191 Telex: 0742471 Fax: 306 975 4839

Carrying out contract research on bloodroot tissue culture for sanguinarine production. Funded by the National Research Council Canada.

Pollutech Ltd

768 Westgate Rd, Oakville, Ontario L6L 5N2. Tel: 416 847 0065 Fax: 416 847 3840

1149 Varvier Rd, Sarnia, Ontario N7S 3Y6

Environmental consultants offering waste biotreatment services. Developing waste feedstock conversion technology including production of single cell protein.

Polydex Pharmaceuticals Ltd

421 Comstock Rd, Scarborough, Ontario M1L 2H5. Tel: 416 755 2231

Produce enzymes including dextranase as well as dextran-bead columns.

POS Pilot Plant Corp

118 Veterinary Road, Saskatoon, Saskatchewan S7N 2R4. Tel: 306 975 7066 Telex: 074 2882 Fax: 306 343 5966

Research and development organisation offering analytical services, information services and custom processing as well as pilot plant facilities with test market production capabilities. Developing enzymic hydrolytic processes based on an extruder as well as carrying out research on enzyme use in extraction of oils and fats from oilseeds, enzymic modification of oils and fats and the use of immobilized enzymes at pilot plant level.

Prairie Malt Ltd

PO Box 1150, Biggar, Saskatchewan S0K 0M0. Tel: (306) 948 3305 Telex: (07) 42466 Supplies brewing malt.

Precision Biologicals Inc

11A Pettipas Drive, Dartmouth, Nova Scotia B3B 1K1. Fax: 902 4663 6421 Tel: 902 463 0119

Manufacture clinical diagnostics including products for the study of blood coagulation and for microbiology.

Premier Peat Moss Ltd

Chemin Temiscouata, CP 2600, Riviere-du-Loup, Quebec G5R 4C9. Fax: 418 862 6685 Tel: 418 862 6356 Telex: 0513964

Extract peat moss and manufacture peat moss-based products. Develop speciality products including biofertilizers with mycorrhiza, biofilters and composts. Offer services in soil analysis and contract research.

Probtec Corp

Room 236 Farquharson Building, 4700 Keele St, North York, Ontario M3J 1P3.

Tel: 416 736 5390 Fax: 416 736 5594

Research organisation investigating DNA diagnostics for genetic and forensic analysis including genetic diseases and toxicology testing, drug design and gene therapy.

Proplant Garden Products Ltd

2552 Burns Rd, Port Coquitlam, British Columbia V3C 3V4. Tel: 604 942 5756

Wholesale suppliers of tropical, bedding and ornamental plants. Developing plant tissue culture techniques for production of tropical foliage plants.

Pulp and Paper Research Institute of Canada

570 St John Boulevard, Pointe Claire, Quebec H9R 3J9. Tel: 514 630 4100 Telex: 05 821541 Fax: 514 Fax: 514 630 4134

Carries out basic and applied research related to pulp and paper mill operations. Research interests include aspects of pollution control and waste treatment, studies on cellulolytic and ligninolytic enzymes and cloning of genes of industrial interest. A partnership between the Canadian Government, the Canadian Pulp and Paper Association, McGill University and the University of British Columbia, Canada.

Purdel Cooperative Agro-Alimentaire

155 rue St-Jean-Baptiste, Bic, Comte de Rimouski, Quebec G0L 1B0. Tel: 418 736 4363

Fishery and dairy products company carrying out research and development of new products including enzyme, pigment and flavouring extracts from shrimps as well as working on the stabilization of milk

OA Laboratories Ltd

135 The West Mall, Toronto, Ontario M9C 1C2. Tel: 416 622 6705 Fax: 416 622 6591

Carrying out research and development on microbiological products and techniques with applications in the food and pharmaceutical industries including visible colour DNA probes for detection of Listeria and Salmonella to be used in conjunction with their membrane filtration units.

Quadra Logic Technologies Inc

520 W 6th Avenue, 5th floor, Vancouver, British Columbia V5Z 4H5. Telex: 04 54654 Fax: 604 875 0001 Tel: 604 872 7881

Manufacture diagnostic kits. Developing diagnostics including phototherapeutics for the human and veterinary markets using monoclonal antibodies and hybridoma technology. Products include microbiological reagents and instrumentation and pregnancy test kits.

Quality Seafarms Ltd

Box 68, Campbell River, British Columbia V9W 4Z9. Fax: 604 286 3541 Tel: 604 286 3023

Developing salmon hatchery technology including production of sterile salmonids by temperature shock and gamete separation.

Radioimmunoassay Inc

Supplies radioimmunoassay kits and other clinical and research diagnostic products

Raylo Chemicals

Division of Terochem Laboratories Ltd

8045 Argyll Rd, Edmonton, Alberta T6C 4A9.

Tel: 403 468 6060 Telex: 3743236 Fax: 403 468 4784

Manufacture speciality chemicals, pharmaceutical intermediates, bulk active ingredients, biochemicals and reagents for gene synthesizers. Products under development include nucleoside-based pharmaceuticals and anti-viral agents such as experimental AIDS drugs.

Rayonics Scientific Inc

585 Canartic Drive, Downsview, Ontario M3J 2P9.

Tel: 416 736 1600 Telex: 06218063

Supply chromatography equipment. Subsidiary of Vestec, US.

Rechiomine Inc

2095 boulevard Charest ouest, Suite 220, Sainte-Foy, Quebec G1N 4L8. Tel: 418 687 2887

2575 rue Watt, Suite 6, Sainte-Foy, Quebec G1P 3T6. Tel: 418 653 2310

Developing methods of recovery of metals by bioleaching including arsenopyrite degradation by T. ferrooxidans and carrying out selection and development of adapted bacterial strains on metal sulphides.

Region of Peel

North Sheridan Landfill

10 Peel Centre Drive, Brampton, Ontario L6T 4B9.

Tel: 416 791 9400

Developing methods for the management of landfill waste disposal sites for the generation of methane.

Regional DNA Synthesis Laboratory

c/o University of Calgary, Alberta T2N 4N1. Tel: 403 220 4277

Offer custom services in DNA synthesis.

Regional Municipality of Waterloo

Kitchener Landfill

Marsland Centre, 20 Erb Street West, Waterloo Ontario.

Tel: 519 885 9400

Developing methods for the management of landfill waste disposal sites for the generation of methane.

Research Centre Agriculture Canada

1400 Western Rd, London, Ontario N6A 5B7.

Holds culture collection of bacteria for agricultural microbiology research.

Research Foods Ltd

77 Champagne Drive, Downsview, Ontario M3J 2C6. Tel: 416 635 8434

Research and development company involved in food processing methodology and formulations. Carrying out research on production and identification of microtoxins.

Research Station Agriculture Canada

8801 East Saanich Road, Sidney, BC V8L 1H3.

Holds culture collection of bacteria and fungi for agricultural microbiology.

Rhizogen Corp

Bay 5, 116 103rd St East, Saskatoon, Saskatchewan S7N 1Y7. Tel: 306 373 3060

Select and develop bacterial cultures for use in industry and agriculture including legume inoculants.

Rieder Distillery Ltd

297 South Service Road, Grimsby, Ontario L3M 4E9. Tel: 416 621 3773

Produce distilled beverages and natural essences. Carrying out research on natural flavours and their bioconversion as well as on the application of membrane processes for separation of food and beverage components.

Rio Algom Ltd

120 Adelaide Street West, Toronto, Ontario M5H 1W5. Tel: 416 367 4000 Fax: 416 365 6870

Process Development Department: Box 1500, Elliot Lake, Ontario P5A 2K1.

Using bacterial leaching techniques for the recovery of uranium. Carrying out research in bacterial leaching techniques. Developing techniques designed to prevent pyrite oxidation by bacteria in tailings management areas.

Part III CANADA

Robin Hood Multi Foods Ltd

PO Box 4000, Station A, 243 Consumers Road, Willowdale, Ontario M2N 5T5.

Tel: 416 496 1515 Telex: 06989596

Technical Centre: 191 Attwell Drive, Rexdale, Ontario M9W 5Z2. Tel: 416 675 2541

Food processing company engaged in flour milling, pickling, meat and cereals, agricultural feed, poultry processing and egg hatcheries. Carrying out research on biological processing of byproducts.

Rohm & Haas Canada Inc

2 Manse Road, West Hill, Ontario M1E 3T9. Tel: 416 284 4711 Telex: 065 24126

Supplies fine chemicals, enzymes and radioimmunoassay equipment (see Rohm & Haas Co, US).

Rosell Institute Inc

8480 boulevarde St-Laurent, Montreal, Quebec H2P 2M6.

Tel: 514 381 5631 Telex: 05 825559 Fax: 514 383 4493

Produce bacteria, yeast and fungi for the milk and food industries, agriculture, human and animal nutrition, prophylaxis and therapy. Carrying out research on nitrogen fixing bacteria, bacterial pesticides (Bacillus thuringiensis), sporulation of lactobacilli, the use of lactic acid bacteria in silage production and the effects of Streptococcus faecium on growth and health of piglets. All projects are funded in part by the Government of Quebec, Canadian National Research Council or Agriculture Canada.

Royal Pacific Sea Farms Ltd

Suite 1407, 700 West Pender St, Vancouver, British Columbia V6C 1G8. Tel: 604 685 8340 Fax: 604 685 4282

Producers of salmon and trout and hydrolyzed byproducts. Carrying out research on sex control and improved production by gene selection, hybridization, induced triploidy and recombinant somatotropin.

Rutland Biotech Ltd

3220 Park Place, 666 Burrard St, Vancouver, British Columbia V6C 2X8. *Tel:* 604 669 9515 Fax: 604 683 5612

4339 West 10th Ave, Vancouver, British Columbia V6R 2H6. Tel: 604 228 0303

Carry out research and development, marketing and licensing of proprietary health care products including oral, skin and tissue lubricants and cleansers as well as control and detoxification of heavy metal contamination.

Safer Agro-Chem Ltd

Unit 1, 455 Milner Ave, Scarborough, Ontario M1B 2K4. Tel: 416 291 8150 Tx: 06525244 Fax: 416 291 1755

Manufactures pesticides and fungicides. Developing biological control agents based on natural plant and animal oils.

St Lawrence Reactors Ltd

Process carbohydrate feedstocks to produce glucose syrups and fermentable substrates for fuel alcohol production. Carrying out research on enzymes, yeast fermentations and biomass conversions. Manufacture starch conversion and fermentation equipment. Subsidiary of St Lawrence Starch Ltd, Canada.

Sandoz (Canada) Ltd

Manufactures and supplies pharmaceutical and other products of Sandoz AG, Switzerland.

Sanexen International Inc

7777 boulevard Louis-H Lafontaine, Anjou, Quebec H1K 4E4. Tel: 514 355 3351 Telex: 05 829559 Fax: 514 354 2493

10700 boulevard Henri-Bourassa, PAT, Quebec H1C 1G9

Waste treatment company developing systems for biodegradation of toxic wastes including chlorinated compounds, hydrocarbons and phenols in contaminated soils by selected soil microorganisms.

Sanofi Bio Ingredients Inc

Developing peptides of interest in diagnostics and therapeutics including aspects of solid phase peptide synthesis (see Sanofi Bio Industries, France).

Sarstedt Canada Inc

5655 Bois-Franc, St Laurent, Quebec H4S 1B2. *Tel*: 514 337 6908

Supply plastic labware including test, centrifuge and micro-tubes.

Saskatchewan University

Western College of Veterinary Medicine, Saskatoon, Saskatchewan S7N 0W0.

Developing techniques in embryo transfer and cryopreservation.

Saskatchewan University

Department of Microbiology, Saskatoon, Saskatchewan S7N 0W0. Using processes of protoplast fusion to generate yeasts with increased amylolytic activity for production of fuel alcohol by fermentation.

Schering Corp Ltd

3535 Trans Canada Highway, Pointe Claire, Quebec H9R 1B4. Tel: 514 695 1320 Telex: 05 821657

Manufactures and distributes pharmaceutical and veterinary products of Schering-Plough Corp, US.

Sci Can Diagnostics

14601 134th Ave, Edmonton, Alberta T5L 4S9. Tel: 403 455 6079 Fax: 403 455 6099

Develop and test immunological-based diagnostics and produce T-cell and B-cell recovery columns.

Sciex

55 Glen Cameron Rd, Thornhill, Ontario L3T 1P2. Tel: 416 881 4646 Fax: 416 881 9832

Have developed a coupling system for HPLC and mass spectrometry with applications in analysis of biologically active compounds.

Scotia Marine Products Ltd

PO Box 100, Lower Woods Harbour Shelb County, Nova Scotia B0W 2E0.

Tel: 902 723 2080 Telex: 019 38550

Produces sodium alginates, ammonium alginates, calcium alginates and potassium alginates from seaweed, Ascophyllum nodosum. Subsidiary of Protan AS, Norway.

Seasprings Farms Ltd

38 Water St, PO Box 2377, Charlottetown, Prince Edward Island C1A 8C1.

Develop land-based intensive density fish farms. Using genetic engineering to produce new fish strains as well as developing water treatment and aquaculture in man-made environments.

Semico Inc

Markets agricultural products. Developing genetically improved spring barley.

Seprotech Systems Inc

2378 Holly Lane, Ottawa, Ontario K1V 7P1.

Tel: 613 523 1641 Telex: 053 4740 Fax: 613 731 0851

Manufactures and installs membrane systems utilizing microfiltration, ultrafiltration and reverse osmosis technologies with applications in food processing, pharmaceutical and biotechnology industries. Member of Hovey Group, Canada.

Serdary Research Laboratory Inc

Manufacture high purity biochemicals for use in medical research. Developing new biochemicals, lipids in particular, as required for the development of new drugs and diagnostics.

Shaver Poultry Breeding Farms Ltd

PO Box 400, Cambridge, Ontario N1R 5V9.

Tel: 519 621 5191 Telex: 06959337 Fax: 519 621 9407

Breed poultry for meat and eggs. Carrying out research on the introduction of genes to produce new poultry strains via recombinant avian leucosis

Sherbrooke University

Department of Microbiology

Sherbrooke, Quebec J1H 5N4.

Studying cellular transformations brought about by the polyoma virus.

Specialty Marine Products Ltd

1814 Maritime Mews, Granville Island, Vancouver, British Columbia V6H

Tel: 604 685 5499 Fax: 604 685 8249

Developing culture methods of unusual species for aquaculture and fish farming and extraction of pharmaceuticals and chemicals.

Spectrex-Bioengineering Ltd

5250 rue Ferrier, Suite 508, Montreal, Quebec H4P 1L6.

Telex: 05825543 Tel: 514 738 3377

Supplies fermentation plant and other bioreactors as well as equipment and reagents for biotechnology and genetic engineering. Manufactures stainless steel vessels for fermentation and acts as distributor or agent for Bioengineering AG, Switzerland; Ingold Electrodes, Germany; Schleicher & Schuell, Germany; Lab-Line Instruments, US; Labin Co, US; Osmonics, US.

SPI Supplies

Box 187, Postal Station T, Toronto, Ontario M6B 4A1. Tel: 416 787 9193

Supply immunodiagnostics and reagents including products of Janssen Life Sciences Products, Belgium.

SPI Synthetic Peptides Inc

Department of Biochemistry, Room 355, Medical Sciences Building, University of Alberta, Edmonton, Alberta T6G 2H7.

Tel: 403 432 3155 Fax: 403 432 7168

12285 Yonge St, PO Box 417, Richmond Hill, Ontario L4C 4Y6. Tel: 416 773 2820 Tx: 06 986549 Fax: 416 773 2489

Research organization developing peptide pharmaceuticals, diagnostics and synthetic vaccines as wel as marketing computer software for biotechnology.

Stake Technology Ltd

208 Wyecroft Road, Oakville Road, Ontario L6K 3T8. Telex: 06 982285 Tel: 416 842 4560

Manufacture equipment for conversion of biomass into feed, fibres and chemicals. Carrying out research on mechanical dewatering of biomass, high temperature pulping, production of animal feed from wood and crop residues, products from hemicellulose and lignin and the use of cellulose products as feedstock for the production of ethanol. Offer consultancy in biomass conversion and welcome cooperative development projects.

Stephens Equipment Inc

2750 Brabant Marineau, Montreal, Quebec H4S 1L1. Fax: 514 331 2084 Tel: 514 332 1230 Telex: 05 824629

Manufacture analyzers and offer calibration and repair services.

Sterling Drug Ltd

Aurora, Ontario L4G 3H6. Tel: 416 727 4261

Distributes pharmaceuticals and other products of Sterling Drug Inc, US, now a member of the Eastman Kodak, US group of companies.

Sulzer Canada Inc

295 Hymus Blvd, Pointe Claire, Montreal, Quebec H9R 1G6. Telex: 05 821577 sulcan Tel: 514 695 8220 Fax: 514 697 9862

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

SunRoot Energy Ltd

3083 Universal Drive, Mississauga, Ontario L4X 2E2. Tel: 416 625 8250 Telex: 064 77898

Producing ethanol and fermentation byproducts.

Supelco Canada Ltd

46-220 Wyecroft Road, Oakville, Ontario L6K 3V1.

Tel: 426 842 8210 Fax: 416 842 2941

Supply laboratory separation products.

Sydlo Inc

578 Minette Circle, Mississauga, Ontario L5A 3B8.

Tel: 416 270 2282

Manufactures fixed film anaerobic digesters for treatment of potato and vegetable wastes on the commercial scale.

Sylvan Industries Ltd

28355 Fraser Highway, Aldergrove, British Columbia V0X 1A0. *Tel:* 604 533 4444 *Fax:* 604 856 8929

Speciality mushroom farm developing new species and cultivation techniques on waste cellulosic materials.

Syndel Laboratories Ltd

8879 Selkirk Street, Vancouver, British Columbia V6P 4J6.

Tel: 604 266 7131 Telex: 04507726 syndel Fax: 60 Fax: 604 266 0156

Manufactures hormones for induced breeding in fishes as well as sex reversal hormones and other pharmaceuticals for fish health. Also produces diagnostics for medical use and raw materials for genetic engineering as well as other pharmaceutical products and drugs. Carrying out research on development of natural products for use as pesticides, the production of deoxyribonucleosides, enzymes and other products from fish waste as well as fish drugs and feed supplements.

Synphar Laboratories Inc/Taiho Alberta Ltd

24-4290-91A St, Edmonton, Alberta T6E 5V2. Tel: 403 462 4044 Fax: 403 461 0196

Carrying out research and development of pharmaceuticals and monoclonal antibody-based therapeutics. Design, synthesise and test new drugs for infectious diseases.

Syntex Inc

2100 Syntex Court, Mississauga, Ontario L5N 3X4.

Tel: 416 821 4000 Telex: 0623349 Fax: 416 821 2902

Supply pharmaceuticals wholesale. Carrying out research on the development of novel enzyme inhibitors for use both in organic chemical synthesis and in drug design (see Syntex, US).

Synthetic Peptides Inc

Medical Sciences Bldg, University of Alberta, Edmonton, Alberta T6G 2H7.

Tel: 403 492 3155 Fax: 403 492 7168

Offer contract services in synthesis and purification of peptides.

Techneurop Inc

CP 986, Succursale, St-Laurent, Montreal, Quebec H4L 4W3. Tel: 514 733 5406

Supplies fermentation equipment and bioreactors for cell culture; products of Setric Genie Industriel, France.

Technical Marketing Associates Ltd

6695 Millcreek Rd, Unit 1, Mississauga, Ontario L5N 5M5. Tel: 416 826 7752 Telex: 06218227 Fax: 416 826 8 Fax: 416 826 8225

301 King St East, Kitchener, Ontario N2G 2L2

Develop and market synthesizers and sequencers for DNA, RNA, peptides and proteins as well as other scientific instruments.

Temfibre Inc

CP 3000, Temiscamingue, Quebec. Tel: 819 627 9505 Telex: 06 776281

Produce lignosulphonates and develop new lignosulphonate products. Investigating the fermentation of pentose sugars in spent sulphite liquor to produce ethanol.

Part III **CANADA**

Terra Nova Fishery Co Ltd

Fax: 709 364 8759

Developing new fish products and processes to utilize fish byproducts.

Terry Fox Medical Research Foundation

Suite 1130, 1176 W Georgia St, Vancouver BC V6E 4A2. Tel: 604 683 8566

Carrying out research on cell culture and fermentation for production of interferons. Commercial development through Pacific Pharmaceuticals, Canada.

The Canada Starch Co

1 place du Commerce, Nuns' Island Montreal, Quebec H3E 1A7. Tel: 514 761 5851

Produces glucose, glucose monohydrate, glucose syrups and industrial and modified starches. Subsidiary of CPC Corp, US.

The Canadian Liposome Co Ltd

308-267 West Esplanade, North Vancouver, British Columbia V7M 1A5. *Tel:* 604 988 5400 Fax: 604 988 0362

Researching use of liposomes to reduce drug toxicity as well as to extend and target therapeutic effect.

The Griffith Laboratories Ltd

757 Pharmacy Ave, Scarborough, Ontario M1L 3J8. Tel: 416 288 3050 Telex: 06 963562 Fax: 416 288 3481

Researching fermentation processes for baking products and the development of enzymic production of flavours.

The SNC Group

2 Place Felix Martin, Montreal, Quebec H2Z 1Z3. Telex: 055 60042 Fax: 514 866 0795 Tel: 514 866 1000

Engineering and construction group with activities which include manufacture of bioreactors, fermentation process equipment, biotreatment plant etc as well as consulting in biological processing. Carrying out research on fermentation and biological treatments as well as production of single cell protein and dyes.

Thermo Tech Waste Systems Inc

Manufacture digesters and turnkey thermophilic plant including mobile units. Developing high temperature, self-heating, thermophilic waste processing systems.

Toronto University

Department of Chemical Engineering

Toronto, Ontario M5S 1A4.

Tel: 416 978 3088

Developing improved processes for the production of butanol by fermentation during which end product inhibition is reduced by continuous extraction of the solvent using fluorocarbons.

Travenol Canada Inc

6695 Airport Road, Mississauga, Ontario L4V 1T7. Tel: 416 673 2255

Supply health care products including diagnostics, products for intervenous therapy, blood collection and storage etc as well as medical devices and medical instrumentation. Subsidiary of Baxter Travenol Laboratories Inc,

Tyler Research Instruments Corp

6128 103rd St, Edmonton, Alberta T6H 2H8. Tel: 403 435 7041 Fax: 403 436 3783

Offer services in custom design and manufacture of equipment for molecular separations including electrophoresis, ultrafiltration, DNA hybridization and RNA analysis.

United Electric Controls (Canada)

5320 Bradco Boulevard, Mississauga, Ontario L4W 1G7. Tel: 416 625 5082 Telex: 0696 1154 Fax: 416 625 5709

Supply pressure regulators, temperature controllers, probes and indicators.

United Grain Growers

Box 6600, Winnipeg, Manitoba R3C 3A7. Tel: 204 944 5554

Marketing company for hybrid spring canola developed by Allelix Inc,

Upjohn Co of Canada

865 York Mills Road, Don Mills, Ontario M3B 1Y6. *Tel:* 416 444 4433

Manufactures and distributes pharmaceutical products of the Upjohn Co,

Van Waters & Rogers Ltd

PO Box 2009, Vancouver, British Columbia V6B 3RZ.

Tel: 604 273 1441 Telex: 04 355620

Produces a wide range of salts of organic acids (acetic, propionic, benzoic, etc) for use in food, beverage, paper and other industries.

Vancouver Island Antibodies Ltd

265 Caldecote Rd, Victoria, British Columbia V8X 3X3. Tel: 604 479 8671

Offer services in production of monclonal antibodies and antiserums. Carrying out research and development of immunodiagnostics as well as antigen and antibody purification.

Varian Canada Inc

45 River Drive, Georgetown, Ontario L7G 2J4. Tel: 416 457 4130 Telex: 069 7502

Supplies instruments and accessories for chromatography and spectroscopy (see Varian Associates Inc. US).

Ventures West

321 Water St, Suite 400, Vancouver, British Columbia V6B 1B8. Tel: 604 688 9495 Fax: 604 687 2145

Venture capital company with interests in clinical diagnostics.

Veterinary Infectious Disease Organization

(VIDO)

124 Veterinary Road, Saskatoon, Saskatchewan S7N 0W0. Fax: 306 966 7478 Tel: 306 966 7465 Telex: 0742659

Carries out applied research on infectious diseases of food animals and poultry. Developing conventional and recombinant DNA vaccines and carrying out research on monoclonal antibodies, synthetic peptides, interferon, immunomodulators, diagnostic reagents and gnotobiotic animal facilities. Technologies and products developed by the institute are marketed through Biostar Inc, Canada.

Vetrepharm Inc

69 Bessemer Road, Unit 27, London, Ontario N6E 2V6. Telex: 0645817 Tel: 519 685 5800 Fax: 519 685 8825

Research Facilities: RR 1, Box 19, Putnam, Ontario N0L 2B0. Tel: 519 485 4731

Manufacture hormones for farm animals, pharmaceutical products for veterinary use and animal vaccines against rhinitis and pleuropneumonia. Carrying out research on animal vaccines, immunostimulants and parabiologicals.

VG Instruments (Canada) Inc

5929 Transcanadienne, St Laurent, Quebec H4T 1A1. Tel: 514 744 5519

Supply laboratory and industrial data systems.

W G Thompson & Sons Ltd

PO Box 250, 122 George Street, Blenheim, Ontario NOP 1A0. Tel: 519 676 5411 Telex: 064 78529 Fax: 519 676 3185

Handle and market grain. Carrying out conventional breeding programmes for corn, soybeans, wheat, oats, beans and barley. Carrying out research on production of double haploids in barley using in vitro techniques.

Waitaki International Biosciences

55 Glen Scarlett Rd, Toronto, Ontario M6N 1P5.

Tel: 416 761 4089 Telex: 06 22874 wibio Fax: 416 761 4455

Supplies bulk reagents including aprotinin, fetuin, fibronectin, insulin and trypsin. Developing cell growth factors, enzymes and other serum-free media supplements for mammalian cell culture. Subsidiary of Waitaki International Biosciences, New Zealand.

CANADA Part III

Wardrop Engineering Inc

77 Main St, Winnipeg, Manitoba R3C 3H1. Tel: 204 956 0980 Telex: 07 57487 Fax: 204 957 5389

Process engineering company offering services in downstream processing. Developing membrane technology and dehydration, immobilized bioreactors and yeast and ethanol production.

Warner Lambert Canada Ltd

2200 Eglinton Avenue East, Scarborough, Ontario M1K 509. Tel: 416 750 2200

Supplies clinical diagnostic reagents, antibodies, cosmetics and other products of Warner Lambert Co, US.

Waterloo University

Dept of Biology

Waterloo, Ontario N2L 3G1.

Telex: 06955259 Tel: 519 885 1211

Carrying out research on microbiology of Bacillus thuringiensis and the production of biopesticides.

Waterloo University

Microbial Biotechnology Centre

Waterloo, Ontario N2L 3G1.

Telex: 069 55259 Tel: 519 885 1211

Carrying out research on screening, genetics, physiology and nutrition of microbes for industrial use. Areas of interest include microbial insecticides, nitrogen fixing organisms, biomass production, antimicrobial agents, enzymes, etc as well as aspects of biodegradation and detoxification.

Westcoast Biotech Ltd

2175 Greylynn Crescent, N Vancouver, BC V7J 2X6. Telex: 04 54247 Tel: 604 987 3183

Developing bioleaching processes for mineral extraction and carrying out bioextraction of copper.

Westech Agriculture Ltd

West Prince Industry Centre, RR1, Alberton, Prince Edward Island C0B 1B0

Tel: 902 853 3636

Plant breeders producing improved varieties and propagation of soft fruit and cereals by tissue, anther and haploid culture methods.

Western Biologicals Ltd

PO Box 46466, Station G, Vancouver, British Columbia V6R 4G7. Tel: 604 228 0986

3852 West 21st Avenue, Vancouver, British Columbia V6S 1H4 Carrying out research and development in mushroom culture including tissue culture, strain development, pheromones and pest control.

Western Ontario University

London, Ontario N5A 5B9.

Undertaking studies on production of alcohol from jerusalem artichokes using yeasts: Saccharomyces or Kluyveromyces.

WHE Process Systems Ltd

WHE Biosystems Division

100 Klondike Drive, Weston, Ontario M9L 1X3.

Tel: 416 744 4155 Telex: 06 986391 Fax: 416 744 4171

Design and manufacture complete fermentation systems including fermenters, accessories and computer bioprocess controls for the food, dairy and pharmaceutical industries.

Wild Leitz Canada Ltd

513 McNicoll Avenue, Willowdale, Ontario. Tel: 416 497 2460 Telex: 069 86560

Suplies optical and other scientific equipment including fibre optic systems.

Winnipeg RH Institute Inc

University of Manitoba

Winnipeg, Manitoba R3T 2N2. Tel: 204 269 7291 Telex: 0

Telex: 07 587870 Fax: 204 269 7003

Produce plasma protein fractions including albumin, factors VIII and IX, intravenous immunoglobulin and Rh immunoglobulin. Carrying out research on blood protein separation and downstream processing of blood.

Wyeth Ltd

4455 Chesswood Drive, PO Box 370, Downsview, Ontario M3J 2C2. Tel: 416 630 0280

Produces pharmaceuticals, vitamins etc. Subsidiary of Wyeth Laboratories,

Xymotech Biosystems Inc

5250 rue Ferrier, Suite 508, Montreal, Quebec H4P 1L6. Tel: 514 738 3377 Telex: 05 825543

Design and manufacture laboratory fermenters and accessories suitable for mammalian cell culture.

Zeton Inc

4129 Harvester Road, Burlington, Ontario L7L 5M3. Tel: 416 632 3123 Telex: 061 8678 Fax: 416 Fax: 416 632 0301

Engineering company with interests which include design and manufacture of development units, pilot plant and small scale production plants. Experience includes supercritical extraction and polymerization processes.

DENMARK

6V Separation AS

International House, Center Boulevard, DK-2300 Kobenhavn. Tel: (01) 52 02 11 Telex: 31124

Supplies dewatering equipment including decanter centrifuges and automatic filter presses.

A Johnson & Co AS

PO Box 4072, Joegersborg Alle 14-16, DK-2920 Charlottenlund. Tel: 01 63 40 00 Telex: 855 27234

Supplies reagents for biochemical research including agarose and other hydrocolloids; products of FMC Corp, US.

Aarhus University

Department of Molecular Biology

Universitetsparken, DK-8000 Arhus C.

Tel: (06) 12 51 77

Researching into bacterial ribosomal RNA, eukaryotic protein synthesis, structure and function of immunoglobulins and biosynthesis of collagen.

Aarhus University

Institute of Medical Biochemistry

Universitetsparken, DK-8000 Arhus C.

Tel: (06) 12 93 99

Studying immunochemistry, structure of blood and amino acid metabolism.

Abbott Laboratories AS

Bygstubben 15 TVD, DK-2950 Vedbaek.

Manufactures pharmaceuticals, including antibiotics, diagnostics and multivitamin preparations (see Abbott Laboratories, US).

Abetong Sabema

Ny Ostergade 20, DK-1101 Kobenhavn.

Tel: (01) 15 35 03

Constructs thermophilic plant for production of methane by anaerobic digestion based on previous experience in manufacturing of precast concrete elements for all sectors of the building industry, including agriculture and large-scale storage tanks and cisterns. Subsidiary of Abetong Sabema, Sweden.

Agri Contact

Torupvejen 97, DK-3390 Hundested.

Tel: (02) 32 33 06 Telex: 16600

Act as consultants to the agricultural, food and bioindustries serving as a link between research and development advances and the companies served by both personal and postal contacts with a wide circle of research institutes at home and abroad.

Agro-Metan

Brogade 1, Seppersund, DK-9240 Nibe.

Constructs completely mixed anaerobic digesters for use on dairy cattle

Akvdan-Harvey AS

, DK-2880 Bagsvaerd.

Tel: (02) 98 72 00 Telex: 37470

Undertakes engineering construction, design and planning etc, of water works and sewage-treatment plant, including both biological and mechanical systems. Specializes in biochemical treatment of all types, including oxidation ditches and a patent method for biological removal of nitrogenous compounds.

Akzo Chemie Denmark AS

Hovegaden 26-28, DK-2970 Horsholm. Tel: (02) 86 27 00 Telex: 37135

Produces antibiotics, including tetracyclines, enzymes (proteases), steroids and other hormone preparations as well as products for immunoassay and plant growth. Distributes products of Akzo NV Netherlands.

Alfa-Laval Separation AS

5 Maskinvej, DK-2860 Soborg

Telex: 22201 alsep Tel: 01 670 311

Offers services in research and development to meet needs in food processing, the clinical and pharmaceutical industries etc as well as the scale up of recombinant DNA based processes to production level (see Alfa Laval AB, Sweden).

Alfred Benzon AS

Benzon Pharma AS

29 Halmtorvet, DK-1700 Kobenhavn V.

Tel: 01 31 35 70 Telex: 19079 Fax: 01 23 3559

Has rights to techniques for improving the stability and rate of replication of plasmid vectors. Technology available under licence. Also produces nuclease for industrial protein purification and developing other enzyme products.

Amersham Denmark ApS

Abildgardsparken 2, DK-3460 Birkerod

Telex: 37552 Amdria DK Tel: 02 82 0222

Fax: 02 82 0184

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Aminodan Group

DK-9990 Skagen.

Tel: 44 31 05 Telex: 67547

Supplies complete turn-key systems for water treatment based on activated sludge process, primarily for the food industries, including meat, fish, oil, fat, dairy and poultry-processing wastes. Also applicable to paper and pulp effluents, tanning, industrial wastes and municipal sewage treatment.

Askov Research Station

Askov Forsogsstation, DK-6600 Vejen.

Investigating potential fertilizer value of both undigested and digested sludge from farm wastes and manures.

Baltorpvej 154, DK-2750 Ballerup. *Tel:* 97 48 64 *Telex:* 35177

Manufactures equipment for control of wastes from agricultural and food industries (eg poultry manure, effluents from fish processing plants, slaughterhouses etc) as well as treatment of wastewaters.

Badilin (BASF)

Ved Stadsgraven 15, DK-2300 Kobenhavn S.

Tel: (01) 57 00 11 Telex: 31400

Supplies chemicals for industrial and agricultural use (see BASF AG,

Bast of Copenhagen

Biological Division

Ingerslevsgade 44, DK-1705 Kobenhavn.

Tel: (451) 31 33 55 Telex: 22981 bast

Supplies culture media, biochemical reagents, natural polar lipids and lipids for research purposes.

DENMARK Part III

Bayer Kemi AS

Christians IX Gade 2, DK-1014 Kobenhavn K. Tel: (01) 80 13 18 Telex: 37458

Distributes products of Bayer AG, Germany including antibiotics (penicillin), organic acids, antiseptics, alkaloids and vaccines.

Biofac AS

Vesterbrogade 18, DK-1620 Kobenhavn V. Tel: (01) 31 15 91 Telex: 22346 biofac

Manufactures bulk biochemical products for use in the pharmaceutical, veterinary and animal-feed industries.

Biogena AS

Skanderborgvej 277 G, DK-8260 Viby J. Tel: 6 28 25 00 Telex: 68674

Process ultrafiltrated whey permeate into a range of lactose products. Member of the Solvay group.

Biosystem AB

Ny Ostergade 20, DK-1101 Kobenhavn.

Constructs anaerobic digesters for production of methane (see Biosystem AB, Sweden).

Boehringer Mannheim GmbH

Skelstedet 13-15, DK-2950 Trorod-Vedbaek.

Tel: (02) 892 006 Telex: 37155

Supplies a wide range of fine chemicals and reagents for research and analysis, including enzymes, immunochemicals, antibodies, coenzymes and biochemicals for molecular biology (see Boehringer Mannheim GmbH, Germany).

Broste AS

Supplies fine chemicals, biochemicals, pharmaceuticals and laboratory equipment.

Carl Bro

Radgivende Ingenirofirma

Malervangen 1, DK-2600 Glostrup. Tel: 029 68 11 Telex: 33472

Engineering company and consultants involved with Danish farm biogas (anaerobic digestion) programme. Have been monitoring three full-scale demonstration plants, as well as evaluating performance of all existing plants in Denmark. Plants studied in detail include fully mixed, one-stage digester processing pig manure, batch-fed digesters and two plug-flow digesters. These systems include use of biogas for generation of electricity using internal combustion engines/generators.

Carlbiotech

Carlsberg Biotechnology Ltd

Tagensvej 16, DK-2200 Kobenhavn N.

Telex: 15671 Fax: 01 37 27 94

Research organization specializing in enzyme peptide synthesis. Carries out custom synthesis of peptides, accepts research and development contracts for specific peptides or enzyme modification to peptides, offers licence agreements for production of peptides developed in-house, and sells enzymically produced peptides. Subsidiary of Carlsberg Laboratory (Denmark) established as a commercial outlet for research products.

Carlsberg Laboratory

Department of Physiology

Gamle Carlsberg Vej 10, Valby, Kobenhavn. Tel: (01) 22 20 11

Investigating mechanisms of protein synthesis in plants and formation of chloroplast thylakoid proteins in barley in particular. Also studying genetics of barley and photosynthesis and chloroplast structure.

Cerestar Industriprodukter AS

Skovlytoften 33, DK-2840 Holte.

Telex: 37333 Tel: 02 42 2433 Fax: 02 42 0528

Produce glucose and starch derivatives.

Cheminova AS

PO Box 9, DK-7620 Lemvig. Tel: (07) 83 41 00 Telex: 66514

Manufactures pesticides and related chemical intermediates.

Chr Hansen Laboratories AS

10-12 Boge Alle, PO Box 407, DK-2970 Horsholm. Fax: 02 76 55 76 Tel: 02 76 76 76 Telex: 19184 hansn

Manufactures enzymes for dairy industries, including lipases, esterases, rennets and preparations of mixed activity as well as microbial proteins for food use, bacterial starter cultures and natural colorants. Carrying out strain selection and recombinant DNA techniques on lactic acid bacteria and other microbial cultures as well as cloning and expression of recombinant proteins in fungi, bacilli, E coli and lactic acid bacteria.

Ciba-Geigy AS

Lyngbyvej 172, DK-2100 Kobenhavn O. Tel: (01) 29 14 22 Telex: 18282

Distributes pharmaceuticals including antibiotics, steroids and hormones, dyes and chemical products (see Ciba-Geigy AG, Switzerland).

Cimabrex Ltd

PO Box 18, Industrivaenget 18, DK-4622 Havdrup.

Tel: (02) 38 55 75 Telex: 16600

Supplies hormones, vitamins and other pharmaceutical specialities.

Copenhagen University

Institute of Plant Physiology

Oster Farimagsgade 2A, DK-1353 Kobenhavn K.

Developing disc fermenters designed to utilize the tendency of filamentous fungi to attach to solid surfaces, using Aspergillus and Geotrichum, to produce fungal pectinase and lipase.

Copenhagen University

Department of Nuclear Medicine

Blegdamsvej 9, DK-2200 Kobenhavn N.

Developing radioimmunoassays.

Crone & Koch Consulting Engineers KC

Faelledvej 1, DK-8800 Viborg.

Developing methods for the extraction of methane from landfill waste disposal sites.

Cyanamid Denmark

Store Kongensgade 68/2, DK-1264 Kobenhavn K.

Distributes antibiotics (aureomycin and chlortetracycline), agricultural, medical and industrial products (see American Cyanamid Co US).

Dakopatts AS

Fax: 02 84 18 22

22 Guldborgvej, DK-2000 Kobenhavn.

Tel: 01 873 800 Tx:055 16638

Produce antiserums, monoclonals, immunocomplexes and immunohistochemistry reagents including immunoperoxidase kits, tissue culture products and purified human proteins.

Danish Building Research Institute

Statens Byggeforskinings Institut

Dr Neergardsvej 15, DK-2970 Horsholm.

Sets building standards for construction of anaerobic digesters in Denmark.

Danish Engineering Academy

Danmarks Ingeniorakademi

Bygning 376, DK-2800 Lyngby.

Undertaking laboratory studies on biogas (methane) production from agricultural wastes.

Danish Fermentation Industry AS

DK-2600 Glostrop.

Developing fermentation methods for production of enzymes and antibiotics as well as for treatment of waste waters using white rot fungi combined with an anaerobic pretreatment.

Part III **DENMARK**

Danish Technical University

Institute of Technical Biochemistry

Bygning 403, DK-2800 Lyngby.

Studying the microbiology of anaerobic digestion using pure cultures.

Danish Technical University

Institute of Energetics

Bygning 403, DK-2800 Lyngby Telex: 37529 Tel: 01 88 46 22

Researching on the use of international combustion engines fuelled with biogas (methane).

Danmark Protein AS

Skanderborgvej 277 G, DK-8260 Viby J.

Tel: 6 28 25 00 Telex: 68674 Fax: 6 28 75 63

Produce whey protein concentrates with 35%, 60% and 80% protein by ultrafiltration from sweet whey. Member of the Solvay group.

Danochemo AS

Malmparken 5, DK-2750 Ballerup. Tel: (02) 97 37 00 Telex: 3538

Telex: 35382

Manufactures vitamin products. Subsidiary of Ferrosan AS, Denmark.

Dansk Sojakagefabrik AS

Produces fatty acids, glycerol, animal fats and vegetable oils.

DDS

De Danske Sukker-Fabrikker AS

5 Longebrogade, PO Box 17, DK-1001 Kobenhavn K.

Tel: 01 54 61 30 Telex: 31430 dansuk

Carrying out research on beet tissue culture techniques and development of polyploid, monogerm and pollen-sterile beet.

DDS Filtration

Stavangervej 10, DK-4900 Nakskov. Tel: 03 92 27 99 Telex: 47558 Fax: 03 92 31 11

Manufactures and supplies equipment and membranes for reverse osmosis, ultrafiltrationa and microfiltration with applications in water, effluent, food and pharmaceutical industries.

DDS-Kroyer AS

Franogade 15, DK-2100 Kobenhavn O. Tel: (415) 20 61 55 Telex: 16530

Supplies equipment and complete systems for production of glucose syrups, solid glucose, dextrins, glucose monohydrate, barley syrups, modified starches and similar products. Also provides a consultancy service.

De Dansk Spiritfabrikker AS

Raffinaderivej 10, DK-2300 Kobenhavn S. *Tel*: (01) 57 11 80

Manufactures alcoholic beverages and spirits, fermentation-derived ethanol (as well as synthetic alcohol), yeast and prepared food products.

Diosynth Scandinavia

Hovegaden 26-28, Horsholm.

Tel: (02) 86 27 00 Telex: 19146

Supplies bulk pharmaceutical raw materials including peptides and steroids, such as testosterone, pancreatin, insulin, gonadotropin and hydrocortisone. Subsidiary of Diosynth BV, Netherlands.

Domnick Hunter Filter Ltd

Rosavej 6, DK-3660 Stenlose

Tel: 02 17 33 32 Fax: 02 17 33 32

Produces on-line air filters for bacteriological purposes as well as filters for liquid sterilization, cell concentration and solids/liquid separation including prefiltration and general clarification.

Dow Chemical International Inc

Vedbaek Strandvej 350, DK-2950 Vedbaek. Tel: (02) 89 38 88 Telex: 37511

Distributes products of Dow Chemical Co, US.

Du Pont Nemours Nordiska AB

Affiliate of Du Pont Scandinavia AB

Kongelundsvej 297, DK-2770 Kastrup.

Tel: 01 50 66 10 Telex: 35361

Supplies biochemicals (see E I Du Pont de Nemours & Co, US).

Dumex Ltd AS

Prags Boulevard 37, DK-2300 Kobenhavn S.

Tel: (01) 54 45 00 Telex: 31202

Manufactures antibiotics and other pharmaceutical and medical chemicals.

E Tjellesen AS

Blokken 81, DK-3460 Bikerod.

Tel: (02) 81 88 Telex: 37219 tjelle

Supplies reagent kits and monoclonal antibodies for clinical laboratories. Agent for Medix AB OY, Finland.

EKATO Aps

Bregnerodvei 132 B, DK-3460 Birkerod.

Tel: 02 81 95 00 Fax: 02 81 55 90

Supply industrial fluid agitators and plant; products of EKATO, Germany.

Eli Lilly & Co Danmark AS

Tommerup, Stationsvej 10, DK-2770 Kastrup. Telex: 31294

Supplies pharmaceuticals and related products including antibiotics, multivitamin preparations and hormones (see Eli Lilly & Co, US).

Emulsion AS

Paisgaard, DK-7130 Juelsminde.

Telex: 60799 Tel: (05) 69 01 22

Manfactures esters of edible fatty acids with glycerol and other alcohols.

Ercopharm AS

Biochemicals Division

Skelstedet 13-15, DK-2950 Trorod Vedaek.

Tel. (02) 91 22 66 Telex: 37155 ercodk

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Euro-Matic AS

Krimsvej 29, DK-2300 Kobenhavn S.

Tel: (01) 55 91 11 Telex: 31413

Produces a free-floating, rotating biological contact process waste-treatment system, with low installation costs and power consumption. Suitable for use in fish farming.

Fibiger Institute

70 Ndr Frihavnsgade 70, DK-2100 Kobenhavn 0.

Tel: 01 26 88 66

Research Institute of the Danish Cancer Society investigating aspects of cancer including environmental carcinogenesis using recombinant DNA techniqueas and tissue culture.

Fisons AS

Telex: 19663

Supplies pharmaceutical products (see Fisons plc, UK).

Frederiksberg Chemical Laboratories Ltd

Englandsvej 358, DK-2770 Kastrup Kobenhavn. Tel: (01) 50 11 93

Manufactures hormonal preparations.

Grindsted Products AS

Grindstedvaerket

Edwin Rahrs Vej 38, DK-8220 Bradbank. Tel: (0456) 25 33 66 Telex: 64177

Manufactures food additives, including vitamins (thiamine, riboflavine, pyridoxine and ascorbic acid), emulsifiers, stabilizers, flavours and bulk industrial enzymes for use in the wine and juice industries, including glucanases, oxidases, catalases and pectinases.

DENMARK Part III

Heto Lab Equipment AS

Klintehoj Vaenge 3, DK-3460 Birkerod.

Fax: 042 81 7093 Tel: 042 81 7777 Telex: 37481

Manufactures equipment for determination of biological oxygen demand in effluents and wastewaters

Hoechst Danmark AS

Islevdalvej 110, DK-2610 Rodovre. Tel: (02) 91 26 22 Telex: 3533

Telex: 353366 hoeda

Supplies laboratory diagnostics, immunochemical reagents and biochemicals (see Hoechst AG, Germany).

Hojbogard Biogasanlaeg AS

Industrivej 9, DK-5580 Norre Aby.

Designs and builds anaerobic digesters.

Holten Luffteknik AS

Solvang 40, DK-3450 Allerod. *Tel:* (02) 27 67 00 *Telex:*

Telex: 40037

Manufactures laminar flow clean air cabinets for use in laboratories or clinical, pharmaceutical or industrial situations.

ICI Danmark AS

Supplies pharmaceuticals, agrochemicals and other products (see Imperial Chemical Industries plc, UK).

Immuno

Strandboulevarded 96, DK-2100 Kobenhavn.

Telex: 15122 Tel: 451 26 54 22

Supplies immunoreagents and test kits including electrophoretic gels, antiserums and plasma proteins for use in radioimmunoassay and radioelectrophoresis.

Immuntech Denmark AS

Rugaardsvej 387, DK-5210 Odense NV.

Tel: 09 94 29 00 Telex: 59402

Supplies immunological reagents including polyclonal antibodies against immunoglobulins and human complement reagents.

Industri Kemalier AS

Ved Damhussoen 10, DK-2720 Vanlose.

Telex: 16600 Tel: (01) 71 13 66

Act as agents for foreign manufactures of food products, including lactose, whey powder, casein and gelatin.

Institute of Agricultural Economics

Jordbrugsokonomisk Institut

Allegade 13, 1 sal, DK-2000 Kobenhavn F.

Studying economics of biogas (methane) production from farm and agricultural wastes

Janssen Pharma AS

Hammerbakken 21, DK-3460 Birkerod.

Telex: 37244 janfar Tel: 02 811044

Supplies diagnostic and other reagents including antiserums and radioimmunoassay kits for drugs as well as carrying out custom synthesis (see Janssen Biochimica, Belgium).

Jysk Biogas

DK-9640 Farso.

Designs and builds anaerobic digesters.

Kabi Vitrum AS

Halmtorvet 29, DK-1700 Kobenhavn V.

Tel: (01) 31 01 94 Telex: 15899

Supplies clinical diagnostic products, chromogenic substrates etc (see Kabivitrum Diagnostica AB, Sweden).

Kebo Laboratorieudstyr ApS

Skodsborgvei 48, DK-2830 Virum. Telex: 37719

Supplies materials for biochemistry, enzymology and cell culture, including products of United States Biochemical Corp, US

Kem en Tec

Lemchesvej 11, Hellerup, DK-2200.

Tel: (45) 1626706

Supplies research biochemicals and antiserums as well as equipment for electrophoresis and electrofocusing

Knudsen Nordisk Electricitets Selskab AS

Haraldsgade 53, DK-2100 Kobenhavn O.

Tel: (01) 29 11 22 Telex: 22236

Supplies reverse osmosis plants for production of process water, for wastewater treatment and for recovery of valuable wastes.

Kobenhavns Pektinfabrik AS

Ved Banen 12, DK-4623 Lille Skensved.

Tel: (03) 66 92 10 Telex: 43572

Produces pectins and algal carrageenans for use in food and pharmaceutical industries. Uses large anaerobic contact digesters to treat waste in-house. Subsidiary of Hercules Inc, US.

Kruger AS

Rymarksvej 108, DK-2100 Kobenhavn. *Tel:* (01) 29 02 22 *Telex:* 27033

Provides consulting engineering services for all types of water treatment, including industrial effluent clean-up, drinking water supplies, irrigation

Leo Pharmaceutical Products Ltd

Lovens Kemiske Fabrik Produktions AS

Industriparken 55, DK-2750 Ballerup.

Manufacture pharmaceuticals including antibiotics and medical diagnostic enzymes as well as plant hormones.

Litex Industri

Risingevej 1, DK-2660 Brondby Strand.

Tel: (02) 73 11 22 Telex: 33194

Produces seaweed extracts, including carrageenan and and other gelling agents for use in pharmaceutical and food industries.

Marsing & Co Ltd

Sjaellandsbroken 6, DK-2450 Kobenhavn SV.

Tel: (01) 16 44 44 Telex: 19925

Distributes biochemicals, food additives, pesticides and pharmaceutical chemicals.

Meda AS

Dynamovej 11, DK-2730 Herlev.

Tel: 02 84 42 11 Telex: 35289

Supplies pharmaceutical products, clinical reagents, biochemicals etc (see Pharmacia Biotechnology AB, Sweden). Also distributor for Collaborative Research, US.

Merck Sharp & Dohme

Marielundvej 46 c/2, DK-2730 Herlev. Tel: (02) 91 77 66 Telex: 35405

Supplies fine chemicals and reagents (see Merck & Co Inc, US).

Miles Scandinavia

Teglporten 2, DK-3460 Birkerod.

Tel: 281 44 66 Telex: 37233 miles

Supplies biochemicals and enzymes for research clinical and industrial use (see Miles Laboratories Inc. US).

Montedison Skandinavien AS

Vester Sogade 10/1, DK-1601 Kobenhavn V.

Tel: (01) 15 08 88 Telex: 15127

Distributes chemical products (see Montedison SpA, Italy).

Niro Atomizer AS

Gladsaxevej 305, DK-2860 Soborg.

Control of the strength of t

Supplies dewatering equipment for pharmaceutical and biological products; aqueous and organic solvent systems for sterile and non-sterile products: cooling, drying, coating, encapsulation, agglomeration, solid/liquid extraction etc; spray driers, fluidized bed dryers, reverse osmosis, spray fluidizers and continuous extraction.

Part III **DENMARK**

Noco AS

Industriholmen 17-19, DK-2650 Hvidovre. Telex: 15949 Tel: (01) 78 55 11

Supplies optical and other scientific equipment including fibre optic

Nordisk Gentofte

Niels Steensenvej 1, DK-2820 Genetofte. Tel: (01) 68 01 68

Produces insulins, human growth factor and plasma proteins. Carrying out related research using recombinant DNA techniques. Has gained approval for the marketing of human growth hormone produced by recombinant DNA technology. Developing technique for large scale production of human serum albumin with Skandigen, Sweden. Manufacturing, marketing and development arm of Nordisk Insulinlaboratorium, Denmark.

Nordisk Insulinlaboratorium

International House, Niels Steensens Veg 1, DK-2820 Gentofte. Tel: (01) 68 01 68 Telex: 15001

Manufactures insulin and other pharmaceutical preparations.

Normedac KS

Bernstorffsvej 162, DK-2900 Hellerup. *Tel*: (01) 63 28 23

Supplies chemicals and reagents for clinical chemistry, research and molecular biology including lectins and agglutinins antibodies and antiserums, affinity chromatography supports, carbohydrates and enzymes and reagents for polypeptide sequence analysis.

Novo Biolabs

Novo Alle, DK-2880 Bagsvaerd. Telex: 855 37173 novo Tel: 02 98 23 33

Developing diagnostic kits based on monoclonal antibodies. Subsidiary of Novo Industri AS.

Novo-Nordisk AS

Novo Alle, DK-2880 Bagsvaerd. Tel: 44 49 00 33 Telex: 37173 Fax: 44 49 05 55

Has pharmaceutical interests. Major producer of enzymes for research, analysis, pharmaceutical and industrial applications, in liquid, powder, freeze-dried, immobilized or slurry form as appropriate: amylases (bacterial, fungal and plant) for textiles, baking, brewing alcohol, food-processing, starch juice and wine industries; proteases for analytical use, tissue culture, detergent industry etc. Pharmaceutical enzymes include immobilised penicillin acylase, cellulase, cellobiase, galactosidase, and enzymes for the sweetener industry including bacterial glucose isomerase and new enzymes for isomerization and saccharification of maize starch (See also Novo Pharmaceuticals, UK). Projects with Zymogenetics, US in yeast and mammalian cell technology and development of haematology products by recombinant DNA technology including factor VIIa. Products also include low molecular weight heparin. Has interest in veterinary research.

Nunc AS

PO Box 280, Kamstrup, DK-4000 Rosklide. Tel: (02) 35 90 65 Telex: 43115

Manufactures disposable plastic laboratory ware.

Nycomed ApS

Mose Alle 10A, DK-2610 Rodovre. Tel: (01) 70 82 00

Supplies cell separation media, clinical diagnostic kits, reagents and control serums.

Odense University

Institute of Biochemistry

Campusvej 55, DK-5230 Odense M.

Tel: 09 15 86 00

Developing a programme of biotechnology including research on the regulation of growth, development and metabolism of mass cell culture.

Operations Analysis Centre AS

Sofielundsvej 23, DK-2600 Glostrup. Tel: (02) 96 80 00 Telex: 33472

Consulting company specializing in technology assessment, feasibility studies, implementation and management of new technologies. Has carried out economic and feasibility studies in relation to biomass energy production within Denmark and for the FAST programme of the Commission of European Communities. A member of the Carl Bro, Denmark group.

Organon Teknika

PO Box 48, 9 Literbuen, DK-2740 Skovlunde. Tel: 02 84 68 00 Telex: 35102

Supplies immunological reagents, microbial enzymes and other biological reagents (see Organon Teknika, US).

Orthana Kemisk Fabrik AS

Englandsvej 350-356, DK-2770 Kastrup. Tel: (0451) 50 14 01 Telex: 31191

Produces enzymes (proteases), peptones and related products.

Pfizer AS

Vestre Gade 18, DK-2650 Hvidovre. Tel: (01) 75 42 11 Telex: 15058

Supplies antibiotics, enzymes, organic acids and biopolymers (see Pfizer Inc, US).

Pharmacia AS

Herredsvejen, DK-3400 Hillerod. Tel: (03) 26 52 00 Telex: 42112

Manufactures pharmaceutical products.

Pharmacia LKB Produkter ApS

Ronnegade 1, DK-2100 Copenhagen O. Tel: 01 29 50 44 Telex: 15423

Supplies instruments and chemicals for use in liquid chromatography, electrophoresis, electrofocusing, isotachophoresis, microtomy and fermentation (see Pharmacia LKB-Produkter AB, Sweden).

Philips Elektronik Systemer AS

PO Box 1919, Strandlodsvej 4, DK-Kobenhavn S. Tel: (01) 57 22 22

Supplies a full range of analytical equipment including chromatographs, spectrophotometers, ion selective electrodes, electron microscopes etc (see Philips NV, Netherlands).

Project Godrum

Viborgvej 188, DK-8210 Arhus V. Tel: (06) 15 03 04

Undertaking a demonstration project aimed at rural energy production through integrated use of anaerobic digestion of manure and agricultural residues with solar and wind sources.

Radiometer AS

Emdrupvej 72, DK-2400 Kobenhavn NV. Tel: (01) 69 63 11 Telex: 15411

Supplies a range of analytical products for laboratory use including pH meters, filtration systems and specific ion electrodes.

APV Rannie AS

Roholmsvej 8, DK-2620 Albertslund. Tel: 2 64 9300 Fax: 2 64 03 30 Telex: 33333

Specializes in high pressure homogenisation technology and cell rupture processes. Manufactures homogenizers and high pressure pumps for biotechnology and pharmaceutical industries.

Riact AS

Oesterbrogade 95, DK-2100 Kobenhavn. Telex: 27464 ria

Supplies bulk antiserums; products of Sera-Tec Biologicals, US as well as distributing products of Janssen Biochimica, Belgium and Southern Biotechnology Associates, US.

DENMARK Part III

RISO National Laboratory

Agricultural Research Department

DK-4000 Roskilde.

Telex: 43116 Tel: (03) 37 12 12

Studying legume/Rhizobium symbiosis including interactions between varieties of host plants and strains of Rhizobia as well as estimates of the contribution of fixed nitrogen to growth of non-leguminous species in mixed cropping systems.

Roche AS

Industriholmen 59, DK-2650 Hvidovre. Tel: (01) 78 72 11 Telex: 16983

Supplies vitamins and other chemicals including diagnostic reagents, cosmetics, perfumes, flavourings and plant protection chemicals (see Hoffmann-La Roche & Co AG, Switzerland).

Rosco AS

Diagnostics Division

Taastrupgaardsvej 30, DK-2630 Tastrup. Tel: (02) 99 33 77 Telex: 33475

Supplies products for testing sensitivity to antibacterial and antimicrobial therapeutics, as well as materials for identification of bacterial infections.

Royal Veterinary and Agricultural University

Institute of Veterinary Microbiology

Bulowsvej 13, DK-1871 Kobenhavn S.

Studying destruction of parasites and pathogens using anaerobic digestion of farm wastes.

Royal Veterinary and Agricultural University

Department of Crop Husbandry

Thorvaldsensvej 40, DK-1871 Kobenhavn.

Tel: (01) 35 17 88

Developing a two-phase plug-flow reactor for anaerobic digestion of crop residues for the production of biogas (methane).

Sandoz AS

Titangade 9A, DK-2200 Kobenhavn N.

Tel: (01) 82 61 02 Telex: 16228

Supplies antibiotics of Sandoz AG, Switzerland.

Scandinavian Medical Systems

PO Box 115, DK-2970 Hoersholm. Telex: 37368

Supply immunological and biological reagents. Distributor for Advanced Magnetics, US.

Schering Kemie AS

Energivej 2, DK-2750 Ballerup. Tel: (02) 97 63 33 Telex: 3

Telex: 35189

Supplies pharmaceuticals, especially steroids, of Schering AG, Germany.

Senetek AS

Voldbjervej 14A, DK-8240 Riskov. *Tel*: 06 17 54 22

Developing a diagnostic test for Alzheimer's disease and carrying out research on aging and therapeutics.

SMS Group

PO Box 115, DK-2970 Horsholm. Tel: 02 86 44 00 Telex: 37368

Supplies immunological and biological reagents. Distributor for Kirkgaard & Perry Laboratories, US.

Statens Seruminstitut

Amager Boulevard 80, DK-2300 Kobenhavn S. Tel: 01 95 28 17 Telex: 31316

Supplies antibodies, antiserums and biological standards. Recognised by the World Health Organization. Holds culture collection containing bacteria for general, medical and veterinary microbiology research. Offers identification service. Collaborating Centre for Reference and Research on Escherichia and Klebsiella.

Struers Scientific Instruments

Valhojs Alle 176, DK-2610 Rodovre Kobenhavn. Tel: 01 70 80 90 Telex: 855 19625 struers Fax: 01 41 65 44

Supplies clinical diagnostic test kits, nutrient media and serums, tissue cultures and viral diagnostic reagents. Agent for Vector Laboratories Inc,

Technology Institute of Denmark

Department of Chemical Technology

Gregersensvej, DK-2630 Tastrup. Tel: (452) 99 11 Telex: 33416

Laboratory studies on anaerobic digestion of farm wastes include investigations of optimum process parameters, inhibitory factors and gas yields from various organic substances.

Teknunc AS

Industrivej 1, DK-4000 Roskilde.

Manufactures a programmable microplate reader. Supplies laboratory equipment. Distributor for Gallenkamp, UK and Damon/IEC, US.

Tessek AS

Voldbjergvej 14A, DK-8240 Risskov. Tel: 06 17 54 22 Telex: 64481

Supply hydroxyethyl-methacrylate (HEMA) based chromatography

Trichem

Bernhard Olsenvej 23, DK-2830 Virum. Telex: 85537820

Tel: 02 85 82 83

Supplies immunological reagents and enzymes. Distributor for Zymed, US and Cedarlane Laboratories, Canada.

Vingmed AS

Havsteensvej 9, DK-4000 Roskilde.

Supplies laboratory diagnostic kits and immunological products, ELISA test kits, complement and antiserums; products of Cordis Laboratories Inc,

Water Quality Institute

Vandkvalitetsinstituttet

Agern Alle 11, DK-2970 Horsholm.

Tel: (012) 86 52 11

Concerned with all aspects of water quality. Undertakes laboratory and field studies, water-quality surveys and water planning. Develops wastewater and effluent treatment technology, data processing etc, for clients which include state, regional and local authorities as well as private industry.

FINLAND

Alko AB OY

Finnish State Alcohol Company

Research Laboratories:, Salmissaarenrantra 7 PO Box 350, SF-00101

Helsinki 10.

Tel: 060911 Tlx: 125364

Produces grain ethanol as well as related products including technical alcohol, bakers yeast, fermented vinegar and process enzymes (alpha-amylase, amyloglucosidase, beta-galactosidase and cellulose) mainly for in house use. Also sells technical know-how related to ethanol and enzyme processes backed by basic research at the Research Laboratories. Research is also concerned with aroma composition of alcoholic beverages, alcohol metabolism and effects of alcohol, chemical processing of alcohol and production of industrial enzymes by conventional and rDNA research for improvement of industrial organisms. Also serves as a culture collection.

Alnor OY

PO Box 506, SF-20101 Turku 10. Tel: 21 308 700 Telex: 62376

Supplies radioactivity monitoring equipment.

Bioteras OY

SF-41800 Korpilahti. *Tel:* (941) 821 807

Developing and marketing systems for waste treatment and energy production from biomass and agricultural slurries. Systems include anaerobic digesters and composters.

Cerestar Teollisuustuotteet OY

Asemapaallikonkatu 12 B, SF-00520 Helsinki.

Tel: 014 2200 Telex: 1001129 Fax: 014 2933

Supplies glucose syrups and starch products.

Clinical Laboratory Consultation OY

PL 132, SF-00251 Helsinki 10. Tel: 17 15 41 Telex: 124885

Supplies fine chemicals, laboratory reagents and gases for industrial and laboratory use.

Ekofin AB OY

Rullakatu 6C, SF-15900 Lahti 90. Tel: 51 31 71 Telex: 16204

Produces small-scale trickle filter water-treatment plant for individual dwellings or small isolated communities. Also provides a consultancy service on wastewater problems.

Ekono OY

PL 27, SF-00131 Helsinki 13.

Tel: (358) 04 69 11 Telex: 124822 ekono

Consulting engineering company involved in new and renewable energy systems including biomass and bioconversion for ethanol production. Also interested in other engineering activities covering the whole energy field.

Electronor OY

Supplies optical and other scientific equipment including fibre optic systems.

Enso-Gutzeit OY

PL 34, SF-571-1 Savolinna 10. Tel: (957) 219 36 Telex: 5613

Engineering contractors for water and effluent treatment plants, in particular for the pulp and paper industries.

Farmos Diagnostica

PL 425, SF-20101 Turku 10.

Produces clinical diagnostics based on radioimmunoassays.

Farmos OY

Diagnostics Division

Manufactures diagnostic reagents and radioimmunoassay kits for steroids, bile acids, ferritin and prostatic acid phosphatase, as well as supplying general diagnostics.

Filter AB OY

Tinasepankuja 5, SF-00620 Helsinki 62. Tel: 7904 88 Telex: 123189

Manufactures water filters and metering equipment.

Fincoil Teollisuus OY

Ansatie 3, SF-01740 Vantaa 74.

Manufacture industrial cooling and refrigeration plants.

Finn Metric OY

Riihitontuntie 2, SF-02200 Espoo 20.

Supply laboratory equipment including centrifuges; products of Damon/IEC, US.

Finnish Sugar Co Ltd

Biochemical Division

Lansituulentie 7, PO Box 46, SF-021101 Espoo.

Tel: 046961 Telex: 125737

Supply animal and fungal enzymes as well as xylitol.

Finnish Sugar Co Ltd

Technology Centre

SF-02460 Kantvik.

Tel: 0 29741 Telex: 121076 supo Fax: 0 2974 615

Carrying out research on the large scale production of organic acids from biomass using immobilized genetically engineered microbial culturescoupled with ultrafiltration separation systems.

Foundation for Biotechnical and Industrial Fermentation Research

SF-00101 Helsinki 10, c/o Alko AB PO Box 350, SF-00101 Helsinki 10. Tel: 60911 Telex: 125364

Founded at Alko AB, its purpose is to promote and support research, education and development in biotechnology and fermentation industry with the objective of advancing science to individuals and groups.

G W Berg & Co AB

Laboratory Department

PO Box 43, SF-0051 Helsinki 55. Tel: 750450 Telex: 124 885

Supplies a wide range of laboratory apparatus; distributors for Gallenkamp, UK.

G W Berg & Co AB OY

Fabianinkatu 14, SF-00100 Helsinki 10.

Telex: 124885

Supplies fine chemicals, laboratory reagents and gases for industrial and laboratory use.

Huhtamaki OY

PL 415, SF-20101 Turku 10. Tel: (21) 40 12 22 Telex: 62262

Manufactures industrial cooling and refrigeration plants.

Hurme-Yhtiot

Tapio Hurme OY/Hurme Consulting OY

Puolalanpuisto 3 A 1, SF-20100 Turku.

Tel: 35821 519941 Telex: 62004

Fax: 35821 519945

Offers consultancy and assistance in product development in agrochemistry, biochemistry and silvichemistry. Products include binding agents for animal feed pelleting and adhesives as well as other fine chemicals, fermentation additives and natural products derived from wood processing and the pulp and paper industries.

Immuno Diagnostics OY

Markkulantie 4, SF-13100 Hameenlinna. Tel: 17 22758 Telex: 2304 immuno d Fax: 17 22039

Supplies immunological and biological reagents including monoclonal antibodies for diagnostics. Distributor for Zymed Laboratories, US and Janssen Biochimica, Belgium.

Instrumentarium Corp

Hospital & Laboratory Department

Vitikka 1, SF-0260 Espoo.

Telex: 122555 Tel: 333155

Supplies immunological and biological reagents. Distributor for Zymed Laboratories, US.

Iostop OY

Kaisaniemenkatu 4B, SF-00100 Helsinki 10.

Supplies isotopes and radioactive materials.

Jaakko Povry

PO Box 16 Kaupintie 3, SF-00401 Helsinki 40.

Tel: (358) 05 65 71 Telex: 121069

Engineering company with extensive experience in the design of pulp and paper mills throughout the world. Developing energy systems based on renewable and biological resources through the subsidiary JP-Energy OY.

Kavkomarkinat OY

PL 40, SF-02631 Espoo 63.

Supplies accessories, reagents and adsorption media for gas and liquid chromatography. Agents for Phase Separations Ltd, UK

Kemira OY

Malminkatu 30 PO Box 330, SF-00101 Helsinki. Tel: (90) 694 2911 Telex: 124633/121191

Chemical company with a wide range of activities including production of fertilizers, agrochemicals, textile fibres, filters and industrial chemicals.

Kemira OY

Research Centre

PO Box 44, SF-02271 Espoo.

Tel: 981 15 521 Telex: 32122 keoul

Conducting basic research in relation to current activities in agriculture and chemicals including aspects of plant growth and protection, and biotechnological production of chemicals. Cooperating with Calgene Inc, US developing herbicide resistant turnip-rape. Also looking at clonal propagation of biomass trees such as willow as well as a new biological control agent and nodule forming bacteria.

Kemistien OY

PL 52 Vattuniemenkuja 1, SF-00211 Helsinki 21.

Tel: 67 31 91 Telex: 121374

Supplies clinical diagnostics, laboratory chemicals and glassware.

KSV-Chemicals OY

Hoylaamontie 11, PO Box 128, SF-00381 Helsinki.

Telex: 123909

Manufactures lipids for research applications.

Laaketukku OY

PL 52 Vattuniemenkuja 1, SF-00211 Helsinki 21.

Tel: (80) 67 31 91 Telex: 121374

Supplies products for testing sensitivity to antimicrobial and antifungal substances, as well as kits for identification of bacterial infections. Agent for Rosco AS, Denmark.

Labsystems OY

Pulttitie 8, PO Box 8, SF-00881 Helsinki. Tel: 75 821 Telex: 1002048 Fax.

Fax: 78 9732

Supplies a range of liquid handling equipment including single and multichannel pipettes, stoppers, diluter/dispensers, tips, cuvettes and microstrips. Instrumentation comprises immunoassay instrumentation, microbiological growth analyzers, clinical chemistry analyzer systems and coagulation instrumentation. Diagnostics include a line of EIA kits for infectious diseases including HIV, monoclonal antibodies for tumour characterization and FECA-EIA system for the detection of occult blood.

Lakemedelsfahriken Medica OV

PL 325, SF-00101 Helsinki 10.

Produces cell separation media, clinical diagnostic kits, reagents and control serums.

Larox OY

PL 29, SF-53101 Lappeenranta 10. Tel: (53) 117 60 Telex: 58233

Manufactures industrial dewatering and separation equipment, filters, centrifugal classifiers, clarifiers, screw pumps etc.

Mariachi OY

150-Heikkilantie 14, SF-20200 Turku.

Telex: 62665 maroy Tel: (9) 21-307000

Main products are microprocessor-based automation applications for the Finnish industries, data collection devices and intelligent disk drives for industry and laboratories. Research and devlopment projects relate to microprocessor technology.

Medilab AB OY

Sektionsvagen 13, SF-02700 Grankulla.

Tel: 05050155 Telex: 123367

Supplies radioactive materials and ion exchange resins. Also distributes diagnostic products of Milab, Sweden.

Medix AB OY

Asematie 13, SF-02700 Kauniainen.

Tel: 358 90 5050 155 Telex: 123367 medix

Produces diagnostic kits and monoclonal antibodies for clinical laboratories.

Merck OY

Koulutie 4F, SF-02200 Espoo 20.

Telex: 123348 Tel: 42 32 11

Supplies raw materials and additives for the food industry including bacterial gums and also markets fine chemicals. Subsidiary of Merck & Co Inc, US.

Metagas Ltd

Paraistentie 11, SF-00280 Helsinki.

Tel: (09) 417 297

Provides consultancy, planning and research services for agricultural, municipal and industrial methane fermentations. Produces biomethanation test kits. Developer of a commercial plug-flow biogas reactor with cell recycle.

Morus AB OY

PL 8, SF-00301 Helsinki 30.

Tel: (3580) 57 83 00 Telex: 124837 morus

Supplies pharmaceutical specialities and clinical diagnostics. Agent for Rohm GmbH, Germany.

Part III **FINLAND**

Nokia

Nokia Engineering PO Box 780, SF-00101 Helsinki.

Tel: 56271 Telex: 125746

Finland's largest private sector industrial enterprise with activities in forest industries, chemicals, plastics as well as electronics and machinery.

Nycomed AB OY

Atomvagen 5C, SF-00370 Helsinki.

Supplies immunological and biological reagents; products of Nycomed AS Diagnostics, Norway.

Organon Teknika AB OY

PO Box 254, SF-0081 Helsinki. Tel: 06949466 Telex: 122870

Supplies immunological reagents and diagnostic; products of Organon

Oriola OY

PL 8 Sairaalavaline, SF-02102 Espoo 10. Tel: 04291 Telex: 122745 slg

Supplies clinical diagnostic test kits and viral diagnostic reagents, as well as nutrient media and serums for cell and tissue culture. Distributor for Vector laboratories, US.

Orion Corp OY

Nilsiankatu 10-14, SF-00510 Helsinki 51. Telex: 857122745 slg Tel: 71 74 11

Supplies clinical diagnostic test kits and viral diagnostic reagents, as well as nutrient media and sera for cell and tissue culture.

Orion Diagnostica

PO Box 83, SF-021101 Espoo.

Tel: 04291 Fax: 04292794 Telex: 122612

Produces diagnostic clinical test systems, bacterial culture test media and antiserums. Developing monoclonal antibodies for use in diagnostic systems. Subsidiary of Orion Corp, Finland.

Perkin Elmer OY

Luoteisrinne 4A, SF-02270 Espoo 27. Tel: 88 01 44 Telex: 121547

Supplies fine chemicals and analytical instruments (see Perkin Elmer Corp,

Pfizer OY

PL 26, SF-02101 Espoo 10 Tel: 4606 00 Telex: 124615

Supplies food additives, gluconates, itaconic acid and pharmaceutical raw materials (see Pfizer Inc, US).

Pharmacia LKB Wallac OY

Box 10, SF-20101 Turku 10.

Supply instruments and chemicals for use in liquid chromatography, electrophoresis, electrofocusing, isotachophoresis microtomy and fermentation (see Pharmacia LKB-Produkter AB, Sweden).

Philips AB OY

PO Box 255 Kaivokatu 8, SF-00101 Helsinki.

Tel: 901 72 71 Telex: 124811

Supplies analytical equipment, including chromatographs, spectrophotometers, electron microscopes etc (see Philips NV, Netherlands).

Raision Tehaat

SF-21200 Raisio.

Tel: (217) 803 11 Telex: 62236

Manufactures starch products, modified starches, wheat gluten, fatty acids and derivatives, and related chemicals. Also supplies wheat starch process technology.

Rauma-Repola OY

SF-28101 Pori 10.

Tel: (939) 372 11 Telex: 26246

Produces filters for wood pulp and chemical industries filter presses, heat exchangers and condensers.

Rintekno OY

PO Box 146, SF-02101 Espoo.

Tel: 3580 46981 Telex: 122139 rinte Fax: 3580 466311

Supplies computerized control for, and monitoring of, fermentation processes and multifermenter control systems using Digital Equipment Corp (DEC) PDP 11 Series computers. Adaptable to other systems. Offers: engineering and contracting for chemical, biochemical, pharmaceutical and foodstuff industries; fermentation units and fermentation automation systems involved in product categories such as amino and organic acids, enzymes, polysaccharides and SCP.

Rohto AB OY

PO Box 35, SF-10601 Tammisaari. Tel: (911) 128 20 Telex: 13160

Produces pharmaceuticals and feed additives. Subsidiary of Tamro AB

Starter Collection of the Valio Laboratory

Kalevankatu 56, Helsinki,

Hold culture collection of bacteria for research into dairy starter cultures.

Suomen Bofors AB OY

PL 8, SF-00371 Helsinki 37.

Tel: 55 31 66

Imports fine chemical intermediates (see also Bofors Nobel Kemi, Sweden).

Suomen Laboratoriopalvelu OY

Sinikalliontie 4, SF-02180 Espoo. Tel: 524455 Telex: 122614

Supplies diagnostic and pharmaceutical products of UCB-Bioproducts, Belgium and Biomakor, Israel.

Suomen Nalco OY

Kalevankatu 4, SF-00100 Helsinki 10.

Tel: 64 37 47 Telex: 125162

Distributes antifoams, flocculants and water treatmen chemicals (see Nalco Chemical Co, US).

Tampella AB OY

PL 256, SF-33101 Tamere 10.

Tel: (931) 324 00

Has developed a process for treatment of wastewater from paper pulp mills in which white rot fungus is used to clean up the water, resulting in a cattle feed with a 40 percent protein content.

Tampere University of Technology

PO Box 527, SF-33101 Tampere 10.

Tel: (31) 16 21 11

Developing methods for treatment of forest industry wastewaters.

Tamro AB OY

Rousilantie 14, SF-00390 Helsinki. Tel: 54 40 11 Telex: 12717

Supplies ion exchange resins, fine chemicals laboratory chemicals and radioactive substances.

Turku University

Department of Biochemistry

SF-10500 Turku 50.

Carrying out studies on bacterial bioluminescence.

University Pharmacy

Kemikaaliosasto PL 66, SF-00511 Helsinki. Tel: 71 71 00 Telex: 121708

Supplies laboratory chemicals, immunological reagents and diagnostics. Distributor for Jackson Immunoresearch Laboratories, US. Division of Yliopiston Apteekki, Finland.

FINLAND Part III

VTT Biotech

PO Box 156, SF-02101 Espoo. *Tel*: 04561/465712

Recently established subsidiary of VTT Technology OY to commercialize products based on research at Oulu University. Products under development include: adiagnostic kit for malignant cells; human vaccines and diagnostic kits; production systems for eukaryotic and prokaryotic proteins in filamentous fungi eg Trichoderma reesei, including human therapeutic protein.

VTT Collection of Industrial Microorganisms

Biotechnical Laboratory Technical Research Centre of Finland Tietotie 2, SF-02150 Espoo. *Tel*: 04561

Hold culture collection of bacteria, fungi and yeasts for industrialmicrobiology and biotechnology research. Offer limited services in identification of beer spoiling bacteria and filamentous fungi of grain.

VTT Technical Research Centre of Finland

Biotechnical Laboratory Tietotie 2, SF-02150 Espoo 15. *Tel*: 0 4561

Researching into: production of cellulolytic enzymes for preparation of feed materials for ethanol fermentation by yeast or bacteria (Zymomonas), fermentation of pentoses by Fusarium: isolation of mutants of Trichoderma; pilot-plant trials and process design for fuel alcohol.

Wallac OY

PL 10, SF-20101 Turku 10. Tel: 21 678111 Telex: 62333

Manufactures instruments and reagents for scintillation counting and chemiluminescence or bioluminscence assays. Products include a complete range of reagents in kit form for use in monitoring biological reactions coupled with the consumption or production of ATP or NAD(P)H, by use of luminescence photometer, scintillation counter or fluorometer. Distributor for Dakopatts, Denmark and Janssen Life Sciences Products, Belgium.

Yliopiston Apteekki

Kalliolanrinne 6, SF-00510 Helsinki. Tel: 0717100 Telex: 1001923

Supplies materials for cell culture as well as defined media; products of Collaborative Research Inc, US. Also distributor for Promega, US.

FRANCE

Abbott

3 rue Le Corbusier, F-94518 Rungis Tel: 1 46 87 32 52 Telex: 204669

Manufactures reagents and analytical systems based on various immunoassays for use in clinical chemistry, immunology, hormone assay and pharmacological testing. Developing new systems using recombinant DNA technology and monoclonal antibodies. Subsidiary of Abbott Laboratories, US.

ABC Bioindustrie

204 Point du Pont de Sevres, Tour Vendome, F-92516 Boulogne-Billancourt.

Telex: 203382 Tel: 1 46 08 81 80

Produce animal feed additives and preservatives.

ADEBIO

Association pour le Developpement des Bioindustries

3 rue Massenet, F-77300 Fontainebleau.

Tel: 1 64 22 45 44

Provides support to and assists in the implementation of biochemical and microbiological processes for industrial use. Promotes biotechnology through seminars and exhibitions, coordinates interests of its members with industry and academia, publishes information on biotechnology in France and interacts with financial and government organisations.

6 rue de l'Universite, F-29000 Quimper. Telex: 941122 Tel: 98 90 62 32

Involved in food research and development, including aspects of quality control, food processing and analysis in relation to lactic acid bacteria.

AEC Societe De Chimie Organique et Biologique

avenue Edouard Vaillant, F-03600 Commentry. Tel: 70 64 63 22 Telex: 990208

Manufactures amino acids, including methionine. Also produces vitamins

A and E and animal feedstuffs.

AES Laboratoire

route de Dol, Boite Postal 27, F-35270 Combourg.

Tel: 99 73 11 55 Telex: 950482

Supplies dehydrated and ready to use culture media, kits based on monoclonal antibodies for use in human pathology, systems for production of ultra-high quality water for cell culture and laboratory scale fermenters.

AFOCEL

Association Foret Cellulose

4 rue Paul Bertes, F-4900 Angers.

Tel: 41 87 04 90

Selecting and breeding eucalyptus clones for fast growth and frost resistance, as well as carrying out other research related to the exploitation of forest biomass.

Agrex Biotechnologies

10 rue Jean Jaures, Tour Litwin, F-92800 Puteaux. Tel: 1 47 75 80 36 Telex: 612749

Involved in treatment of effluents, development of compact bioreactors, selection of bacteria with high performance in waste treatment and the improvement of soils by use of biological agents.

Agrishell

Recherche et Developpement

14 chemin du Prof Desperet, F-69160 Tassin La Demi Lune. Tel: 78 34 29 38

Produce plant protection chemicals.

Agro Industrie Consultant

24 rue Jean Duplessis, F-78150 Le Chesnay. Tel. 1 39 54 52 31 Telex: 696077

Consultants offering advice on new developments and diversification as well as recruitment and research collaboration.

Alfa Laval SA

ZI du Chene Sorcier - BP 56, F-78340 Les Clayes sous Bois. Tel: 30 55 82 44 Telex: 698136

Manufactures separation and dewatering equipment including decanter centrifuges, centrifugal separators and heat exchangers for both cooling and pasteurization, as well as equipment for reverse osmosis and ultrafiltration.

Alimentation Equilibree de Commentry

18 rue d'Alsace, F-92400 Courbevoie. Tel: 1 47 68 15 83 Telex: 610500 Telex: 610500

Produce animal feed additives.

Amersham France SA

6 ave du Canada, BP 144, F-91944 Les Ulis Cedex Telex: 603770 Amfran F Fax: 1 64 46 04 64 Tel: 1 69 28 83 00

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

AMES

33 avenue du Maine, Tour Maine - Montparnasse, F-75755 Paris Cedex Tel: 1 45 38 52 43

Produces analytical kits and other rapid test systems.

AMF Cuno-Europe/AMF Corp

54 rue Chaptal, F-92300 Levallois-Perret. Tel: 37 58 11 74 Telex: 612710

Produce systems for filtration, microfiltration, molecular separation and purification as well as laboratory products and reagents including culture media.

Amora SA

48 quai Nicolas Rolin, F-21100 Dijon. Tel: 80 43 81 08 Telex: 350703

Produce food products based on acetic acid fermentations and enzymic conversions.

Amylum

50 rue Etienne Marcel, F-75002 Paris. Tel: 1 42 36 77 12 Telex: 210326

Produces glucose syrups, purified starches and proteins (gluten) from grains.

ANERA

Association Normande d'Economie Rurale Appliques 6 promenade des Sevigne, F-14039 Caen Cedex.

Carrying out studies on the anaerobic digestion of abattoir wastes.

FRANCE Part III

ANRED

Agence Nationale pour la Recuperation et Elimination des Dechets Boite Postale 406, 2 Square Lafayette, F-49004 Angers. Tel: 41 87 29 24 Telex: 721325

National agency concerned with disposal of wastes. Carrying out joint project with Gaz de France on production of methane from landfills. This is part of its overall role to assist development of facilities for treatment and use of waste, and to encourage new technologies. Also aims to promote educational campaigns for the general public and industries. Functions under the auspices of the Ministeries of Environment and Industry.

ANVAR

Agence Nationale de Valorisation de la Recherche

43 rue Caumartin, F-75436 Paris. Tel: 42 66 93 10 Telex: 230298

Promotes scientific technologies, supports research and the development of innovation over a wide area of disciplines including aspects of biotechnology.

APC Research Laboratories

Azote et Produites Chimiques Laboratoires de Agronomiques 143 route d'Espagne, F-31053 Toulouse Cedex. Tel: 61 41 11 50 Telex: 531866

Working on cultivation of Jerusalem artichokes under different soil and climatic conditions found in the region, as well as establishing the best methods of using the tuber for production of fuel ethanol by fermentation.

APELEX

29 rue Salvador Allende, F-92220 Bagneux. Tel: 46 55 63 36 Telex: 632016

Manufacture power packs for use in electrophoretic systems as well as for use in cell fusion and electrotransfection.

API Systems

La Balme les Grottes, F-38390 Montalieu-Vercieu. Tel: 74 90 66 77 Telex: 340467

Supply reagents for identification of microorganisms and automated equipment for bacteriology.

Aplibio SA

4 bis boulevard Stalingrad, F-94600 Choisy le Roi. Tel: 1 48 52 36 29

Carry out studies on the tolerance to and efficacy of new medicines. Carry out clinical studies (phase I to IV) as well as undertaking immunological and hematology investigations.

Applexion

3 avenue de la Mauldre, F-78680 Epone. Tel: 1 30 95 88 66 Telex: 69508 Supply resins for use in ion exchange.

Applied Biosystems

BP 50086, ZAC Paris Nord II, F-95948 Roissy Charles-de-Gaulle Cedex. Tel: 1 48 63 24 44 Telex: 230458f

Supplies instruments for sequencing, synthesis and analysis of proteins, peptides, oligonucleotides and nucleic acids.

Appligene

route du Rhin, BP 72, Parc de l'Innovation, F-67402 Illkirch Cedex. Tel: 88 67 22 67 Telex: 880179 Fax: 88 67 19 45

Produces reagents for use in molecular biology and carries out peptide and oligonucleotide synthesis and DNA sequencing. Products include restriction and modification enzymes, cloning vectors and markers as well as nuclear probes for diagnosis.

APV

6 ruc Jacquard, BP 684, F-27006 Evreux. Tel: 32 28 96 12 Telex: 770880

Supplies equipment for use in the pharmaceutical, chemical and food industries; products include apparatus for separation, heat transfer, homogenization, sterilization, concentration, drying and automation.

Argiles et Mineraux

Clerac, F-17270 Montguyon. Tel: 46 04 17 11 Telex: 790297

Produce materials for use as supports in the immobilization of bacteria, cell cultures and hybridomas.

Armor Equipments Scientifiques

Route de Dole, F-35270 Combourg. *Tel*: 99 73 11 55 *Telex*: 950482

Markets automated equipment for the preparation of culture media and laboratory analytical equipment.

ASCAF

Association pour le Developpement des Carburants par la Fermentation BP 311, 1-4 avenue de Bois-Preau, F-92506 Rueil Malmaison Cedex. Building a pilot facility for the production of acetone/butanol by fermentation using wood hydrolyzates as feedstock. The wood pre-treatment uses steam expansion technology of Stake, Canada. Supported by the Institute of Petroleum, France and AFME, France.

Asgrow France

avenue Lelix Louat, BP 80, F-60304 Senlis Cedex 4. Tel: 44 53 42 77 Telex: 150123

Produce a wide range of commercial seeds, including maize, sorghum, and legumes.

Atlas Copco France

326 rue General Leclerc, F-95130 Franconville. *Tel*: 1 34 13 54 54 *Telex*: 695005

Markets aeration systems for use in fermenters and bioreactors.

ATLAS Sarl

Association Technique des Laboratoires d'Analyse et de Synthese 43 boulevard du 11 Novembre, BP 2060, F-69616 Villeurbanne. Tel: 78 89 07 43

Researching microbial diagnostics, the creation of new molecules, automated biochemical analysis, and the valorization of wastes and effluents in relation to improving the environment from the point of view of health and safety. Associated with the Ecole Superieure de Lyon, France.

Barberet Ducloux

Les Bas-Jardins, F-83250 La Londe Les Maures. Tel: 94 66 81 12 Telex: 404762

Producing plants using meristem culture techniques.

Baube SA

Produces food additives and flavours; carrying out research on potential food flavours produced by fermentation.

Bayer France

Distributes chemical products of Bayer AG (FRG) including agro-chemicals.

BCPM

quartier de l'Eglise, F-83250 La Londe. Tel: 94 66 82 46 Telex: 400784

Produce carnations and other ornamental flowers using in vitro micro-propagation.

Beckman

52-54 chemin des Bourdons, F-932220 Gagny. Tel: 43 81 93 00 Telex: 230191

Supplies instruments for chromatography, amino acid analysis, centrifugation, spectroscopy, peptide and protein synthesis, DNA synthesis and sequencing and radioactivity counting (beta and gamma) as well as automated laboratory workstations.

Part III **FRANCE**

Becton Dickinson Sarl

47 avenue Marie Reynoard, BP 798, F-38035 Grenoble Cedex. Tel: 76 09 80 61 Telex: 980318

3 bis rue Le Corbusier, Silic 222, F-94528 Rungis.

Tel: 1 46 86 75 66 Tlx: 270048

Markets monoclonal antibodies for use in diagnostics, laboratory ware and fluorecence activated cell sorters.

Beecham-Sevigne Laboratoires

15 boulevard Amiral Bruix, F-75782 Paris Cedex 16. Tel: 1 45 02 70 70

Markets antibiotics; see Beecham Pharmaceuticals Co Ltd, UK.

Beghin-Say

Direction du Developpement

54 avenue Hoche, F-75360 Paris Cedex 08.

Tel: 1 47 63 12 20

Produce sugar and developing sugar derivatives as well as processes for production of industrial alcohol.

BEL Industries

103 boulevard MacDonald, F-75019 Paris.

Tel: 42 00 33 11 Telex: 215040

Cheese manufacturers; also produce yeast and bacterial preparations with lactic acid metabolism for use in the agricultural and food industries. Products include animal feed additives based on live organisms (probiotics).

Bendal SA

route de Nancy, F-57430 Sarralbe Tel: 87 97 91 22 Telex: 860527

Offer environmental protection through use of anaerobic digestion for treatment of wastes.

Berthold Analyse Instrumentation SARL

6 rue du Marechal Ferrant, ZA des 4 Abres, F-78990 Elancourt. Tel: 1 30 62 31 12 Telex: 696789

Automated analyzers and other instruments for use in research laboratories or pharmaceutical industries.

Bertin & Cie

59 rue Pierre Curie, ZI des Gatine, BP 3, F-78373 Plaisir Cedex. Tel: 1 34 81 85 00 Telex: 696231 Fax: 1 30 54 04 14

Centre d'Aix les Milles, rue Louis Armand, BP 22, F-13762 Les Milles Cedex, Tel: 16 42 600111 Tx:420729, Centre de Bayonne, ZI, F-40220

Tel: 16 59 64 86 48 Tx: 570026

Engineering company with activities which include aspects of waste treatment and pollution abatement using both anaerobic and aerobic systems, as well as the development of techniques for hydrolysis (acid) of lignocellulosic materials. Also supply equipment for use in industrial separations (based on membranes or chromatographic processes) and for process control. Undertake custom work on systems conception and development in the area of bioreactor and fermenter design including systems for animal cell culture.

Bertrand Freres SA

Boite Postale 87, avenue Font Laugiere, F-06130 Grasse. Tel: 93 70 15 45

Produces essential oils for flavours and fragrances used in food products, beverages and household goods.

Bevaloid

avenue de Suisse - BP 9, ZI Ile Napoleon, F-68390 Sausheim.

Produces chemical additives for use as dispersants or anti-foams.

Bignier Schmid Laurent

25 quai Boyer, BP 205, F-94203 lvry. Tel: 1 46 71 85 00 Telex: 270615

Produce industrial fermenters for the chemical and food industries.

Bio Chrom

rue Louis Pergaud, Z Agro-Alimentaire Grelet, F-16000 Angouleme. Tel: 45 21 40 89 Telex: 791020

Supplies products for use in cell culture, as well as immobilized enzymes, HPLC columns and GC capillary columns. Also supplies electrochemical detectors and radioactivity monitors for use with HPLC systems. Agents for Nuclear Enterprises, UK and Rheodyne, US.

Bio-consult

16 rue Barbes, F-92126 Montrouge. Tel: 1 46 57 13 00

Carries out strategic studies in areas of food, agriculture, pollution, energy and pharmaceuticals. Part of the organisation Consultronic which is a subsidiary of Sema Energie, France.

Bio-Europe

6 rue Chardin, F-75016 Paris. Tel: 1 45 25 05 36 Telex: 649304

Laboratoire de Recherche, 4 impasse Didier Daurat, Z I de Montaudran F-31400 Toulouse

Tel: 61 80 88 47 Tlx: 532219

Carries out proprietary and contract research concerning the use of enzymes in the food, healthcare, cosmetics and speciality chemicals industries. Produces diagnostic enzymes and offers services in downstream processing, product recovery and formulation.

Bio Serae Sarl

2 rue de Tendes, F-12400 Saint Affrique. Tel: 65 49 33 12 Telex: 531917

Interests include enzymes for use in the food industries, lactic and malic acid fermentations, extraction and purification of proteins with antimicrobial action, systems for bioconversion of natural products and work on immunoglobulins.

Bioart France

85 rue d'Arthelon, F-92190 Meudon. Tel: 46 26 13 80 Telex: 201641

Supplies eqipment and reagents for use in synthesis of peptides and oligonucleotides. Agents for genetic molecular instruments of Du Pont de Nemours, US.

Bioblock Scientific

19 rue Ernest Laval BP 27, F-92173 Vanves Cedex.

Tel: 1 46 44 46 46 Telex: 890436f

Supplies a wide range of general scientific and laboratory apparatus.

Biochem France (Calbiochem)

85 rue Henri Barbusse, F-92190 Meudon.

Tel: 1 46 26 78 70 Telex: 201641

Distributes fine chemicals and other products for use in biochemistry and immunology (see Calbiochem, US).

Biochrom

rue Louis Pergaud, Zone AA de Grelet, F-16000 Angouleme. Tel: 45 21 40 89 Telex: 791020

route d'Angouleme, Vindelle, F-16430 Champniers.

Tel: 45 21 40 89

Produces media and reagents for use in animal cell culture as well as custom media.

Biocom

Immeuble Le Nath 24 avenue de la Baltique, ZA Courtaboeuf - BP 53, F-91942 Les Ulis Cedex.

Tel: 1 64 46 27 60

Supplies systems for image analysis for biological and medical applications; suitable for use in pathology, autoradiography, electrophoresis, cytology, etc as well as in process control.

Bioconcept Sarl

28 avenue de la Californie, F-06200 Nice. Tel: 93 96 44 00 Telex: 461287

Supplies systems for image analysis for use in biological, food technology and medical applications. Products include a combined fluorescent microscope and image analysis system for use in the rapid counting and recognition of microorganisms.

FRANCE Part III

Bioflor SA

10 rue de Isabey, F-54000 Nancy. Tel: 83 27 68 25

Produce anaerobic digesters for biogas production and systems for composting of animal wastes.

BioInvest Sarl

29 rue Buffon, F-75005 Paris.

Telex: 202400 Tel: 1 47 07 11 22 Fax: 1 43 36 80 93

Consultancy specializing in management and financing in the field of biotechnology and the life sciences.

Biokar SA

50 avenue du President Wilson, F-93210 La Pleine St Denis. Tel: 1 48 09 09 40 Telex: 230827 biosor

Sales: 29 rue Delizy, F-93698 Pantin Cedex.

Tel: 1 48 91 02 32 Fax: 1 48 91 18 77

Supplies peptones, serum and other products for cell culture including artificial serum as well as dehydrated complete media formulations, controls and microbiological diagnostics.

Biolandes SA

Le Sen, F-40420 Labrit.

Tel: 58 51 46 34 Telex: 550286 bioseva

Produce compost and biofuel from forest litter and wood wastes as well as oils and aromatic extracts from pine with applications in cosmetics, soaps, pharmaceuticals, aromatherapeutics etc.

Biolog

27 rue de l'Etang, F-78000 Versailles. Tel: 1 39 50 66 06 Telex: 698942

Offer consultancy in process development, development of scientific software, etc in relation to industrial microbiology as well as supplying laboratory-scale fermenters and modular containment cabinets for microbiological use.

Biomagaz

Biomagaz Aspach-le-Bas, F-68700 Cernay. 70 40 11 11 Telex: 881595

Manufacture anaerobic digester systems for use in agriculture, food industries, slaughterhouses and with sewage sludge for removal of odour, pollution control or production of gas. Carrying out research on mechanisms of bioconversion, waste treatment, anaerobic digestion and carries out chemical and biochemical analysis.

BioMerieux SA

Marcy l'Etoile, F-69260 Charbonnieres-Les-Bains. Tel: 78 87 81 10 Telex: 330967

Manufactures diagnostic products for routine laboratory use in clinical chemistry, diagnostic work, enzymology, bacteriology, virology and various immunological techniques, including radioimmunoassay.

Biomidi

Centre d'Innovations Industrielles, 3 av Didier Daurat ZI Montaudran, F-31400 Toulouse

Tel: 61 34 07 14

Produce reagents for medical analyzers.

Bioprobe Systems

26 bis rue Kleber, F-93100 Montreuil. Tel: 1 48 51 66 22 Fax: 1 48 51 59 90

Offer courses in molecular biology applied to research and diagnostics based on non-radioactive nucleic probe technology, in situ hybridization using papillomavirus and gene amplification by polymerase chain reaction.

Bioprox

6 rue Barbes - BP 177, F-92305 Levallois-Perret. Tel: 1 47 57 74 00 Telex: 620987

Produce nitrogen fixing inoculants for legumes, food flavours, cultures of microorganisms and lactic acid bacteria cultures.

Biosem SA

Laboratoire de Biologie Moleculaire et Cellulaire

24 avenue des Landais, Campus Universitaire des Cezeaux, F-63170. Tel: 73 26 87 34 Telex: 392754

Carrying out research in molecular biology, genetics, cell biology, immunology and microbiology with an emphasis on use of novel techniques in plant breeding. Part of the Limagrain, France group.

Biosoft

60 rue de Wattignies, F-75580 Paris Cedex 12. Tel: 1 43 42 38 30 Telex: 214044

Carrying out cell hybridization and producing monoclonal antibodies. Distributor for Jackson Immunoresearch Laboratories, US.

Biosoph Laboratories

Chemin Departemental 1, BP 156, F-80200 Peronne. Tel: 22 84 20 05 Telex: 140759 Fax: 22 84 14 33

Carries out research and development and the manufacture and sale of specific products mainly for bioprocessing in the agriculture, biotechnology and chemical industries. Products include antifoams, specific growth factors and extraction equipment.

Biosys SA

21 Quai du Clos des roses, F-60200 Compiegne.

Tel: 44 86 22 75 Telex: 145171

Supplies a wide range of laboratory reagents including products for cellular biology, diagnostics, products for bioluminescence studies and biotin-avidin complexes. Distributor for Vector Laboratories, US.

Biosystems Europe

11 Chemin de Ronde, F-78110 Le Vesinet. Tel: (03) 071 92 30

Supplies industrial enzymes and markets immobilized enzyme systems for conversion of whey to lactose, products of the enzyme division of Corning, US. Has a joint project with the Milk Marketing Board, UK - Specialist Dairy Ingredients Ltd. A division of Corning France SA.

Biotechnica

Association pour le Developpement des Biotechnologies en Aquitaine Comite d'Expansion Aquitaine, 2 place de la Bourse, F-33076 Bordeaux

Tel: 56 52 65 47

Supplies information as well as technical and development assistance on a regional basis. Promotes research and industrial activities.

Le Rivier d'Apprieu, F-38140 Rives. *Tel:* 76 65 10 91

Produce monoclonal antibodies, in vivo, using nude mice.

Biotest-Folex Sarl

ZIC 80 rue Helene Boucher, F-78530 Buc.

Tel: 39 56 81 77 Telex: 696229

Supplies blood-grouping and tissue typing reagents, immunological reagents and bacterial growth media.

Boehringer Mannheim France SA

Biochemicals Division

Boite Postale 22, 2 avenue du Vercors, F-38240 Meyland.

Telex: 980628 Tel: 76 90 80 77

Supplies wide range of fine chemicals and reagents for research and analysis, including reagents for clinical analysis and food chemistry products for molecular biology, immunological reagents, etc, as well as instruments for clinical chemistry.

Boerhinger - Ingelheim

rue Andre Huet, F-51100 Reims.

Tel: Tel: 26 87 96 87

Produces and markets pharmaceuticals through subsidiaries such as Sochal (France) and Sedipharm (France).

Bretagne Chimie Fine

Saint Nolff - BP 325, F-56005 Vannes.

Tel: 97 43 38 99

Produce cystine and other amino acids from natural sources.

Part III FRANCE

Bridel SA

BP 5, F-35240 Retiers.

Telex: 730846 Tel: 99 43 66 66

Produce casein and derivatives.

Bruker Spectrospin SA

34 rue de l'Industrie, F-67160 Wissembourg. Tel: 88 94 98 77 Telex: 870639

Supplies fully automated nuclear magnetic resonance spectrophotometers (see Bruker AM GmbH, Germany).

BSL Industries SA

25 quai Marcel-Boyer, BP 205, F-94203 lvry-sur-Seine.

Tel: 1 46 71 85 00 Telex: 270615 Fax: 1 46 71 10 34

Manufactures industrial equipment including cryogenic tanks, fermenters and waste treatment plant.

7 rue de Teheran, F-75008 Paris.

Tel: 1 42 99 10 10 Telex: 641351 Produce starter cultures for use in the milk industries, fermented cereal

products, vinegars, etc. Carrying out research on industrial fermentations using organisms such as lactobacillus, lactic acid-producing streptoccocus and acetobacteria.

Calaire Chimie SA

46 boulevard de Latour Mauborg, F-75340 Paris Cedex 7. *Tel*: (1) 45 50 23 52 *Telex*: 204930

Produces intermediates for synthesis of benzylpenicillin, fine chemicals and bulk pharmaceuticals including dipeptides.

Calliope SA

7 rue du Chapeau Rouge, F-34500 Beziers.

Fax: 1 47 58 43 39 Tel: 1 47 58 47 45 Telex: 610233

16 rue Baudin, F-92300 Levallois Perret

Produces biopesticides, agricultural inoculants and chemical pesticides.

Cambridge Instruments Sarl

Centre d'Affaires Paris Nord, F-93153 Le Blanc Mesnil.

Telex: 230185 Tel: (1) 867 01 34

Supplies scanning electron microscopes (see Cambridge Instruments, UK).

Cappa SA

rue de Liege, F-59121 Prouvy

Tel: 20 44 43 74 Telex: 110870

Produces fresh yeast, dried yeast and bakers' sundries. Subsidiary of Gist-brocades $NV,\,Netherlands.$

Carel Fouche

Aubefoye, F-27600 Gaillon.

Tel: 32 53 08 40 Telex: 180665

Designs and constructs, on a turn-key basis, accelerated aerobic fermentation plant for the processing or composting of domestic refuse as well as other equipment for waste treatment.

Carl Zeiss Jena

48 boulevard de la Bastille, F-75012 Paris.

Tel: 43 44 12 34 Telex: 220 231

Market a wide range of microscopes and related optical instruments.

Carlo-Erba

Tour Franklin, F-92081 Paris la Defense Cedex 11.

Tel: 1 47 76 42 52 Telex: 620419

Produce analyzers for continual monitoring of pH, dissolved oxygen, dissolved carbon dioxide, etc.

Caves et Producteurs Reunis de Roquefort

F-12250 Roquefort.

Tel: 65 60 23 05 Telex: 531557

Produce cheese; studying lactic acid fermentations and the activity of relevant fungal enzymes.

CAYLA Sarl

99 chemin de la salade Ponsan, F-31400 Toulouse.

Tel: 61 44 24 40 Telex: 530162f

Laboratoire Recherche et Developpement, avenue Larrieu - Centre Commercial de Gros, F-31094 Toulouse Cedex. Tel: 61 44 24 40 Tlx: 530162

Produce enzymes, microbial cultures and cloning vectors for use in the food and agricultural industries. Products include silage additives and enzymes for use in the preparation of protoplasts. Carries out research on microbial enzyme production as well as strain selection and genetic improvement of microorganisms producing novel antibiotics, herbicides and insecticides.

CCM

92/98 Blvd Victor Hugo, F-92115 Clichy. Tel: 1 47 39 06 52 Telex: 615 242 ccmsf Fax: 1 47 30 15 96

Supplies bioreactors and biotechnical equipment for the laboratory pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG,

CDF Chimie AZF

Azote & Fertilisants

143 rte d'Espagne, F-31057 Toulouse Cedex.

Tel: 61 41 11 50

Switzerland).

Carrying out research on soil inoculants as well as applications of biotechnology to assimilation of fertilizers by plants, covering topics such as solubilization of phosphate, rhizosphere microbiology as well as formulation of inoculants.

Caderache Laboratoire de Bio-Energie Solaire

F-13115 St Paul-lez-Durance. Tel: 42 25 70 00 Telex: 440678

Investigating production and consumption of hydrogen gas by cell and chromatophore suspensions of photosynthetic and non-photosynthetic bacteria, related to the mechanism of nitrogen fixation by heterotrophic organisms. Also working in areas of algal production, energy and biomass, the culture of plant cell suspensions and enzymology.

CEA (France)

Labelled Compounds Division

Boite Postale 21, F-91190 Gif-sur-Yvette.

Tel: (1) 69 08 26 03 Telex: 690641

Supplies radioactive isotopes, labelled compounds and kits for radioimmunoassay.

CECA SA

12 - 16 alle des Vosges, F-92062 Paris la Defense 5.

Tel: (1) 49 04 12 34 Telex: 611444

Produces polysaccharides by fermentation. Part of the group Elf-Aquitaine, France.

Cellier SA

rue du Maroc - BP 603, F-73106 Aix les Bains.

Tel: 79 35 05 65 Telex: 980053 Fax: 79 88 37 71

144 avenue Charles de Gaulle, F-92200 Neuilly sur Seine

Produce fermenters and bioreactors as well as automation systems for fermentation.

Cellulose du Pin

353 boulevard Wilson, F-33200 Bordeaux Cauderan.

Tel: 56 08 84 81 Telex: 560682

Laboratoire de Recherches, 351 cours de la Liberation, F-33405 Talance. Tel: 56 80 71 97 Tlx: 571230

Paper pulp processors carrying out research and development work on treatment of industrial wastes, the action of cellulases and the fermentation of pulping liquors.

CEN Saclay

Labelled Compounds Divsion

F-91191 Gif-sur-Yvette Cedex.

Tel: (06) 908 25 26 Telex: 690641

Supplies radioactive compounds, standards, fine chemicals, etc.

FRANCE Part III

Central Hydraulic Laboratory of France

Laboratoire Central d'Hydraulique de France 10 rue E Renault, F-94700 Maisons-Alfort. Tel: (01) 893 28 28 Telex: 240985

Carries out studies of water pollution on land, as well as of the sea, arising from discharge of sewage and effluents. Monitors such pollutants in order to protect hydraulic resources.

Centrale Latiere de Paris

103 rue Moliere, BP 221, F-94203 Ivry sue Seine. Tel: 1 46 70 15 81 Telex: 250679

Produce yoghurts and other fermented milk products.

Centre de Recherche Pierre Fabre

17 Avenue Jean Moulin, F-81106 Castres Cedex. Tel: 63 35 56 07 Telex: 531635 Fax: 63 35 60 13

Research organisation carrying out work over a wide front with an emphasis on biological processes; phytochemistry, pharmacology, enzymology, microbiology, chemical analysis, clinical and other assays in relation to treatment of human health problems such as cancer, depression, cardio-vascular disease, allergy, immunology and vaccines. Carries out synthesis of new peptides and other organic chemicals for assessment of their pharmacological activity as well as studying effects and mode of action of natural products.

Centre de Selection de Chartres SDME

Champhol, F-28300 Mainvilliers.

Carrying out research on selection and breeding of new varieties of maize, sunflower and soya.

Centre Europeen de Biotechnologies

37 route de Bouchemaine, F-49001 Angers. *Tel*: 41 44 36 36 *Telex*: 720343

Produce equipment for use in cell culture.

Cera Labo

Supply a wide range of membranes and papers for use in nucleic acid transfers, hybridization experiments, blotting (Western, Southern and Northern) as well as materials for electrotransfer, electrocolution from gels, electroconcentration of protein, etc as well as materials for filtration and cell culture. Also supplies laminar flow work stations, clean room systems and protective clothing for laboratory use.

Ceraver/SCT

BP 113, F-65000 Tarbes. Tel: 62 37 92 91

Manufacture ceramic cross-flow ultrafiltration membranes.

Ceries SA

Tour du Credit Lyonnais, 129 rue Servient, F-69431 Lyon. Tel: 786 36 590 Telex: 375311

Manufacture laboratory and pilot plant scale mixer-settlers for use in liquid-liquid extraction.

Chambourcy

Produce fermented milk products.

Chemap

10 Ch des Gorges, Parc d'Affaires de Dardilly, F-69573 Dardilly cedex. Tel: 7 835 41 32 Telex: 900605

Produce a wide range of laboratory, pilot and industrial scale fermenters as well as automated process control systems including custom computer programmes for use in fermentations and other cell culture applications.

Chemunex SA

41 rue Barrault, F-75013 Paris. Tel: 43 54 44 23

41 rue du 11 Novembre 1918, F-94700 Maisons Alfort. Tel: 1 43 96 92 00 Tx: 260808 Fax: 1 43 96 01 15

Produce diagnostic kits, including products for use in the food and agricultural industries based on monoclonal antibodies, for detection of aflatoxins for example, and flow cytometry systems. Also offer a custom service in monoclonal antibody production.

Choay Chimie

Research Reagents

48 avenue Theophile Gautier, F-75782 Paris Cedex 16.

Tel: (1) 45 24 46 77 Telex: 610726

Centre de Recherche et Developpement, 1 rue de l'Abbaye, Notre Dame de Bondeville F-76150 Maromme.

Tel: 35 74 34 00

Manufactures products purified from extracts of animal organs, human urine and human placentas, as well as peptide products for use in the production of immunoadjuvants.

Christ SA

65 rue de Paris, BP 4, F-72160 Connerre. Tel: 43 89 16 16 Telex: 720753

Produce vinegar and fermented food products such as sauerkraut.

Chromatofield

ZI La Valampe, F-13220 Chateauneuf les Martiques.

Tel: 42 76 29 61 Telex: 402234f

Supplies HPLC systems and associated equipment including electrochemical detectors. Products include preparative scale HPLC systems as well as in-line densitometers and turbidity meters for both laboratory and industrial use.

Chrompack France Sarl

BP 20, 91940 Les Ulis Cedex.

Supply equipment for gas, liquid and HPL chromatography and ultrasonic cleaning equipment. Products include absorbents, capillary columns, column packings, columns, data systems, gas detectors and valves including preparative scale systems.

Ciba Geigy France

rue Lionel Terfay, F-92506 Rueil Malmaison. Tel: 1 47 49 02 02 Telex: 203012

Market agrochemicals and produce seeds.

Cilas Alcatel

Route de Nozay, F-91460 Narcoussis. Tel: 644 91000 Telex: 691862

Manufacture precision laser systems including tools for sub-micron granulometry with applications in the fields of pharmaceuticals, pesticides and food processing.

CIRP

42 rue de Montigny, F-95100 Arggenteuil. Tel: 1 39 82 40 90 Telex: 698862

Manufacture freeze driers for any size of installation from laboratory use to custom built turn-key industrial scale systems.

CIT-Alcatel High Vacuum Division

33 rue Emeriau, F-75725 Paris cedex 15. *Tel:* 1 571 1557 *Telex:* 270431

Produce vacuum pumps and other related equipment.

Citrem

Compagnie Industrielle de Travaux Electriques et Mechaniques 3 rue Langevin, F-21300 Chenove. *Tel*: (080) 54 42 12

Engineering and consulting company. Interests include generation of methane and electricity by anaerobic digestion.

Part III FRANCE

Claeys-Luck SA

9 rue Touraine, F-59112 Annoeullin. *Tel*: 20 85 63 33

Produce seeds and carrying out improvement programmes for commercial seeds of maize, beet, legumes, sorghum, soya and forage legumes. Carrying out studies on in vitro tissue culture techniques for use in plant breeding programmes.

Cliniscience Sarl

3 rue du General Beuret, F-75015 Paris. *Tel:* (1) 45 54 29 23 *Telex:* 200736

Supplies materials for cell culture and laboratory diagnostics, including those based on monoclonal antibodies. Distributor for Southern Biotechnology Associates and Immuno-Mycologics, US.

Clonatec

60 rue de Wattignies, F-75580 Paris Cedex 12. Tel: 1 43 42 43 88 Telex: 214044 Fax: 1 43 40 48 86

Produce monoclonal antibodies for diagnostic use in human health care, veterinary applications, and in the food and agricultural industries.

CML

Consortium de Materiel pour Laboratoires

1 rue des Palis - BP 30, F-77792 Nemours Cedex.

Tel: 64 28 60 55 Telex: 691756

Offers a wide range of plastic products for use in tissue culture and immunology. Products include flasks, microplates, petri dishes, tubes and roller bottles.

CNRS - Grenoble

Biochemistry Laboratory

BP 68, F-38402 Saint Martin d'Heres.

Tel: 76 51 46 00

Carrying out studies on cloning genes as well as the culture of algae and plant cells.

CNRS - Marseille

Laboratoire de Chime Bacterienne 4

Investigating methanogenic fermentation of lignocellulosic materials by natural and recombined mixed bacterial populations, as well as evaluation of pretreatments such as enzyme hydrolysis, and degradation of macromolecules and anaerobic digestion.

CNRS - Toulouse

Laboratoire de Biologie moleculaire

chemin de Borde Rouge - BP 12, F-31320 Castanet Tolosan. Tel: 61 73 81 75

Studying the fixation of nitrogen by rhizobial symbiotic systems as well as the genetics of symbiosis.

CNRS - Toulouse

Institute National des Sciences Appliques avenue de Rangueil - INSA, F-31077 Tolouse.

Tel: 62 55 95 13

Studies on fermentations and bioreactor design with applications to the production of ethanol, proteins, organic acids, anaerobic digestion, cellulose hydrolysis and amino acids such as lysine.

CNRS - Villejuif

Institut Gustave Roussy

rue Camille Desmoulins, F-94805 Villejuif Cedex.

Tel: (1) 47 26 46 58

Investigating in vivo monoclonal antibodies for human use as well as aspects of interferon and antibiotics (adriamycin).

CNTS Fondation

Centre de Transfusion Sanguine Department Assurance Qualite Produits Diagnostics

Avenue des Tropiques, BP 100, F-91943 Les Ulis Courtaboeuf.

Tel: 1 69 07 78 71 Telex: 603054

Head Office, 6 rue Alexandre Cabanel, F-75015 Paris. Tel: (1) 43 06 70 00

Carrying out cell hybridization and producing monoclonal antibodies and other reagents and diagnostics as well as blood proteins and serum.

Coger Sarl

79 rue des Morillons, F-75015 Paris. *Tel:* 1 53 36 717 *Telex:* 842204046

Supplies a wide range of chemical products for use in research and industry including biochemicals and other reagents for molecular biology. Agents for Sigma, US, Fluka, Switzerland, Promega Biotec, US and Worthington,

Collection de Champignons et d'Actinomycetes Pathogenes

Unite de Mycologie, Institut Pasteur

25 rue du Docteur Roux, F-75724 Paris Cedex 15.

Holds culture collection of fungi and yeasts for medical microbiology research and teaching. Offers services in identification.

Collection Nationale de Cultures de Microrganisms

Institut Pasteur

25 rue du Docteur Roux, F-75724 Paris Cedex 15.

Holds culture collection of bacteria for general, medical and veterinary microbiology research and acts as Patent Depository. Offers identification services

Collectorgane

avenue Adrien Hamon, F-22140 Begard. Tel: 96 45 20 37 Telex: 740818

Produce extracts of glands and other by-products from abattoirs for use in pharmaceutical products.

Cometal Technologies

2 avenue Jean Moulin - BP 106, F-94123 Fontenay Sous Bois. *Tel:* 1 48 75 53 76 *Telex:* 670960

Manufactures a wide range of modular laboratory furniture with special protective coatings designed to meet specific needs of safety and/or hygiene.

Commissariat a l'Energie Atomique

29 - 33 rue de la Federation, F-75752 Paris. Tel: 1 42 73 60 00 Telex: 200671

Manufactures labelled biochemicals and other radioactive reagents. Products include tritiated peptides, deuterated solvents and specific receptor ligands. Also carry out research on a wide range of aspects of molecular structure and interactions related to molecular engineering.

Compagnie du Guano de Poisson Angibaud

ZI des Grands Champs, F-17290 Aigrefeuille d'Aunis. Tel: 46 44 02 04 Telex: 790701

Produce organic fertilizers from a wide variety of animal, agricultural and food industry wastes such as those produced in fish processing and fermentation.

Compagnie du Poisson

9 rue Florian Laporte, F-56100 Lorient. Tel: 97 37 40 73 Telex: 950626

Produce concentrates of fish protein hydrolysates.

Compagnie Francaise BASF

140 rue Jules Guesde, F-92303 Levallois Perret. *Tel*: 1 47 30 57 58 *Telex*: 620445

Produces vitamins, artificial flavours and food colourants (see BASF, Germany).

Compagnie Française des Petroles

Direction Scientifique

5 rue Michel-Ange, F-75016 Paris. Tel: 1 47 43 80 00 Telex: 611 992

Direction Scientifique, 24 rue Erlanger, F-75781 Paris Cedex 16.

Tel: 1 47 43 79 08 Tlx: 611992

Developing systems for large scale production of algae and carrying out studies on photosynthesis.

Compagnie Generale des Eaux

52 rue d'Anjou, F-75384 Cedex 08 Paris. Tel: 42 66 91 50 Telex: 280332

Centre de Recherches, Chemin de la Digue - BP 76, F-78600 Maison Lafitte.

Tel: 1 39 62 34 56 Tlx: 699252

Water company with interests in water purification, treatment of effluents and valorization of by-products of water treatment. Carrying out research on biological methods of determining water purity and the analysis of toxic substances.

Concept Marche Distribution

30 boulevard Vital Bouhot, F-92521 Neuilly sur Seine. Tel: 1 47 22 09 98

Produce biological additives based on enzymes or bacteria for composting as well as cultures of Trichoderma viride.

Aspach-le-Bas, F-68700 Cernay. Tel: 89 48 96 11 Telex: 881595 bio/gaz

Carrying out research and development in areas of industrial waste and sewage treatment, energy recovery and biotechnology. Division of Biomagaz, France.

Coultronics France SA

29 avenue Georges Pompidou, F-95580 Margency. *Tel:* 1 34 16 10 30 *Telex:* 697427

Supply equipment for haematology, flow cytometry, particle analysis and surface area analysis with computer control and software systems, designed for use in medical research and biotechnical applications. Agents for Micromeritics, US and Chrono-Log Corporation, US.

Courvoisier SA

BP 59, F-16200 Jarnac. Tel: 45 81 04 11 Telex: 790082

Produce cognac.

CRAN

Chambre Regionale d'Agriculture de Normandie 4 promenade Madame de Sevigne, F-14039 Caen Cedex. Tel: (31) 84 47 19

Developing simple batch-type anaerobic digesters for on-farm energy production from manure. Carrying out development work on anaerobic digestion of slaughterhouse wastes.

Cunow SA

28-30 rue Fernand Pelloutier, F-92110 Clichy. Tel: 47 37 32 30 Telex: 630087

Supplies HPLC products and associated equipment including pumps, detectors and data acquisition systems. Products include dedicated systems for analysis of products such as peptides, sugars or catecholamines.

Cyanamid

74 rue d'Arcueil, Silic 275, F-94578 Rungis. Tel: 1 46 87 23 19 Telex: 270571

Produce antibiotics for enhancing growth of animals producing meat.

Cytolab

30 bis rue du Vieil Abreuvoir, F-78100 St Germain en Laye. Tel: 1 30 61 12 65 Telex: 699511

Supplies radioactivity counters, including both gamma and beta systems, as well as other sophisticated laboratory equipment such as cell-sorters and pipetting stations.

Degremont

183 avenue du 18 Juin 1940, F-92508 Rueil Malmaison Cedex. Tel: (1) 47 72 25 05 Telex: 631950

Designs and constructs plants and equipment for wastewater and effluent treatment, including drinking and industrial water installations, wastewater purification plants and plants for the treatment of industrial effluents. Constructs both aerobic and anaerobic treatment plant, including systems for recovery of energy as biogas or through electricity or combined heat and power. Also produce denitrification plant. Part of the group Lyonnaise des Eaux, France.

Delbard Georges

Laboratoire de Micropropagation

Macicorne, F-03600 Commentry Tel: 70 64 33 34 Telex: 391632

Using in vitro micro-propagation techniques to produce and develop new strains of fruit bushes, forest trees, ornamentals and roses.

Delpech & ses fils Sarl

5 rue Emile Barriere, F-31200 Toulouse. Tel: 61 47 51 69/61 47 33 38

Carrying out research on the mechanism of fruit preservation using ethylene as well as on the chemistry of the molecular basis of senescence.

Delsi Instruments

51 rue de Verdun, F-92150 Suresnes. Tel: 45 06 52 22

Supplies laboratory equipment and instruments including systems for in-line analysis of the composition of volatile products from fermentations and other similar uses of gas phase chromatography in research or industrial applications.

Deltalab

F-38340 Voreppe. Tel: 76 50 04 54

Telex: 320286

Manufactures, under licence from CNRS, and markets, a flash hydrolysis pilot unit designed for the steam treatment of lignocellulose feedstocks to render them more accessible to hydrolysis by chemical reagents or cellulolytic enzymes.

Delvo SA

PO Box 139, 15 rue des Comtesses, F-59113 Seclin. *Tel:* 20 90 93 20 *Telex:* 820645

Supplies a wide range of industrial enzymes and related products. Subsidiary of Gist-brocades NV, Netherlands.

Dia Prosim Duolite

107 rue Edith Cavell, F-94400 Vitry sur Seine.

Tel: 1 43 45 85 80 Telex: 260792

Produce resins for use as supports with immobilized enzymes.

Diagest Laboratoires

59 rue de Trevise, BP 2034, F-59014 Lille Cedex.

Tel: 20 52 68 00 Telex: 160716 Fax: 20 52 06 10

Produces and distributes diagnostic reagents for in vitro purposes in immunology, immunohaematology including tests for STDs, cytomegalovirus and tetanus, monoclonal and polyclonal antibodies and enzymes as well as laboratory hygiene products.

Diagnostica Stago

6 rue Denis Papin, F-92600 Asnieres.

Tel: 1 47 33 40 60 Telex: 697 294

Supplies diagnostic kits based on enzyme immunoassay coagulation tests. Developing blood analysis kits and anti-PDF monoclonal antibodies.

Diagnostics Pasteur SA

3 boulevard Raymond Poincare, F-92430 Marnes-la-Coquette. Tel: 1 47 41 79 33 Telex: 200464 Fax: 1 47 41 91 33 Tel: 1 47 41 79 33

Produce reagents, instruments and services for diagnostics for use in human health and other clinical or biological applications. Joint venture between Institut Pasteur and Sanofi, France.

DiaMed France SA

9 rue Française, F-75002 Paris. Tel: 1 508 02 48 Telex: 214368

Market diagnostics for use in the field of fibrinolysis and other reagents based on monoclonal antibodies produced by Biopool AB, Sweden.

Part III FRANCE

Diamond Shamrock France

Boite Postale 4, 185 avenue de Fontainbleau, F-77310 St Fargeau/Ponthierry.

Fargeau/Ponthierry. Tel: 60 65 90 90 Telex: 692027

Supplies fine chemicals, herbicides and other products of Diamond Shamrock Corp, US.

Diatech

15 rue des Grands Pres, F-92000 Nanterre. Tel: 1 39 57 57 22 Telex: 611642f

Supply a wide range of pharmaceutical, diagnostic and chemical products including monoclonal antibodies, bacteriological culture medium, lyophilized cell preparations as well as raw materials for use in parmaceuticals, cosmetics and agro-industrial applications derived from natural sources.

Diosynth France SA

Boite Postale 141, 164 rue Ambroise Croizat, F-93204 St Denis Cedex 1. Tel: (1) 48 20 61 64 Telex: 630586

Supplies bulk pharmaceutical raw materials including peptides and steroids, such as testosterone, pancreatin, insulin, gonadotropin and hydrocortisone.

DMF

19 rue Marc Seguin, F-75018 Paris. *Tel:* 1 42 08 91 34 *Telex:* 230804

Produce ultrafiltration and microfiltration systems for both laboratory and industrial use, including cross flow systems.

Dow-Corning France

Parc Sophia Antipolis - BP 43, F-06561 Valbonne. Tel: 93 33 91 92 Telex: 970464

Produce silicones for medical use and other biological products (see Dow-Corning, US).

Du Pont De Nemours France SA

BP 85 - ZA de Courtaboef, F-91943 Les Ulis. Tel: (1) 69 82 54 32

Distributes instruments for thermal analysis high performance liquid chromatography, etc. Also centrifuges and mictrotomes as well as reagents and other products for molecular biology (see Dupont de Nemours, US).

Dufour et Igon

Supply industrial, medical and scientific gas mixtures and gases for use in preservation systems as well as effluent treatment and cryogenic systems.

EC

Lussan Adeilhac, F-31430 Le Fousseret.

Tel: 61 87 71 88 Telex: 521232 Fax: 61 97 28

Design and construct apparatus for biological applications in industry including filtration systems.

Ecole Nationale Superieure de Chimie de Paris

Laboratoire de Chimie Bioorganique

11 rue Pierre et Marie Curie, F-75231 Paris Cedex 5. *Tel*: (01) 336 25 25

Investigating production of hydrocarbons using the fresh water, unicellular colonial green alga Botryococcus braunii, including studies on the chemical nature of products, methods of separation, culture conditions and improvement of yields.

EGA Chimie France Sarl

Supplies fine organic and inorganic chemicals including biochemicals, solvents, standards, etc, as well as laboratory supplies and equipment. Subsidiary of the Aldrich Chemical Co, US.

EKATO Sari

3 rue Andre Kiener, F-68003 Colmar.

Supply industrial fluid agitators and plant; products of EKATO, Germany.

Electricite de France

Direction des Etudes et Recherches

6 quai Watier, F-78400 Chatou. Tel: 1 30 71 77 20 Telex: 696395

Developing processes for treatment of stillage by anaerobic digestion with recovery of energy (biogas or electricity) as well as recovery of energy from sugar cane bagasse.

Electropur

48 rue de Paris, F-92110 Clichy. Tel: 47 39 50 50 Telex: 611322f

Specialize in equipment for use in production of very pure water using techniques of distillation, ion-exchange demineralization, filtration and reverse osmosis.

Elf Aquitaine

Societe Nationale Elf Aquitaine

tour des Miroirs 5739, F-92096 Paris La Defense Cedex 27.

Tel: (1) 47 44 45 46 Telex: 615400

Information and Documentation. Tel: 45 71 72 73 Tlx: 203607 Elfa

Principal activities relate to exploration, mining, production, marketing and distribution of petroleum and hydrocarbons as well as chemicals derived from such sources. Carrying out applied research in areas of renewable energy, including alcohol fuels and crop improvement as well as genetics, mass cell culture, fermentation and down stream processing (see Elf Biorecherches, France).

Elf Biorecherches

Research Centre for Industrial Biotechnology

Boite Postale 137, La Grande Borde/Labege, F-31328 Castanet Tolosan. Tel: (61) 80 57 50 Telex: 520405 elf bio

Carrying out research on production of ethanol, butanol and acetone by fermentation of cellulose hydrolysis products. Also studying applications of molecular biology techniques to crop improvement as well as mass culture of plant and animal cells, fermentation and processing in relation to industrial processes. Part of the Sanofi, France group.

Elga Filtro

Produce equipment for the production of high quality water by demineralisation through ion exchange or reverse osmosis, or using ultrafiltration.

Eli Lilly France SA

rue du Colonel Lilly, Zone Industrielle, F-67640 Figersheim. Tel: 88 64 90 00 Telex: 880402

Producing human insulin using genetically engineered bacteria on a commercial scale by fermentation.

Endress & Hauser SA

Boite Postale 5, 3 rue du Rhin, F-68330 Huningue.

Supplies equipment for level or flow measurement for liquids and solids, as well as analysis of water and industrial effluents.

Enraf-Nonius France SA

16 Rue de l'Evangile, F-75018 Paris. *Tel*: 01 380 3512 *Telex*: 641164

Market x-ray diffraction equipment.

ERD

Ethanol Recherches et Developpements

Carrying out research on the enzymatic hydrolysis of whole sugar beet, with applications in fermentation to ethanol and other products, at industrial pilot plant level.

Erlab DFS SA

Fabricate ductless portable fume hoods for use with toxic gases; suitable for laboratory, medical or industrial use.

FRANCE Part III

ESI Flufrance

21 rue de l'Armistice, F-94230 Cachan.

Produce laminar flow cabinets and air filtering devices.

Etablissements Boll

Le Moulin d'Aulnay - BP 64, F-91292 Arpajon. Tel: 1 60 84 07 27 Telex: 691625

Produce starter cultures for the milk industry as well as probiotics and food colourants

Etablissements Cluzeau Info Labo

Produce supports, packings and packed columns as well as high purity solvents for use in HPLC.

Etablissements Depince

Armor Proteines

route de Saint James, F-35460 Saint Brice en Cogles.

Tel: 99 98 61 09 Telex: 740735

Produce fractionated constituents of milk including casein, lactoserum and lactose.

Eurobio Labs

20 bd St Germain, F-75005 Paris. Tel: 143 252033 Telex: 201236

Supply immunological and biological reagents including monoclonal and polyclonal antibodies, serums and virus products.

Eurofiltec

18 rue de l'Esterel, Silic 175, F-94563 Rungis Cedex. Tel: 1 46 87 23 87 Telex: 260978 Fax: 1 46 87 58 68

Develops and manufactures filters for liquid and gas filtration with applications in the pharmaceutical, food and cosmetic industries.

Eurolysine

16 rue Ballu, F-75009 Paris.

Manufactures the amino acid lysine, for use as an animal feed supplement, under licence from Ajinimoto, Japan, as well as various proteins.

Euromedex

29 rue Herder, F-67008 Strasbourg. Tel: 088 35 36 00 Telex: 890331

Supply immunological and biological reagents. Distributor for Cambridge Research Biochemicals, UK.

Eurotherm Automation Sarl

Parc d'Affaires Dardilly, 6 Chemin des Jones BP 55, F-69572 Dardilly Cedex.

Manufacture a wide range of automated temperature control, monitoring and alarm systems for industrial plant use.

Eurozyme

75 quai d'Orsay, F-75007 Paris. Tel: 1 45 55 44 30

Produce and market lactic acid fermenting organisms.

Filtron/Saimap SA

Produce a range of conventional membranes with cut-off from one thousand to one million daltons, as well as new products which are steam and alcohol resistant. Available as disposable stirred cells or cross flow systems with both minicassettes and standard cassettes available. Developing other untrafiltration and related equipment for use in the bioindustries.

Flobio

15 rue Armand Silvestre, F-92400 Courbevoie.

Supplies instruments and reagents for research and diagnostic laboratories. Products include agarose, lectins and agglutinins, antiserums, nylon membranes for transfer in molecular bilogy, biotin labelling kits, antibodies, density gradient reagents, etc as well as equipment such as freezers, shakers, incubators, bioreactors, fermenters and autoclaves. Also supplies P3/P4 containment systems. Distributor for Nycomed AS Diagnostics, Norway and FMC Corporation Bioproducts, US.

Florimond Desprez

Produce commercial seed of plants such as cereals, lupins, sugar beet, forage beet, lucerne, chicory and peas. Developing micro-propagation systems as well as using meristem production techniques for generation of double haploids.

FLOT

 $25~\rm rue~du~8~Mai~1945,~BP~22,~Zl~La~Haie~Griselle;~F-94471~Boissy~St~Leger~Cedex.$

Tel.: 1 45 69 11 69 Telex: 202791 filtrer Fax: 1 45 69 50 32 Supply a wide range of nylon, polypropylene and metal microfilters.

Flow Laboratories SA

BP 50, 99 rue de la Republique, F-92800 Puteaux. *Tel*: (1) 47 73 66 58 *Telex*: 612041

Supplies wide range of chemicals and reagents for cell culture, research and clinical diagnostics, etc, as well as fibroblast interferon for research purposes. Also supplies laminar air flow systems for cell culture and microfiltration systems. Distributor for Biomakor, Israel.

Fould-Springer

103 rue Jean-Jaures, F-94701 Maisons-Alfort.

Tel: 1 43 75 34 60 Telex: 210353 Fax: 1 43 78 18 58

Producers of yeast, extracts and autolysates for culture media, ferments and starter cultures, antibiotics, enzymes, vitamins etc.

Foxboro France SA

Boite Postale 741, rue des Oziers, St Oen l'Aumone. Tel: (01) 443 88 55 Telex: 697019

Supplies gas-phase chromatographic analyzers, electrodes for pH and redox measurement as well as pH regulators.

France Biochem

42 Rue d'Arthelon, F-92190 Meudon. Tel: (1) 62 67 870 Telex: 201641

Supplies clinical equipment, immunological products and biological reagents. Supplies products of Behring Diagnostics, Germany and Calbiochem, US.

France Embryon

BP 24, F-42210 Montrond les Bains. Tel: 77 54 41 08 Telex: 380110

Carry out embryo transfer for cattle breeders.

France Luzerne

route des Suippes, BP 149, F-51008 Chalon sur Marne. Tel: 26 65 19 39 Telex: 830511

Produce plant protein extracts and dehydrated forage.

Francereco

Groupe de Genetique Vegetale, BP 0166, F-37001 Tours. Tel: 47 54 55 67 Telex: 759783

Interests in plant biotechnology in relation to selection of species of interest as food or as sources for production of secondary metabolites of value to the food, pharmaceutical or cosmetic industries.

Froilabo Biomedical

15 rue R Schuman - BP 98, F-77831 Ozoir La Ferriere. Tel: 1 64 40 05 75 Telex: 691107f

Manufacture a wide range of refrigerators, freezers and deep freezers designed for laboratory use as well as incubators, freeze driers, plant growth chambers and controlled environment chambers.

Gaz de France

23 rue Philibert Delorme, F-75017 Paris. Tel: 47 66 03 90 Telex: 641700

Direction des Etudes et Techniques Nouvelles, 33 rue d'Alsace, F-92531 Levallois Perret.

Tel: 47 59 75 00 Tlx: 612970

Carrying out anaerobic digestion of manures as well as investigations on the treatment, storage and use of biogas.

58 rue du Dessous des Berges, F-75013 Paris. Tel: 45 84 01 94

Carries out studies on technoeconomics in areas of biomass energy. fermentation, the environment, water and the agro-food industries. Consults on financing of biotechnology processes.

Gemu Sarl

2 allee des Foulons, F-67381 Lingolsheim Cedex. *Tel*: 88 77 16 57 *Telex*: 890544

Supply a range of diaphragm valves suitable for use in sterile systems operated pneumatically, by motors or by hand, as well as pneumatically operated metal seat valves for control of water, air or steam.

Gendron Industries

19 rue Maurice Daniel, F-44200 Nantes. Tel: 40 47 81 68 Telex: 710983

Supplies filters for use with liquids or with air, as well as tubular plate exchangers, cartridge filter systems and systems for automation.

Genencor

11 Chemin de Ronde, F-78110 Le Vesinet. Tel: 1 39 76 52 36 Telex: 697379

Contract research organisation working in the area of application of molecular biology to industrial processes. Distributes enzymes (see Genencor, US).

Generale Sucriere

25 avenue Franklin Roosvelt, F-75008 Paris. Tel: 42 25 15 11 Telex. 650050

Services Techniques, 106 rue du Marechal Leclerc, BP 58 Epperville F-80400 Ham.

Tel: 23 81 02 50 Tlx: 140748

Produce sugar as well as ethanol, by fermentation of molasses and beet juice, for potable and industrial use.

Genetica

160 quai de Polangis, F-94340 Joinville le Pont. Tel: 48 86 39 91 91 Telex: 213732

Research and development company using recombinant DNA technologies to generate new products for the pharmaceutical and chemical industries.

Genex International

Marketing Office, Boite Postale 7305, F-75223 Paris Cedex 05. Tel: 1 43 26 21 99 Telex: 680461

Markets products of the Genex Corporation, US.

Gercavi

ZI Kervoas Doue, F-29270 Carhaix-Plouguer. Tel: 98 93 29 69

Manufacture lysozyme from egg white for use in the pharmaceutical

Germe SA

27 bd Charles-Moretti, F-13014 Marseille. Tel: 91 98 45 03 Telex: 41 07 77

Supply enzymes including dehydrogenases, lipases, oxidases.

Gibco BRL Sarl

14 rue des Oziers - BP 7050, F-95051 Cergy Pontoise Cedex. Tel: 34 64 54 40 Telex: 609098f

Supplies reagents and instruments for cell biology and molecular genetics. Products include media for cell culture, vaccines enzymes and pharmaceuticals. See Gibco (Life Technologies Inc), US.

Gidec Sarl

BP 7, F-26260 Clerieux.

Telex: 345715 Tel: 75 71 50 64

Produce anaerobic digestion systems for production of methane from agricultural and food industry wastes and effluents.

Gie Nutrinov

85 rue de Saint-Brieuc, F-35000 Rennes.

Fax: 99 33 94 00 Tel: 99 33 13 50 Telex: 741285

Carrying out research and development and training in food biotechnology. Products developed in association with partners include proteins, protein hydrolyzates, peptides and yeast hydrolyzates from milk products, soya and other plant products, seaweed and fermented substrates, with applications in special diets and novel foods.

Gilson Medical Electronics (France) SA

Boite Postale 45, 72 rue Gambetta, F-95400 Villiers le Bel. Fax: 039 94 51 83 Tel: 034 29 50 00 Telex: 606682

Supplies laboratory equipment and apparatus including positive displacement pipettes with disposable capillaries and pistons as well as other automated liquid sample handling equipment. Also manufactures systems for preparative and high performance liquid chromatography.

Gist brocades SA

Division Enzymes Industrielles

rue des Comtesses, BP 239, F-59472 Seclin Cedex.

Tel: 20 90 93 20 Telex: 820645

Produce yeast and products for baking, as well as industrial enzymes and antibiotics. Market systems for the anaerobic treatment of effluents (see Gist-brocades NV, Netherlands).

Givaudan Lavirotte

56 rue Paul Cazeneuve, BP 8344, F-69008 Lyon.

Telex: 340987 givla Tel: 78 72 95 11 Fax: 78 61 33 94

Produce intermediates for use in pharmaceuticals. Part of Rhone-Poulenc

Goavec

13 rue Eiffel, Z I Nord - BP 205, F-61006 Alencon.

Tel: 33 29 02 88 Telex: 170818

Construct fermenters and other reactors for the chemical, pharmaceutical and food industries

Grands Moulins de Pantin

62 rue du Louvre, F-75061 Paris Cedex 02. Tel: 1 42 33 44 55 Telex: 210612

Laboratoires (ARIA), 15 rue Croix des Petits Champs, F-75001 Paris. Tel: 42 96 14 34 Tlx: 204659

Produce starch and starch derivatives.

Groupe Declos SA

F-13240 Septemes.

Tel: 91 51 90 56 Telex: 430113

Raise insects for use in biological control programmes and produce other plant protection products.

Groupe Limagrain

BP 51 Chappes, B-63360 Gerzat. Telex: 392754 Tel: 73 38 20 09

Produce seeds and developing in vitro prop... ion techniques through the subsidiary Biosem, France.

Hazleton SA

Institut Francaise de Toxicologie

Les Oncins - BP 118, F-69210 l'Arbresle. Tel: 74 01 10 10 Telex: 305716

Offer analytical and consultancy services in testing for toxic substances, carcinogens, mutagens etc.

13 rue Augereau, F-75007 Paris. *Tel*: (01) 551 93 72

Produces pH, conductivity and oxygen meters, as well as electrodes. Products include a single portable instrument with six modules for combined measurement and recording of pH, redox, conductivity, oxygen, temperature, etc.

FRANCE Part III

Helena France SA

6 rue Charles Cros - ZAE, F-95320 Saint Leu La Foret. Tel: 1 39 95 92 92 Telex: 696440

Manufactures and distributes a range of high performance optical densitometers suitable for use with all types of support media including gels, agarose, polyacrylamide, cellulose acetate and thin layer chromatography media.

Hepar Chimie Sarl

141 bureau de la Colline, F-92213 St Cloud. Tel: (1) 46 02 13 15 Telex: 200110

Supplies bulk pharmaceuticals derived from animals including bovine albumin, collagen and insulin.

Heraeus SA

avenue de l'Atlantique, Z A de Courtaboeuf, F-91941 Les Ulis Cedex. Tel: 69 07 65 00 Telex: 600037f

Manufacture a wide range of laboratory apparatus including refrigerated centrifuges, freezers, freeze driers, incubators, cryostats and ovens, including vacuum systems.

Hermann-Moritz

4 rue du Strade, 28480 Chassant. Telex: 760994 Tel: 37 29 53 19

Supply analytical equipment for use in monitoring air quality.

Hewlett Packard

parc d'Activite du Bois Briard, avenue du Lac, F-91040 Evry Cedex. . Tel: (1) 60 77 83 83

Supplies automated systems for the identification of microorganisms as well as systems for biological analysis based on micro-titration.

Hoechst-Behring SAPB

260 avenue Napoleon Bonaparte - BP 237, F-92500 Rueil Malmaison Cedex.

Tel: (1) 47 08 92 25 Telex: 203448

Supplies fine chemicals, radioimmunoassay kits based based on monoclonal antibodies, as well as enzymes and other clinical diagnostics. An associate of Hoaechst AG, Germany.

Hybridolab SA

35 rue du Dr Roux, F-75015 Paris Cedex 15.

Established by the Institut Pasteur, France as a means to commercialization of products of their hybridoma research.

Hybridoma Databank

Fac Medecine

Ave de Valombrose, F-06034 Nice Cedex.

Tel: 93 81 61 61

Provide details information on hybridomas and their properties.

IBF Biotechnics

35 avenue Jean-Jaures, F-92390 Villeneuve-la-Garenne. Telex: 610719 Tel: 1 47 98 83 53 Fax: 1 47 92 26 55

Develops and sells a complete range of gels for chromatographic purification of proteins at laboratory or preparative scale. In addition they supply a wide range of products for chromatography and analysis including chromatography columns, pH/ion meters, agaroses, lectins, protein A, avidin-biotin, cytohelicase, fibronectin, calmodulin, and trypsin. Part of Rhone-Poulenc, France.

ICI Pharma

rue Blanche, F-95880 Enghien-Les-Bains. Tel: 34 12 90 80 Telex: 830982

Manufactures pharmaceuticals and veterinary products.

Immuno France Sarl

ZI Senia 544, 8 rue des 15 Arpents, F-94577 Orly Rungis Cedex. Tel: (1) 46 87 31 21 Telex: 200636

Supplies blood products and diagnostic kits (see Immuno Ltd, UK).

Immunotech SA

Luminy - Case 915, 70 rue Leon Lachamp, F-13288 Marseille Cedex 9. Tel: 94 41 41 38 Telex: 430246 immtech Fax: 91 41 27 94

Developing diagnostics based on monoclonal antibodies using radioimmunoassays in collaboration with Centre d'Immunologie, Marseille-Luminy. Manufactures and supplies monoclonal antibodies and immunoassay kits for hormone, allergy testing and tissue typing. Undertakes research contracts for drug immunoassays and immunopurification. Distributor for Jackson Immunoresearch Laboratories, US.

Induferma

15 rue Georges Blandon, F-78430 Louveciennes. Tel: (1) 39 18 28 07

Designs systems for energy production from all types of organic wastes using anaerobic digestion.

Ingold France

30 boulevard Douaumont, F-75017 Paris. Tel: 01 4737 06 00 Telex: 610 293

Supplies pH and ion-specific electrodes, subsidiary of Ingold Messtechnik AG, Switzerland.

Innovation 128

24 rue du 4 Septembre, F-75002 Paris.

Fax: 1 42 65 47 76 Tel: 1 42 68 09 71 Telex: 214492

Offer consultancy in areas of technical innovation, in particular in the biotechnology sector.

INRA - Bordeaux

BP 131, Domaine de la Grande Ferrade, F-33140 Pont de la Maye. Tel: 56 37 44 44 Telex: 541521

Studying in vitro plant culture for production of haploid melons, courgettes, aubergines and other horticultural plants as well as plant embryo culture, in vitro propagation, studies on physiology of seeds, effects of stress on plants, introduction of genes for disease resistance and detection of viruses in plants.

INRA - Dijon

Laboratoire de Microbiologie des Fermentations 17 rue de Sully, BP 1540, F-21034 Dijon Cedex. Tel: 80 63 30 00

Carrying out studies on fermentation, microbial biochemistry, molecular biology and cell biochemistry.

INRA - Jouy en Josas

domaine de Vilvertsas, F-78350 Jouy en Josas. Tel: (1) 39 56 80 80 Telex: 695431

Carrying out studies on microbial genetics of bacteria and animal cell cultures as well as the mechanism of transfer of genetic information and the biology and genetics of milk production, enzymes of cheese production, bacteriophages and molecular biology.

INRA - l'Hermitage

Station de Recherches sur l'Elevage de Porcs

St Gilles, F-35590 l'Hermitage.

Tel: 99 64 62 63

Investigations include studies on the production of methane by anaerobic digestion of pig manure.

INRA - Montpellier

place Viala, F-34060 Montpellier Cedex. Tel: 67 61 22 00 Telex: 490818

Studying nitrogen metabolism and the physiology of transport of cations, structural functional relationships in membranes and the use of monoclonal antibodies in plant metabolism studies, isolation of genes determining quality in cereals and the molecular basis for polymorphism in wheat proteins.

INRA - Narbonne

Station d'Oenologie et de Technologie des Produits Vegetaux boulevarde du General de Gaulle, BP 429, F-11104 Narbonne. Tel: 68 32 04 86

Studying anaerobic digestion of several aquatic plants for production of biogas (methane). Also assessing methods of pretreatment to improve methane production. Investigating the recovery of by-products of vegetable processing, pollution control and biotechnology applied to the food industries.

INRA - Orleans

Station d'Amelioration des Arbres Forestiers

Ardon, F-45160 Olivet.

Telex: 760359 Tel: 38 63 02 06

Interests include tree breeding and genetics including in vitro propagation using tissue culture techniques.

INRA - Orsav

Institut de Microbiologie Department de Genetique et d'Ameliorations des Plantes (GRIMP)

Batiment 409, Universite de Paris-sud, F-91405 Orsay.

Tel: (1) 69 41 74 91 Telex: 692166

Carrying out research on the Ti and Ri plasmids from Agrobacterium in relation to segregation of opine synthesis characteristics in transformed plants.

INRA - Paris

16 rue Claude Bernard, F-75231 Paris Cedex 05. Tel: (1) 43 37 15 50

Studies include genetics of yeasts, yeast metabolism, genetic analysis of bacteria, and microbial enzyme degradations.

INRA - Thiverval Grignon

Station de Virologie Immunologie F-78850 Thiveral-Grignon. Tel: (1) 30 54 45 45

Investigating applications of monoclonal antibodies for recognition of viruses and the cloning of genes from viruses implicated in enteritis.

INSERM

Unite de Proteines place de Verdun, F-59045 Lille. Tel: (020) 57 51 22

Studying glycoproteins and glycosidases.

Institut Française du Petrole

1-4 avenue de Bois-Preau, F-92506 Rueil Malmaison. Tel: (1) 47 49 02 14 Telex: 69666

Non-profit organization under government control involved in all aspects of hydrocarbons, natural gas and liquid fuels including substitutes produced from organic raw materials. Has extensive research and development programme related to the production of acetone/ butanol by fermentation of wood hydrolyzates. Working on improved strains of Trichoderma for production of cellulases as well as biological aspects of pollution control, aspects of biodeterioration and microbial corrosion, enhanced oil recovery, single cell protein from methanol and edible colourants and dyes from algae (Spirulina).

Institut Merieux

58 Avenue Leclerc, F-69007 Lyon.

Tel: 72 73 77 07 Telex: 310627 Fax: 72 73 78 30

Manufactures products for use in preventive medicine including vaccines against meningitis, rabies and poliomyelitis, as well as serum and other blood fractions. Carrying out research into applied immunology, including large-scale culture of animal cells, viruses and bacteria as well as purification of proteins. Member of Rhone-Poulenc Group.

Institut Pasteur

25/28 rue du Dr Roux, F-75724 Paris Cedex. Tel: 1 45 68 80 00

Carrying out research in the areas of immunology, microbial genetics, cell and tissue culture, and other aspects of biotechnology including protein synthesis, recombinant DNA technologies, the AIDS viruses, diagnostics, therapeutics and vaccines, as well as industrial applications such as biological control, nitrogen fixation, cellulose breakdown and methane production.

Institut Pasteur de Lyon

13 rue Domer, F-69366 Lyon Cedex 07. Tel: 78 61 05 03 Telex: 380397

Produces pharmaceuticals, including insulin as well as antibodies to collagen and fibronectin.

Institut Pasteur Production

Boite Postale 3, 3 boulevard Raymond Poincare, F-92430 Marnes-La-Coquette. Tel: 741 79 33 Telex: 200464

rue du Docteur Roux 36, F-75725 Paris 15

Supplies reagents for clinical diagnostic purposes and carries out research in molecular biology and recombinant DNA technology, microbiology etc.

Institute of Cancer Research

Institut de Recherches sur le Cancer

7 rue Guy Moquet, F-94800 Villejuif.

Studying immunochemistry, genetics and virology related to cancer and tumour formation.

Instrumat

Avenue des Andes, ZA de Courteboeuf - BP 86, F-91943 Les Ulis. Tel: 69 28 27 34 Telex: 600961

Supplies a wide range of laboratory instruments for specialized uses. Products include colony counters, particle counters, analyzers for measuring calcium in living cells, fluorecent image analyzers, molecular weight apparatus, electrophoresis equipment, analyzers based on diffusion of light, moisture analyzers and clean room systems.

Instruments SA

Jobin Yvon Division

16-18 rue du Canal, F-91163, F-91160 Long-Jumeau Cedex. Tel: (06) 909 34 93 Telex: 692822

Division Adam Lhomargy, BP 238, F-94203 Ivry sur Seine Cedex.

Tel: (046) 701 180 Tx: 204342

Supplies laboratory apparatus, including preparative liquid chromatography systems built on a modular basis which can be controlled by microprocessors.

Interchim

Boite Postale 15, 213 ave J F Kennedy, F-03103 Montlucon. Telex: 990343 inchim Tel: 70 03 88 55

33 rue des Cordelieres, F-75013 Paris.

Tel: 1 47 07 99 72

Supplies calibration standards for gel permeation chromatography and fine research chemicals, including reagents for peptide synthesis, oligonucleotide synthesis and immunochemistry. Have produced antibodies against cytoskeletal proteins, alpha-interferons, prostoglandins and leukotrienes. Also produce preparative HPLC columns. Agents for P&S Biochemicals, UK, Milab, Sweden, Sera-Lab, UK and Jackson Immunoresearch and Kent Laboratories, US.

Intermed SA

24 rue du Ballon, ZI des Richardets, F-93160 Noisy Le Grand. Tel: 43 04 77 33 Telex: 230380

Manufactures instruments and reagents for immuno-chemistry and distributes a wide range of medical supplies. Products include immuno-washers and immuno-plate readers as well as products for cell culture.

International CIS

BP 32, F-91192 Gif-sur-Yvette Cedex.

Tel: 1 69 08 78 78 Telex: 603912 Fax: 1 69 08 77 50

Supplies in vivo and in vitro diagnostics including radioimmunoassay kits for determinations on serum plasma and urine.

Interscience

100 Route de Sainte Gemme, F-78860 Saint Nom la Breteche. Tel: (1) 34 62 62 61 Cables: 698463

Supplies fermentation equipment and bioreactors as well as laser-based colony counters, peristaltic pumps, media dispensers and automatic petri-dish platers.

Intersmat Instruments

Boite Postale 25, F-77181 Courtry. *Tel*: 64 21 18 36 *Telex*: 692261

Supplies gas chromatographs for research and industrial use as well as microprocessor control equipment, recorders and data processors.

IRAT

Institut de Recherche Agronomique Tropicale et Cultures vivrieres 9 place Viala 5035, F-34060 Montpellier.

Tel: 67 61 23 50 Telex: 490818

Studying the properties of tropical cereals and root crops which contribute to their food qualities.

IRCHA

Rue Levoisier - BP 01, F-91710 Vert-le-Petit. Tel: 64 93 24 75 Telex: 600820

Public research centre developing products and processes in the areas of chemistry and the environment, including aspects of the anaerobic digestion of potato processing waste waters. Carries out work on fermentation, bioconversion, bioreactors and membrane separation in the areas of amino acids, organic acids, biomaterials and intermediates for peptide synthesis.

IRIS

Institut de Recherches de l'Industrie Sucriere

Boite Postale 39, 369 rue Jules Guesde, F-59651 Villeneuve d'Ascq. Tel: 20 91 01 01

Studying anaerobic digestion of wastewaters, sugar beet and beet trash as well as treatment of waters polluted with distillery stillage, lactic acid fermentations and methods for preservation of beet pulp.

ITCF

Institut Technique de Cereales et des Fourrages 8 avenue du President Wilson, F-75116 Paris. Tel: (1) 47 23 55 13 Telex: 630071

Undertaking studies on production of methane by anaerobic digestion of manures as well as research on cereals.

J Bibby Science Products SA

Manufacture a wide range of cell culture products made from glass or plastic including cell spinners and stirrers.

Javenech

La Boitardiere Javene, F-35133 Fougeres. *Tel*: 99 99 37 37

Produce deoxyribonucleic acids from salmon.

Jean Niel SA

4 rue Tracastel, F-06139 Grasse. Tel: 93 36 00 37 Telex: 470831

Produces fine chemicals for the pharmaceutical industry, including essential oils and aromatic compounds.

Jouan SA

60 rue de Wattignies, F-75580 Paris Cedex 12.

Tel: 1 43 42 40 50

Manufacture carbon dioxide incubators and refrigerated centrifuges as well as a wide range of reagents for use in biochemistry and blood bank applications.

KC Biologicals Europe

11 chemin de Ronde, F-78110 Le Vesinet. *Tel*: 39 76 52 36 *Telex*: 695792

Supplies media and serum for cell culture as well as cell culture equipment.

Kermene SA

F-22330 Collinee.

Tel: 96 31 40 04 Telex: 730704

Produce higher value products from abattoir wastes and by-products, including insulin from pancreas, blood plasma and tallow for both food and industrial use.

Kodak Pathe

8 rue Villiot, F-75594 Paris Cedex 12. *Tel*: 1 43 47 80 00 *Telex*: 670924

Centre de Recherches, 30 rue des Vignerons - BP 60, F-94302 Vincennes. Tel: 1 43 47 76 84

Produce medical and x-ray film, diversifying into medical immunology.

Kontron

2 avenue du Manet, Montigny-le-Bretonneux, F-78185 St Quentin Yvelines Cedex.

Tel: 30 43 81 52 Telex: 698801

Specializes in equipment for isolation, analysis and identification of chemicals and biochemicals. Products include centrifuges, spectrophotometers, HPLC systems, radioactivity counters, clinical analyzers and analyzers for blood chemistry.

Korano Sarl

La Balme-les-Grottes, F-38390 Montalieu. *Tel:* 74 90 62 82 *Telex:* 308136f

Produces dehydrated culture media for microbial applications as well as in vitro plant tissue culture. Also produce artificial diets for insects.

Kratos Analytical

88 rue Phillipe de Girard, F-75018 Paris. *Tel*: (1) 42 01 71 00 *Telex*: 212759

Supplies amino acid analyzers and analytical chromatographs.

Krehs

Boite Postale 321, 61 rue Pouchet, F-75832 Paris Cedex 17. Tel: (1) 42 28 60 60 Telex: 280480

Major consulting and design engineering company.

KWS-France Sarl

rue des Lombards, Le Fayel, F-60680 Grandfresnoy.

Tel: 44 83 96 97 Telex: 140011 kws Fax: 44 83 98 80

Centre for research and development of seeds of new varieties of sugar beet, maize, forage plants, vegetables, cereals etc. Also the address of SDME, the European Maize Society.

Labex Sarl

BP 1114, F-68052 Mulhouse Cedex.

Tel: 89 61 75 65 Telex: 881236 Fax: 89 61 77 76

27 rue des Trois Frontieres, F-68110 Illzach-Ile Napoleon

Supplies fine chemicals and reagents for laboratory and diagnostic use. Agent for Fluka AG, Switzerland.

Labomoderne

37 rue Dombasle, F-75015 Paris. *Tel:* (1) 45 32 62 54 *Telex:* 20310

Supplies laboratory reagents, diagnostic assay kits, stains and biochemicals. Agent for Clin-Tech Ltd, UK.

Laboratoire CCD

Produce immulogical products for use in diagnostics and therapeutics.

Laboratoire d'Histopathologie et Cytopathologie

59 avenue de Paris, F-78000 Verseilles.

Tel: 1 39 53 49 76

Active in the areas of toxicology of medicines, pesticides and chemicals including aspects of histopathology and genetic effects.

Laboratoire du Lacteol

route de Bu, F-78550 Houdan. Tel: 1 30 59 65 76 Telex: 698272

Produce health products based on Lactobacillus acidophilus (probiotics).

Laboratoire Goemar

ZAC de la Madeleine - BP 55, F-35403 Saint Malo.

Tel: 99 81 88 78 Telex: 740382

Produce algal polysaccharides and other products from marine algae.

Laboratoire Midac

40 boulevard de la Liberte, F-59800 Lille. Tel: 20 97 02 80 Telex: 110123

Offer consultancy on the use of microbiological systems in the food, pharmaceutical, cosmetic and hospital industries.

Laboratoire Riker 3M

40 rue Gabriel Crie, F-92245 Malakoff. Tel: 1 47 46 99 00 Telex: 201096

avenue du 11 Novembre, Zone Industrielle, F-45312 Pithiviers Cedex. Tel: 38 30 43 21 Tlx: 760494

Produce medicines for human and veterinary use as well as plant protection chemicals. Also products for microbiology and bioluminescence (see 3M Co, US).

Laboratoire Roger Bellon

159 avenue du Roule, F-92200 Neuilly-sur-Seine. Tel: (1) 46 37 90 00 Telex: 750787

Produces antibiotics for pharmaceutical and veterinary applications, as well as cosmetics. Investigating vaccines and monoclonal antibodies. Member of Rhone-Poulenc Group.

Laboratoire Upjohn

Tour Franklin, F-92081 Pris la Defense Cedex 11.

Tel: 1 47 76 41 44

Manufactures pharmaceuticals; products include prostaglandins.

Laboratoires ARIA

Grands Moulins de Paris

15 rue Croix des Petits Champs, F-75001 Paris. Tel: 42 96 14 34 Telex: 204659

Produce starch, gluten, bioethanol from wheat and by-products for use as animal feed. Carrying out research on identification of wheat varieties and quality control of relevant processes.

Laboratoires Beytout SA

10-12 rue Guynemer, Saint Mande/Val-de-Marne. Tel: (01) 374 11 78 Telex: 220691

Supplies antibiotics including penicillin and its derivatives, spectinomycin, amoxicillin, kanamycin sulphate, natamycin etc, as well as steroids and enzymes. Also supplies diagnostics and other kits and reagents for clinical chemistry, radioimmunoassay, seroimmunology, bloodgroup serology, haematology, bacteriology, virology and immunochemistry The representative of the pharmaceutical division of Gist-brocades NV, Netherlands.

Laboratoires Biosoph

72 route Sartrouville, F-78230 Le Pecq. Tel: 1 30 71 14 41 Telex: 696916

Supply a wide range of chemicals for use as anti-foams, detergents, emulsifiers, thickeners and extractants.

Laboratoires Biotrol

Clinical Diagnostics Division

1 rue du Foin, F-75140 Paris Cedex 03. Tel: (1) 42 77 81 10 Telex: 670736

Manufactures and distributes clinical diagnostic products: antibodies and antisera against gamma-globulins, enzymes for clinical diagnostics, quality control materials and immunological reagents.

Laboratoires Cassenne

3 square Desaix, F-75015 Paris Tel: 1 45 78 61 70 Telex: 696731

Recherche et Production Biologique, 17 route de Pontoise, F-95520 Osny. Tel: 1 30 31 35 71 Tx: 696731

Produce materials for immunology, rheumatology and gynecology. Carrying out research and development studies on the production of pharmaceutical specialities in these areas.

Laboratoires Dynatech

1 boulevard de Jardy, F-92430 Marnes la Coquette Cedex. *Tel:* 17 41 38 67 *Telex:* 202173 Tel: 17 41 38 67

Supplies apparatus and reagents for immunology, including micro-ELISA plate readers and washers, fluorescent plate readers, multichannel pipetters and affinity chromatography purified monoclonal antibodies. Distributor for Kirkgaard & Perry Laboratories, US.

Laboratoires Eurobio

20 boulevard St Germain, F-75005 Paris.

Fax: 1 43 25 98 48 Tel: 1 43 25 20 33 Telex: 201236

Supplies enzymes, immunodiagnostics and culture media for research and industrial use. Products include monoclonal and polyclonal antibodies; enzyme and fluorescent based immuno diagnostic systems; serums, serum substitutes and other culture media; blood grouping reagents; lymphocyte separation medium; antigens for viral tests; coombs-test reagents etc, as well as other immuno-haematology products. Distributor for Biozyme Laboratories, UK.

Laboratoires Flork

Montglandier, F-63380 Pontaumur. Tel: 73 79 93 87 Telex: 990969

Produce amino acids, peptides and reagents and intermediates for the synthesis of peptides.

Laboratoires Fournier SA

9 rue Petitot, F-21100 Dijon.

Manufacture absorbent materials from native haemostatic collagen with uses in clinical tests, surgery and dentistry.

Laboratoires Gambro SA

18 rue de Calais, F-75009 Paris. Telex: 640913 Tel: 1 45 26 62 74

Produce polymeric materials, such as those used in the formation of dialysis membranes

Laboratoires Janssen

Citrail-Batiment 5/1B, 110 bis ave du General Leclerc, F-93506 Pantin Cedex.

Tel: 14 84 06 262 Telex: 213285

Supplies immunological and biological reagents; products of Janssen Life Sciences Products, Belgium.

Laboratoires Labaz SA

1 rue de la Vierge, F-33440 Ambares et Lagrave. Tel: 56 90 91 938

Manufactures pharmaceuticals, antibiotics and product for blood transfusions. Subsidiary of Sanofi, France.

Laboratoires Merck-Clevenot

5 a 9 rue Anquetil, BP 8, F-94731 Nogent sur Marne. Tel: 1 48 76 11 50 Telex: 215720 merkfra

Export: 17 avenue de la Trentaine, BP 44, F-77500 Chelles.

Tel: 1 60 20 90 45 Tx: 693014 merkexp

Produce a wide range of products and reagents including products for use in molecular biology, DNA synthesis and sequencing. Products include supports for gel filtration chromatography electrophoresis, electrofocusing, HPLC, etc as well as laboratory equipment for HPLC (pumps, gradient formers, detectors, integrators, etc) and scanners for use in electrophoresis and thin layer chromatography.

Laboratoires Miles SA

Tour Maine Montparnase, 33 avenue du Maine, F-75755 Paris Cedex. Tel: (1) 45 38 52 43 Telex: 204315 milab

Supplies wide range of biochemicals and enzymes for research, clinical and industrial use. Products include conjugated and non-conjugated monoclonal antibodies, lectins, polypeptides, albumin and other animal proteins (see Miles Laboratories Inc, US).

Laboratoires Unicet

92 rue Baudin, F-92307 Levallois-Perret. Tel: 1 47 39 94 80

Produce monoclonal antibodies including gamma-interferon monoclonal antibody, clones of human lymphocytes and cell cultures.

Laboratoires Virbac

BP 27, F-06511 Carros Cedex.

Tel: 93 29 08 33

Developing veterinary products using recombinant DNA and monoclonal antibody technology.

FRANCE Part III

Laboratoires Wellcome SA

159 rue Nationale, F-75640 Paris Cedex 13. Tel: (1) 45 85 04 60 Telex: 204276

Supplies wide range of medical and veterinary pharmaceuticals, fine chemicals, medicines, vaccines, laboratory reagents, insecticides, etc for use in agriculture, industry and the home (see Wellcome Diagnostics, UK).

Labozym

Z1 Kervoac Doue, F-29270 Carhaix. Tel: 98 93 29 69 Telex: 940038

Produce lysozyme from egg whites.

Labsystems France

540 avenue de Quebec, F-91946 Les Ulis cedex. *Tel*: 69 07 97 50 *Telex*: 690012

Supply immunological diagnostics including kits for detection of anti-chlamydia IgG.

Lacto Bretagne SA

Zone Industrielle, F-22600 Loudeac. Tel: 96 28 24 26 Telex: 740693

Association of milk processors treating whey from the cheese industries to produce lactoserum for food, medical and animal feed uses.

Lacto Labo

Carries out lactic acid fermentations and supplies starter cultures for cheese making and yoghurt, surface flowering yeasts and moulds and ripeners for the meat industry, silage inoculants, bacteria for nutritional regulation and balance, as well as malo-lactic bacteria for oenology. Part of Rhone Poulenc, France.

Lafarge Coppee

Joint company formed Lafarge, France and Coppee, France developing biotechnical products through Orsan, France, Eurolysine, France and Group Claeys-Luck, France. Produces amino acids, lysine and biopesticides.

Lafay Ets

F-71360 Epinac.

Tel: 83 10 09

Supplies equipment for handling activated sludge, manure, vegetable pulp, etc, as well as plant for anaerobic digestion and methane production, filtration, waste compaction, etc.

L'Air Liquide

Centre de Recherche Claude Delorme BP 126, F-78350 Les-Loges-en-Josas. Tel: 1 39 56 80 20 Telex: 697588

Developing new technologies for use in the biological and food industries based on cryogenic fluids and gases.

L'Air Liquide SA

Engineering and Construction Division

Manufactures plant equipment for the anaerobic pretreatment of industrial waste waters, cryogenic systems, etc (see L'Air Liquide, France).

L'Air Liquide SA

75 quai d'Orsay, F-75321 Paris Cedex 07. *Tel*: (1) 45 55 44 30 *Telex*: 270716

Principal interests relate to construction and engineering of gas installations, industrial gases and related chemicals. Produces pharmaceutical products through its subsidiary Lipha Lyonnaise. Developing cryogenic systems for pharmaceutical, biological and food industry applications. Developing systems for the production of microorganisms as well as systems for preservation of fruit and vegetables. Produces systems for treatment and valorization of wastes and effluents.

Lancer Industrie SA

25 Avenue François-Verdier, F-31170 Tournefeuille. *Tel:* 61 862195 *Telex:* 531404

Manufactures glassware washing machines and drying cabinets for use in laboratories, research centres, hospitals and industries.

Latoxan

F-05150 Rosans. Tel: 92 66 60 64

Produces venoms from snakes and scorpions for use in pharmaceutical preparations, immunological applications and biochemical research.

LDC SA

15 rue Guyton de Morveau, F-75013 Paris. *Tel:* (01) 45 88 28 00 *Telex:* 205331

Supplies high performance liquid chromatographs as well as detectors, integrators, columns, pumps and HPLC accessories (see Milton Roy Laboratory Group, US).

Lequeux

64 rue Gay-Lussac, F-75005 Paris. Tel: 1 43 25 43 22 Telex: 200291

Supplies fermentation equipment of Electrolux Sweden ranging from laboratory systems of 7 to 20 litres, through pilot scale plant to production units of around 5000 litres. Also supplies steam sterilizers and water stills for medical, pharmaceutical and laboratory use.

L'Occitane SA

route de Forcalquier, F-04130 Volx. Tel: 92.79.30.42

Produces essential oils for cosmetic purposes.

LSL Biolafitte SA

10 rue de Temara, F-78100 St Germain en Laye. Tel: 1 30 61 52 60 Telex: 695409 Fax: 1 30 61 52 34

Manufacture a wide range of fermenters and bioreactors ranging from two litres to five cubic metres, suitable for culture of bacteria, fungi, animal cells and plant cells. Also supplies automated data aquisition and control systems.

Lucas Meyer France

106 avenue du General Leclerc, F-94100 Saint Maur. Tel: 1 48 85 42 51 Telex: 210322

Produces lecithins.

Lyonnaise des Eaux

52 rue de Lisbonne, F-75008 Paris. Tel: 1 45 63 09 06 Telex: 643407

Laboratoire Central, 38 rue du President Wilson, F-78230 Le Pecq. Tel: 1 39 76 64 10 Tlx: 698287

Carrying out research on treatment of sludges using biological methods, water analysis using enzymic and monoclonal antibody techniques, development of other areas of biotechnology for measuring the quality of water, etc. Produce systems for treatment of water and valorisation of effluents and sludges through the subsidiary, Degremont, France.

3M Diagnostic Systems

40 rue Gabriel Crie, F-92245 Malakoff Cedex. Tel: 1 47 46 99 00 Telex: 201096 Supply products of 3M Co, US.

Mane et Fils

quartier Notre Dame, F-06620 Bar sur Loup. Tel: 93 42 51 00 Telex: 470841

Produce aromatic compounds for use in the food and perfume industries using bio-conversion and other semi-synthetic methods.

Marumo

rue de la Foret, Hartmanswiller, F-68500 Guebwiller. Tel: 89 76 74 48

Produce anaerobic digesters for treatment of cattle and pig manure.

MBR/CCM Sulzer

92-98 boulevard Victor-Hugo, F-92110 Clichy La Garenne. Tel: 1 47 39 06 52 Telex: 615242

MBR produces a wide range of bioreactors including stirred tank, air-lift, membrane, loop, fluidized and fixed bed systems as well as downstream processing equipment such as micro- and ultra- filtration. Also supplies equipment for sterilization, peristaltic pumps, chromatographic systems and control systems including probes and samplers for off-line analysis, instrumentation and computerized process control systems. Sulzer produces in addition packings for separation and absorption columns, mixers, crystallizers, refrigeration units, steam generators, etc., as well as engineering technology and services.

Merck Sharp & Dohme-Chibret

3 avenue Hoche, F-75008 Paris. Tel: (1) 42 67 97 22

Produces wide range of pharmaceuticals, vitamins vaccines, steroids, etc.

Mero Rousselot Satia

Baupte, F-50500 Carentan. Telex: 772086 Tel: 33 42 22 01

Produce a range of polysaccharides derived from fermentation products, higher plants or algae.

Metalab

rue de Fumechon - BP 9, Radepont, F-27380 Fleury S/Andelle. Tel: 32 49 04 55 Telex: 770535

Manufacture a wide range of laboratory fume hoods, laminar flow chambers, clean room furniture etc.

Microbiologie des Sols INRA

17 Rue Sully BV 1540, F-21034 Dijon Cedex.

Hold culture collection of bacteria for agricultural microbiology research.

Micromeritics france SA

Zaet St Maximin, 181 rue Henri Bessemer, F-60100 Creil. Tel: 44 242302

Supply amino acid analyzers, chromatography accessories and detectors.

Milligen

rue Jean-Pierre Timbaud, BP 307, F-78054 Saint Quentin Yvelines Cedex. Tel: 1 30 58 98 58 Telex: 698371

Produce systems for oligonucleotide, protein and peptide synthesis as well as analyzers and sequencers for proteins and nucleic acids.

Millipore SA

Waters Division

6 rue J P Timbaud, BP 307, F-78054 St Quentin en Yvelines. Tel: 1 30 58 98 58 Telex: 698371

Supplies membranes and filters, water treatment and chromatography apparatus, automated control systems for HPLC, enzymes and diagnostic kits (see Millipore, UK).

Moet-Hennessy

30 avenue Hoche, F-75008 Paris. Tel: 45 63 01 01 Telex: 640366

Business activities include the production of wines and spirits; cosmetics and perfumes; ornamental plants and bioequipment through SGI (Setric Genie Industriel), France.

Molecules Naturelles SA

72 Rte De Sartrouville, F-78230 LePecq. Tel: 30 71 14 41

Produce natural flavours and fragrances by fermentation processes. Joint venture of Igene Biotechnology and Biosoph Laboratories, US.

Molry Chimie SA

56 rue de Maubeuge, F-75009 Paris Tel: (01) 878 49 40 Telex: 660551 chemry

Produces filters for industrial and river waters, water-purifying products and chemicals

Multibio

2 mail des Cerclades, BP 155, F-95022 Cergy Cedex. Tel: (1) 30 73 42 55 Telex: 280332

Developing methods for the production of energy sources and fuels from natural products, including the use of anaerobic digestion for methane production and production of ethanol by continuous fermentation. Also looking at aspects of nitrogen metabolism and composting as well as the production of microbial protein for animal feed (single-cell protein) and water treatment.

Museum of Natural History

Cryptogram Laboratory 12 rue Buffon, F-75005 Paris. Tel: (01) 3313521 Supply fungal cultures.

Naarden International France

42 rue de la reine Henriette, F-92704 Colombes. Tel: 1 47 84 74 75 Telex: 620672

Produce enzymes for use in production of beer as well as invertases.

Nachet Vision

125 Boulevard Davout BP 128, F-75963 Paris Cedex 20,, 1 43 48 77 10. Cables: 215384

Supplies computerised image processing equipment.

National Culture Collection of Microorganisms (CNCM)

Institut Pasteur, 28 rue du Dr Roux, F-75724 Paris Cedex 15. Tel: 306 19 19 Telex: 250609

Contains bacteria (including actinomycetes), bacteria containing plasmids, filamentous fungi and yeasts, and viruses. Supply bacterial cultures.

NEN France Sarl

36040 rue de Romainville, F-75019 Paris.

Tel: 1 20 98 011

Supplies immunological and biological reagents; products of Du Pont-NEN Research Products, US.

Neosystems Laboratories

BP 309 R8, F-67008 Strasbourg Cedex. Tel: 88 36 96 96

Suplies amino acid derivatives for protein synthesis as well as offering custom peptide synthesis, peptide and protein sequencing, and peptide anti-sera preparation. Also supplies diagnostic kits, multi-channel peptide synthesizers and preparative liquid chromatography equipment.

Nermag

49 Quai du Halage, F-92500 Rueil Malmaison.

Tel: 1 732 92 05 Telex: 204029

Produce mass spectrometers.

Nicolet Instruments Sarl

Rue Elsa Triolet, ZI Les Gatines, F-78370 Plaisir.

Telex: 3 054 0097 Tel: 3 00 55 83 00

Distribute analytical instruments, including x-ray diffraction systems as well as laboratory computers.

Nitris SA

2596 avenue de Frejus, Le Tremblant, F-06210 Mandelieu. Tel: 93 49 91 67

Offers aerobic and anaerobic systems for the treatment of industrial and domestic water supplies.

Novo Industrie Enzymes SA

26 rue Fortuny, F-75017 Paris.

Telex: 642640 novo Tel: (1) 42 67 22 67

Distributes enzymes (see Novo Industri AS, Denmark).

Novo Industrie Pharmacie SA

103 rue la Boetie, F-75008 Paris.

Tel: (1) 42 25 93 90 Telex: 642188 novoip

Markets pharmaceutical products (see Novo Laboratories Ltd, UK).

Nuclepore France

72 boulevard de Courcelles, F-75017 Paris. *Tel*: (1) 42 41 83 11

Supplies membranes and apparatus for filtration, ultrafiltration and microfiltration.

Numelec SA

1 place de la Gare, La Verriere, F-78320 Le Mesnil Saint Denis. Tel: 1 30 62 43 20 Telex: 697143

Offer acquisition and image analysis of biological materials.

Odam-Bruker

34 rue de l'Industrie, F-67160 Wissembourg.

Markets equipment for flow cytometry including flow analyzers and sorters and multi-channel analyzer and sorter controllers compatible with all major flow cytometers and programmable in Pascal.

Omnium de Traitement et de Valorisation

Supplies systems for the biological treatment of water and effluents, including anaerobic systems. Subsidiary of the Compagnie Generale des Eaux, France.

Omnium Scientifique Industriel

141 rue de Javel, F-75739 Paris Cedex 15.

Tel: (1) 45 54 97 31

Telex: 842270011 osilabo

Supplies clinical diagnostic test kits and viral diagnostic reagents, as well as nutrient media and serums for cell and tissue culture. Agent for Polyscience Inc, US and M A Bioproducts, US.

Organon Teknika

5 avenue des Pres, BP 26, F-94267 Fresnes. Tel: 46 60 10 20 Telex: 631641f - otgdf

Market a wide range of products for medical, hospital and research use including clinical laboratory systems (micro- ELISA, immobilized enzymes etc), bloodbank and blood transfusion reagents. Also markets products previously marketed by Litton Bionetics and Cooper Technicon Cappel, companies aquired by Organon (Netherlands).

Organotechnie

27 avenue Jean Mermoz, F-93120 La Courneuve. *Tel*: 1 48 38 91 35 *Telex*: 213410

Supply proteins and protein hydrolysates as well as bile pigments and enzymes, organ extracts and other similar natural products. Offer services in drying (vacuum or spray) and produce materials tailored to clients specific needs. Division of Cooperation Pharmaceutique Française group.

Orimbio SA

5 bis rue Maurice Rouvier, F-75014 Paris. *Tel*: 1 45 45 50 10 *Telex*: 842203546

Supply immunological and biological reagents. Distributor for Atlantic Antibodies, US.

Oris Industrie

BP 21, F-91190 Gif sur Yvette. Tel: 1 69 80 71 58 Telex: 692431

Biomedical company active in four major areas of health care: biomedical imaging, biological analysis, therapy and rehabilitation. Develops methods and equipment for use in these areas such as diagnostics, screening and radiotherapy. A subsidiary of CEA (France). Distributor for Centocor, US.

Orsan

16 ruc Ballu, F-75009 Paris. Tel: (1) 42 80 66 25 Telex: 650847

Produces glutamates and glutamic acid derivatives. Part of the group Lafarge Coppee, France.

Ortho Diagnostic Systems

69 avenue de la belle etoile, ZAC Parinor 2 - BP 550-42, F-95946 Roissy Charles de Gaulle Cedex.

Produce monoclonal antibodies and laboratory reagents including blood group reagents, antiserums etc.

OSIbio

141 Rue de Javel, F-75739 Paris Cedex 15. *Tel*: 1 45 54 97 31 *Telex*: 270011

Supplies equipment, glassware and chemicals for biotechnology laboratories. Products include electrical balances centrifuges, water baths, cell culture media and apparatus, carbon dioxide incubators, membrane filtration systems, microscopes, freeze driers, etc.

Ozvme

31 rue des Fougeres, F-78310 Maurepas. Tel: 1 30 64 72 34 Telex: 699470

Produces restriction enzymes and other enzymes which modify nucleic acid as well as methylases and other reagents for research use in genetics and molecular biology.

Pall France SA

Boite Postale 146, 3 rue des Gaudines, F-78102 Saint Germaine-en-Laye Cedex.

Tel: (1) 34 51 03 50 Telex: 697497

Supplies a wide range of laboratory and industrial filtration systems and accessories (see Pall Filtration, US).

Paramex

9 rue Française, F-75002 Paris. *Tel:* 47 36 38 21

Produces synthetic media for cell culture.

Pasteur Culture Collection of Cyanobacterial Strains

Institut Pasteur

24 rue du Docteur Roux, F-75724 Paris Cedex 15.

Hold culture collection of Cyanobacteria for general microbiology research.

Pasteur Vaccins

1 boulevard Raymond Poincare, F-92430 Marnes la Coquette. *Tel:* 1 47 41 79 22 *Telex:* 206464

Produce vaccines and serums against bacteria as well as enzymes for diagnostic use.

Paul Doittau Ets

Boite Postale 103, 14 rue Emile Zola, F-91102 Corbeil Essonnes. Tel: 64 96 92 10 Telex: 692405

Produces glucose, glucose syrups and starch derivatives.

Payan et Bertrand SA

avenue Jean XXIII - BP 57, F-06332 Grasse. Tel: 93 70 05 35 Telex: 470882

Produces essential oils and other natural aromatic products.

PBS Orgenics

Parc de l'Innovation, BP 209, F-67405 Illkirch Cedex. *Tel*: 88 67 08 30

Produce diagnostic and detection systems based on monoclonal antibodies and the detection of nucleic acids modified by sulphonation. Can be used in blotting systems, plaque hybridization experiments or in situ hybridization. Marketed in kit form with all the reagents required for visualization of hybrid DNA. Have developed a rapid HIV-1 test.

PEC Engineering

Agro-Industrie, 23 rue des Beaux Soleils, Osny BP 205 F-95523 Cergy Pontoise.

130 bis route d'Espagne, BP 1185, F-3100 Toulouse. Tel: 61 41 11 50

Design systems for anaerobic digestion of wastes as well as aquatic plants.

Pechiney Ugine Kuhlmann SA

PUK SA

Boite Postale 78708, F-75360 Paris Cedex 08. *Tel:* (1) 45 61 61 61 *Telex:* 290503

Holding company with subsidiaries in areas of chemicals, metal and industrial production.

Perkin Elmer SA

BP 67, 1 rue Franklin, F-78054 Cedex Bois d'Arcy. Tel: (1) 34 60 61 62 Telex: 697818

Supplies instruments and accessories for chromatography and spectroscopy as well as elemental and thermal analysis, polarimetry and dedicated analytical systems. Dedicated systems include automated microtitration equipment, automated plate readers, automated drug screening equipment and HPLC systems.

Pernod Ricard

142 boulevard Haussmann, F-75008 Paris. Tel: 1 43 59 28 28 Telex: 641930

Laboratoire de Recherches, 120 avenue Foche, F-94015 Creteil. Tel: 1 49 81 50 31 Tlx: 262047

Developing in vitro culture methods for the production of plants producing aromatic oils or perfumes.

Pfizer France

Boite Postale 60, 86 rue de Paris, F-91400 Orsay Cedex. Tel: (1) 69 07 78 29 Telex: 692807

Produces antibiotics (see Pfizer Inc, US).

Pharmacia France SA

8 square Newton - BP 210, F-78180 Montigny Le Bretonneux. Telex: 696501 Tel: 30 43 99 19

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectrofocusing and cell studies as well as health care products including diagnostics, implantable drug delivery systems and gene synthesis products (see Pharmacia AB, Sweden).

Pharmacia LKB Instruments SA

4 rue de l'Acadie, BP 1064 Orsay Cedex, F-91940 Les Ulis Cedex. Tel: (1) 64 46 36 36 Telex: 600915

Supplies instruments and chemicals for use in liquid chromatography, electrophoresis, electrofocusing, isotachophoresis, microtomy and fermentation (see Pharmacia LKB-Produkter AB, Sweden).

Philips Industrielle & Commerciale SA

105 rue de Paris, F-93002 Bobigny Tel: (1) 48 30 11 11 Telex: 210290

Supplies analytical instruments, including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK).

Pioneer France Mais SA

4 rue Paul Bernies, F-31075 Toulouse Cedex. Telex: 531564f Tel: 61 57 10 10

Produce hybrid maize and other seeds such as wheat and lucerne as well as microbial products such as silage additives and probiotics. Carrying out research and development on selection of plant hybrids as well as microbial genetics. Joint venture with Pioneer Hi-Breed International (US).

Poly Labo Paul Block et Cie

305 rue de Colmar, F-67100 Strasbourg Meinau. Tel: 88 39 13 10 Telex: 890281f

Distribute a wide range of labware for use in cell culture, virology and biochemistry. Agents for Nunc Denmark, Wheaton, US and Nalge US.

Pompes Guinard

179 boulevard Saint-Denis, F-92400 Courbevoie. Tel: (01) 788 50 52 Telex: 610592

Manufactures a wide range of industrial pumps including centrifugal, rotor and volumetric systems suitable for fermentation, water treatment and distillation applications.

Pro Entretien

35 rue des deux Communes, F-93100 Montreuil. Tel: 1 48 51 50 84

Produce sterile laboratory gloves, filtration masks and clean room wipes.

Prochrom SA

BP 9, chemin des Blanches-Terres, F-54250 Champigneulles. Tel: 83 31 22 44 Telex: 850 990 sep pro Fax: 83 31 20 51

Engineering and manufacturing company providing services and products related to industrial separation technology including large scale HPLC, gas chromatography and SCF chromatography systems.

Prolabo

12 rue Pelee, F-75011 Paris.

Tel: 1 48 07 38 00 Telex: 680566 prlab Fax: 1 43 55 28 50

BP 369, F-75526 Paris Cedex 11

Supplies wide range of analytical instruments including gas analyzers, pH and conductivity meters, pumps, spectrophotometers, refractometers, etc. Also supply a wide range of reagents and chemicals including additives for waste-water treatment plants. Member of Rhone-Poulenc Group.

Promill

12 route Nationale, BP 109, F-28104 Dreux. Tel: 37 43 20 74 Telex: 760732

Produce bioethanol and animal feed proteins.

46 rue Colmet Lepinay, F-93100 Montreuil Fax: 1 42 87 10 13 Tel: 1 42 87 36 76 Telex: 212513

Produce natural flavours and fragrances, especially vanilla, as well as identical synthesised compounds. Member of Phone-Poulenc Group.

Raffineries de Soufre Reunies (SRA)

1 place de General de Gaulle, F-13001 Marseille. Tel: 91 54 90 60 Telex: 430581

3 boulevard de la Lousiane, F-13014 Marseille

Developing biopesticides.

Reactifs IBF

35 ave Jean-Jaures, F-92390 Villeneuve-la-Garenne.

Tel: 1 798 17 17 Telex: 610719

Supplies immunological and biological reagents including Protein A and

Realef

9 rue Claude Tillier, F-75012 Paris. Tel: 1 43 67 03 05 Telex: 216428

Supplies monoclonal and polyclonal antibodies, sera, antisera and animal tissue as well as immunological diagnostic kits; products of Serotec Ltd, UK. Also distributor for Jackson Immunoresearch Laboratories, US.

Rexim SA

3 rue Dagorno, F-75012 Paris. Tel: 1 43 44 54 41

Research, rue de Verdun, F-80400 Ham. Tel: 23 81 00 25 Tlx: 140877

Produce amino acids (L, DL and D) as well as amino acid derivatives, betaine and its derivatives, acetoglutaric acid, galacturonic acid, nicotinamide and glucoheptonic acid and derivatives.

Rhone Merieux

Laboratoire IFFA

254 rue Marcel Merieux, BP 7009, F-69342 Lyon Cedex 2. Telex: 375470

Laboratoire de Toulouse, 4 chemin du Calquet, F-31057 Toulouse. Tel: 61 49 34 15 Tlx: 520000

Produce bacterial vaccines and serums for veterinary use. Carrying out work on identification of antigens and cloning of relevant genes. Interests include recombinant DNA technology production of synthetic vaccines, monoclonal antibodies, animal immunology in relation to bacterial infections, hormones, bacteria, protozoans and viruses.

Rhone-Poulenc

25 quai Paul Doumer, F-92408 Courbevoie Cedex Tel: 1 47 68 1234/0217 Telex: 610550/610500

Supply cross flow filtration units for ultrafiltration or microfiltration applications.

Rhone-Poulenc Agrochimie

14-20 rue Pierre-Baizet, BP 9163, F-69263 Lyon Cedex 9. Tel: 72 29 25 25 Telex: 310098 Fax: 72 29 27 99

Agrobiological division. Developing genetic engineering technology for improvement and protection of crop plants. Research projects include:isolation of plant genes for resistance to herbicides and parasites; host-parasite relationships; creation of varieties with increased resistance to stress conditions.

Rhone-Poulenc Chimie

Les Miroirs, Defense 3, 18 ave d'Alsace, F-92400 Paris-La Defense Cedex Tel: 1 47 68 12 34 Telex: 610500 Fax: 1 47 68 09 00

Speciality biochemicals division. Produces, xanthan gum, bacterial polysaccharides, itaconic and lactic acid for the cosmetics, food and agrochemical industries. Products under development include, novel bacterial polysaccharides, cyclodextrins, and natural fragrances.

Rhone-Poulenc Sante

20 Avenue Raymond-Aron, F-92160 Antony. Tel: | 40 9| 6| 23 Telex: 632378 Fax: | 40 9| 64 00

Centre for research and development of antiparasite, antimicrobial, anticancer, cardiovascular, immunological and anti-inflammatory etc therapeutics, analgesics and novel biochemical reagents.

Robatel-SLPI

rue de Geneve, BP 203, F-69740 Genas. Tel: 78 90 82 77 Telex: 300595

Produce systems for use in separation and extraction, including decanters, pulsating column systems etc.

Roche Produits

52 boulevard du Parc, F-92251 Neuilly sur Seine. *Tel*: 1 46 37 77 00 *Telex*: 611402

Produces vitamins and food additives.

Rohm and Haas France

Le Tour de Lyon, 185 rue de Bercy, F-75579 Paris Cedex 12. Tel: 1 4345 2421/8580 Telex: 220819/214100 duolif

Produce ultrafiltration membranes, bacteriocides and ion exchange resins.

Roquette Freres SA

4 rue Patou, F-59022 Lille. Tel: 20 30 77 97 Telex: 810858

Centre de Recherche, F-62136 Lestrem

Produce starch, glucose, dextrose, sorbitol, gluconates and fermentation syrups from maize, wheat or potatoes. Also produce antibiotics.

Roure Bertrand Dupont

Centre de Recherches

chemin de la Madeleine, BP 72, F-06332 Grasse.

Tel: 93 70 03 43

Produce aromatic compounds for use in the perfume, cosmetic and food industries - including products manufactured using bioconversion techniques. Also carrying out research on plant cell culture. Subsidiary of Hoffman La Roche, Świtzerland.

Roussel-Uclaf

35 boulevard des Invalides, F-75007 Paris.

Recherches et Production, 111 route de Noisy, F-93230 Romainville.

Tel: 1 48 43 93 10 Tlx:680501

Produces chemical intermediates for use in pharmaceuticals, insecticides, agricultural chemicals and industrial manufacturing processes. Products include antibiotics, vitamins and steroids as well as intermediates for cosmetics, perfumes and therapeutic nutrition. Also produce animal health products and plant protection chemicals.

Rousselot Ets

Boite Postale 129, rue Montolivet, F-07104 Annonay. Tel: 75 33 42 21 Telex: 345670

Produces centrifugal decanting, dewatering and separation equipment designed for use in pharmaceutical, chemical and textile applications.

Rousselot SA

8 rue Christophe Colomb, F-75008 Paris. Tel: (1) 47 23 55 25 Telex: 610551

Research Centre, Moulins Premiers - BP 23, F-84800 L'Isle sur Sorgue. Tel: 57 51 34 47

Produces photographic, pharmaceutical, edible and technical gelatins. Part of the Sanofi, France group.

RUA Instruments

Manufacture low temperature equipment, including systems for lyophilization, cryogenics and specific requirements for low temperatures.

Rua Instruments SA

Bat 4 Parc Industriel Nord de Torey, Boite Postale 14, F-77201 Torcy. Tel: (06) 005 68 53 Telex: 690612 cryolab

Manufacture laboratory freezers, cryogenic systems, water baths and laboratory scale freeze driers.

Rustica Bio-Recherches

Head Office, Rustica Semences, 111 ave Lespinet, BP-4043 Toulouse Cedex..

Tel: 61 25 21 31 Tlx:520881

Carries out research on important crops such as maize, soya and cereals. Subsidiary of Rustica Semances who produce seeds of maize and other grains as well as soya and other oil crops.

SADUC SA

BP 28 - ZI de Troques, F-69630 Chaponost. Tel: 78 56 46 51 Telex: 306621

Produce primary ingredients for the pharmaceutical and cosmetic industries. Products include collagens in various forms and enzymes immobilized on collagen supports.

Safi-Microviv et Cie

14 boulevard Lavoisier, F-49045 Angers. *Tel*: 41 48 33 76 *Telex*: 950511

Using in vitro techniques for the production of a wide range of plant types including ornamentals, horticultural and forestry species.

Sandoz Products SA

Boite Postale 318, 14 boulevard Richelieu, F-92500 Rueil Malmaison Cedex.

Distributes pharmaceuticals and agrochemicals of Sandoz AG, Switzerland. Carrying out research on pharmaceuticals.

Sanofi

40 avenue Georges V, F-75008 Paris. Tel: (1) 47 23 01 50/40 73 40 73 Telex: 630628

rue du Professeur Blayac, F-34082 Montpellier. Tel: (067) 40 01 33 Tx: 480240

Research and development company interested in the use of immunotechnologies in therapeutic applications, cell sorting and analysis, culture of both animal and plant cells, fermentation and molecular biology. Also working on production of enzymes of interest in industrial and therapeutic applications and extraction of biologically active materials from plants and fungi. Their recombinant human growth hormone has been approved for treatment of dwarfism in children. Members of the group include Elf-Biorecherches, Mero, Rousselot, SATIA, Sanofi-Elf Biorecherche and Diagnostics Pasteur.

Sanofi Elf Bio Recherches

Labege Innopole, BP 137, F-31328 Castanet Tolosan Cedex. Tel: 61 80 57 50 Telex: 52040

Research in areas of pharmaceuticals, food technology and fine chemicals. Work includes studies on isolation and expression of genes from microorganisms, animal cell lines and plant cell cultures as well as screening of microorganisms, pilot scale fermentation and down stream processing. Also working on protoplast fusion and micropropagation of plants.

Sanofi Recherches

Centre de Toulouse

195 route d'Espagne, F-31035 Toulouse Cedex. *Tel*: 61 41 11 62

Research on blood biology, peptides, oncology, cardiovascular disease and neurobiology. Activities include development of peptides of interest in diagnostics and therapeutics including aspects of solid phase peptide synthesis.

SAPEC

avenue Alfred Nobel, Carrefour de l'Echangeur, F-64000 Pau. Tel: 59 02 94 40 Telex: 570844

Builds anaerobic digestion systems.

Sartorius Sarl

11 avenue du 1er Mai, F-91122 Palaiseau. Tel: 1 69 20 93 11 Telex: 692339

Distribute a wide range of products for filtration; including disc filters, cartridges, and housings for polishing, clarification or sterilization of liquids or gasses. Products include cross flow micro- and ultra-filtration systems for use in microbiology, analysis and other laboratory work. Also supplies laboratory balances

15 avenue d'Eylau, F-75016 Paris. Telex: 614568 Tel: 1 47 04 67 67

Produces alginic acids and alginates from algae.

Societe Civile d'Etudes et de Recherches dans les Domaines de l'Innovation 59 route de Paris, F-69260 Charbonnieres les Bains.

Tel: 78 87 11 65 Telex: 370015

Developing methods for the use of algae in the treatment of potable water as well as developing uses for algal biomass. Developing the industrial use of ionizing radiation.

Scerma

F-50290 Coudeville.

Tel: 33 51 58 58 Telex: 170612

Produce casein and derivatives including casein hydrolysates. Carrying out research on enzymic hydrolysis of casein.

Schaefer Techniques

1 rue du Ruisseau Blanc, F-91620 Nozay. Tel: 69 01 49 73 Telex: 692266f

Specialists in on-line gas analysis using mass spectrometers (Perkin Elmer) in fermentation applications. Also supply optical particle counters for clean rooms and mass flowmeters. Agents for Perkin Elmer, US and Hastings,

Schott France Sarl

F-89140 Ponts/s Yonne.

Manufacture automatic titration equipment including a microprocessor controlled piston burette.

SCT Societe des Ceramiques Techniques

Departement Ceramiques Industrielles

Usine de Bazet-Tarbes, BP 1, F-65460 Bazet. Tel: 62 37 92 91 62 37 80 06 Cables: 520194

Manufacture ceramic equipment for handling corrosive compounds and working at high temperature.

23 rue Maximilien Robespierre, F-92130 Issy les Moulineaux. Tel: (1) 46 44 86 30 Telex: 203660

Supplies immunochemicals and clinical diagnostic kits as agent for Dako AS, Denmark as well as materials for electrophoresis, and clinical equipment including automated eight channel blood analysers.

Secomam

Fax: 1 39 90 82 58

Manufacture spectrophotometers (UV and visible) as well as automated clinical analyzers.

Sedipharm

55 avenue Kleber, F-75016 Paris.

Tel: (1) 45 53 58 15

Manufactures lysine for use in pharmaceutical products. Part of the Boehringer Ingelheim, Germany group.

Sema Energie

70 rue Cortambert, F-75116 Paris Tel: 1 45 03 21 33 Telex: 615178

Produce systems for bioconversion of wastes and pollution control as well as energy generation by anaerobic digestion.

Sema Metra Group

16-18 rue Barbes, F-92126 Montrouge Cedex Paris. Telex: 200601 Tel: (01) 657 13 00

Consultants in energy planning, conservation and renewable energy sources including the area of biogas production and use on both the small scale in developing countries and on the industrial scale.

SEMSA

103 avenue Pierre Grenier, F-92100 Boulogne. Tel: 1 46 21 66 66 Telex: 270553f

Distributor of sophisticated laboratory equipment including: DNA and peptide synthesizers; amino acid analyzers; carbohydrate analyzers; supercritical fluid chromatographs; beta counters and preparative HPLC systems. Agents for Biosearch, US, Biotronik, Germany, Dionex, US, and Lee Scientific US.

Separex

Chemin des Blanches Terres - BP 9, F-54250 Champigneulles. Tel: 83 31 24 24 Telex: 850 990 Fax: 83 31 24 83

Research and engineering company interested in the separation and purification of pharmceutical, cosmetic and biotechnical products.

Seppim

route de la Chalerie, F-61500 Sees Telex: 171310 Tel: 33 28 70 33

Supplies enzymes and related products for the following industries: brewing, distilling, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical; products of Biocon Ltd, Ireland.

SERES

Societe d'Etudes et Realisation d'Equipements Speciaux

72 rue Albert Einstein, Z I Aix en Provence, F-13763 Les Milles. Telex: 410902

Design and commercialize a wide range of on-line analyzers. Products include systems for determination of air or water purity and pollution control as well as automated control systems for use in the chemical and food industries.

Serono Diagnostics France

84 rue Edouard Vaillant, F-92300 Levallois-Perret. Tel: 1 47 39 91 91 Telex: 696330

Produce diagnostics based on radioimmunoassays, immuno-enzyme reactions and monoclonal antibodies.

SETAL

Societe d'Etudes Techniques Aquitaine-Languedoc

130 avenue des Lilas, F-64000 Pau. Tel: (02) 63 81 Telex: 570905

Engineering consulting company. Has carried out prototype studies for on-farm production of biogas (methane) as fuel for heating and for use as fuel for tractors. Process consists of a batch-fed anaerobic digester using a mixture of straw and manure. System being investigated as a means of producing compost.

101-103 rue de Seze, Boite Postale 34, F-69006 Lyon.

Tel: (078) 29 38 38 Telex: 340924

7 rue de l'Oratoire, F-69300 Caluire Cedex..

Supplies micro-calorimeters suitable for the investigation of biopolymer solutions by thermal analysis.

SFEC-Carbosep

Societe de Fabrication d'Elements Catalytiques

Boite Postal 201, Site Industriel de St Pierre de Sends, F-84500 Bollene. Tel: 90 30 97 70 Telex: 431227

Manufactures tubular ultrafiltration membranes suitable for applications in milk separation and other aspects of food processing and biotechnology based on unique mineral membrane material giving resistance to high pressure or temperature and extremes of pH that allows for steam sterilisation or cleaning.

SGi Setric Genie Industriel

Boite Postale 4050, avenue Didier-Daurat ZI de Montaudran, F-31029 Toulouse.

15 allees de Bellefontaine, F-31100 Toulouse. Tel: 61 40 85 85 Tx: 531930 Fax: 61 41 51 78

Supplies a complete range of fermenters from 2 to 5000 litres in capacity, Supplies a complete range of fermenters from 2 to 5000 litres in capacity, with automated control and data logging in modular form allowing for a maximum of flexibility. Carrying out research on aspects of nitrification, bacterial products for composting, use of bacteria for hydrolysis of polymers causing pollution and the development of mineral-based supports for immobilization of bacteria and enzymes. Also supply cell culture bioreactors from 10 to 600 litres capacity, suitable for hybridomas, suspensions or microcarrier systems of mammalian cells, plant cells and similar shear-sensitive microorganisms. Offer design and process development services. Affiliated to Moet Hennessy Group.

SGN

Societe Generale pour les Techniques Nouvelles

1 rue des Herons, Montigny le Bretonneux, F-78184 Saint Quentin Yvelines Cedex.

Tel: 1 30 58 60 00 Telex: 698316 sgn Fax: 1 30 58 65 22

Engineering company providing services in waste and effluent management. Interests include anaerobic fermentation, deep shaft systems, physico-chemical processing of industrial effluents, filtration, aerobic biological processes for waste treatment, flocculation and aeroflotation. Specialize in processes for the food industries.

Shaefer Techniques

1 rue du Ruisseau Blanc, F-91620 Nozay. Tel: 1 69 01 49 73 Telex: 692266

Produce mass spectrometers for use in analysis of gases produced during

Shandon France

parc Bellavues, F-95610 Cheminou Paro/Eragny. *Tel*: (010 331) 037 12 00 *Telex*: 204213

Supplies materials for histology, biochemistry and high performance liquid chromatography.

Siccap-Emmop

32 avenue du Docteur Heckel, F-13367 Marseille Cedex 4. *Tel*: 91 44 92 92 *Telex*: 420425

Supplies fine chemicals and reagents for laboratory a diagnostic use. Agent for Fluka AG, Switzerland.

Sigma Chimie Sarl

L'Isle d'Abeau Chesnes, BP 701, F-38297 La Verpilliere Cedex. Tel: 74 95 63 91 Telex: 308215

Supplies biochemicals and diagnostics. Distributor for Sigma Chemical Co,

Skalar Analytique SA

40 quai d'Issy les Moulineaux, F-75015 Paris. *Tel*: 1 554 75 25

Supply segmented flow analyzers for determination of products such as sugars, phosphate, vitamins or other nutrients, as well as process analyzers for water and effluent control. Also market an automated digestion system for safe handling of hazardous digestions as well as sample processors.

SmithKline SA

Division Biologique

89 rue de l'Institut, BP 1330, F-99000 Rixensart Belgique. Tel: 19 32 26 53

Producing vaccines and antibiotics against viral, bacterial and parasitic diseases.

Sobea

280 avenue Napoleon Bonaparte, F-92506 Rueil Malmaison Cedex. Tel: 1 47 52 40 00 Telex: 203978

Design systems for the anaerobic digestion of poultry manure.

Sochal

11 rue Camille Pelletant, F-92300 Levallois Perret. Tel: 1 47 30 05 97

Produce enzymes for use in milk processing and cheese production. Part of the Boehringer Ingelheim, Germany group.

Sochibo SA

8 rue des Freres Caudron, F-78140 Velizy Villacoublay. Tel: 39 46 96 76 Telex: 699019

Supplies research and diagnostic reagents and fine chemicals, including growth factors and hormones for the growth of mammalian cells under defined conditions. Markets enzymes, defined sequence oligonucleotides, linkers and other materials for recombinant DNA research and radioimmunoassay kits. Distributor for Collaborative Research, US.

Societe Bretonnes des Algues et Colloides

La Grande Palud - BP 6, F-29208 Landerneau. Tel: 98 85 39 80 Telex: 940315

Produce alginates and other products from algae.

Societe Commerciale De Moteurs-CLM

Manufacture a wide range of internal combustion engines including cogeneration systems for heat and electricity suited for use with biogas produced by anaerobic digestion.

Societe Commerciale UCB

55 rue de la Boetie, F-75008 Paris. Tel: (1) 45 63 05 33 Telex: 280142

Supplies pharmaceuticals, fine chemicals, biological reagents and immunological products including polyclonal antibodies.

Societe de Bioinformatique et Biotechnologies

45 rue Emile Zola, F-37000 Tours. *Tel:* 47 05 27 04

Produce image analyzers, statistical and simulation packages and develop expert systems for the medical and pharmaceutical industries.

Societe des Produits du Mais

379 avenue du General de Gaulle, F-92140 Clamart. *Tel*: 1 46 30 23 41 *Telex*: 250750

Produce amylases, dextroses, glucose syrups, soluble extracts of maize and fermentation media for industrial purposes.

Societe Française BP Energie

10 quai Paul Doumer, F-92412 Courbevoie. *Tel*: 1 47 68 44 59 *Telex*: 620392

Working on biomass energy systems as well as treatment of and energy production from manures.

Societe Française Hoechst

Tour Roussel-Nobel, Cedex 3, F-92080 Paris La Defense.

Tel: 1 47 67 40 00 Telex: 620989

Centre de Recherche et d'Applications, 64 avenue Gaston Monmousseau, F-93240 Stains.

Tel: 1 48 21 61 88 Tlx: 610131

Markets pharmaceutical products including diagnostics, antibiotics and industrial enzymes as well as plant protection chemicals. See Hoechst AG, Germany.

Societe Française Niro Atomizer

4 avenue du 18 juin 1940, F-92504 Rueil Malmaison Cedex. *Tel*: (1) 47 08 92 92 *Telex*: 203381

Suppliers of separation, dewatering and drying equipment (see Niro Atomizer AS, Denmark).

Societe Grace Sarl

Division Amicon

BP 9, F-28231 Epernon.

Tel: 37 28 95 41 Telex: 760022

Supplies systems for laboratory and process scale ultrafiltration as well as media and columns for high performance and preparative chromatography. Also markets hollow fibre systems for cell culture.

Societe Rapidase

Boite Postale 139, 15 rue des Comtesses, F-59113 Seclin. Tel: 20 90 93 20 Telex: 820645

Supplies a wide range of industrial enzymes and related products. Subsidiary of Gist-brocades NV, Netherlands.

Solvay & Cie SA

12 cours Albert 1er, F-75383 Paris Cedex 08. Tel: (1) 42 56 66 11 Telex: 280193

Manufactures organic and inorganic bulk chemicals as well as specialities through subsidiaries.

Sonertec

Centre de Transfert, Ave de Rangueil, F-31077 Toulouse cedex. Tel: 33 61 55 96 77

Developing continuous fermentation processes.

Sopares

51 bis rue Raymond Lefevre, F-94250 Gentilly. Tel: (1) 45 80 44 01

Supplies accessories, reagents and adsorption media for gas and liquid chromatography. Agents for Phase Separations Ltd, UK.

Sovap

30 rue Ampere, F-85000 La Roche sur Yon. Tel: 51 62 11 68

Produce anaerobic digesters for production of methane from chicken manure.

Spectra-Physics France

Z A de Courtaboeuf Avenue de Scandinavie, BP 28, F-91941 Les Ulis Cedex

Tel: 1 69 07 99 56

Manufacture workstations for handling data from chromatographs as well as a wide range of equipment and accessories for gas and liquid chromatography (see Spectra Physics Inc, US).

Speichim

Tour Franklin, 100-101 terrasse Boieldieu, F-92081 Paris La Defense

Tel: (1) 47 76 42 21 Telex: 612262

Laboratories: rue du Reclus, BP 41, F-43100 Brioude. Tel: 71 50 13 76 Tlx: 392557

Major engineering company offering design construction, erection and commissioning of complete turn-key chemical plant including production of fuel ethanol by fermentation, fine chemicals, pharmaceuticals and treatment of wastes and effluents. Part of the group Spie Batignolles, France.

Spie Batignolles

Tour Anjou, 33 quai de Dion Bouton, F-92814 Puteaux Cedex. Tel: (1) 47 76 43 64 Telex: 620834

Major engineering consultant and contracting company. Associates include Speichim, France and Citrem, France.

Spiral Sarl

3 rue des Mardors, Arc sur Tille, F-21560 Couternon. *Tel*: 80 47 56 50 *Telex*: 350585

Supplies chromatography accessories, amino acid standards and electrophoresis apparatus.

Staro

164 boulevard Camelinat, F-92240 Malakoff. Tel: 1 45 56 22 40 Telex: 260819

Produce agitators, mixers, emulsifiers and dispersers.

Strem France

17 rue Vauban ZI, Strasbourg.

Tel: 88 81 90 05 Fax: 88 20 27 19

Provide services in organic synthesis.

Subtil-Crepieux

Les 7 chemins, Route de Genas, F-69680 Chassieu. Tel: 72 37 19 72 Telex: 330086

Manufactures sterilization equipment, pasteurizers and ultrasonic washing machines aimed at the pharmaceutical and food industries.

Sucre Union

27 rue Chateaubriand, F-75383 Paris Cedex 08. Tel: 1 45 63 17 33 Telex: 641882

A group of 19 sugar factories; produce sugar, molasses, alcohol and other by-products of beet processing.

Sulzer

BP 1055, F-78202 Mantes la Jolie.

Tel: 1 30 92 92 10

Design systems for the anaerobic digestion of manures and agricultural

Supelco France Sarl

5 rue Jean Mermoz, F-78100 St-Germain-en-Laye.

Tel: 01 34 51 12 13 Telex: 699679

Supplies laboratory separation products.

Sybron Chimie France SA

Produce bacterial cultures for use in pollution control.

Synthelabo

58 rue de la Glaciere, F-75013 Parisessis Robinson.

Tel: 1 45 89 89 29

22 avenue Galilee, F-92350 Le Plessis Robinson

Manufactures pharmaceutical products.

Tebu France SA

Boite Postale 15, 39 rue de Houdan, F-78610 Le Perray en Yvelines. Tel: (1) 34 84 62 52 Telex: 698622

Supplies diagnostic reagents, both human and animal antiserums, monoclonal antibodies and other immunological products. Distributor for Cedarlane Laboratories, Canada, Nordic Immunological Laboratories and Sanbio, Netherlands and Genzyme, US.

Tecator SA

2 rue de l'Oratoire, F-75001 Paris. Tel: (1) 42 60 24 24

Produce control instruments for analysis and control of dosing as well as systems for HPLC, etc. See Tecator Inc, USA.

Tech-Sen

rue Penberton BP 347, St Maurice de Beynost, F-01703 Miribel Cedex. Tel: 72 01 27 27 Telex: 305445 Fax: 72 25 88 99

Manufacture polymer and mineral membrane modules for cross flow separation, from laboratory scale to large scale plant operations. Member of Rhone-Poulenc Group.

Techim Sarl

4 rue de la Celle, F-78150 Le Chesnay. Tel: (1) 39 54 77 32 Telex: 698749

Produces equipment and accessories for aerobic and anaerobic biological waste treatment, plastic support media, rotary contact plant, biogas systems, gas scrubbers and biological odour control units, as well as distillation plant and distillation column packings.

Technicome SA

1 rue Brunel, F-75017 Paris.

Tel: (1) 47 55 69 81 Telex: 660844

Suplies optical and other scientific equipment including fibre optic systems.

Technip

Tour Technip, F-92090 Paris La Defense Cedex 23. *Tel*: 1 47 78 21 21 *Telex*: 612839

Engineering company with experience in alcohol, protein, antibiotics and chemical production.

Technogram SA

267 rue Lecourbe, F-75015 Paris. Tel: 1 45 57 30 24

Using recombinant DNA technology to develop bioprocesses for production of amino acids and vitamins.

Tecnomara France

5 avenue Rey de Foresta, F-95160 Montmorency. Telex: 695003 Tel: 39 64 43 44

Supply a wide range of laboratory equipment including dosing pumps, petrie dish fillers, autoclaves, equipment for cell culture, laminar flow hoods and pipetters.

FRANCE Part III

Touzart & Matignon

8 rue Eugene Henaff, F-94400 Vitry-sur-Seine.

Supplies ion exchange resins and speciality column packings for high performance liquid chromatography, as well as calibration standards and buffers for amino acid analysis by liquid chromatography.

Transgene SA

16 rue Henri Regnault, F-92400 Courbevoie. *Tel:* 1 47 78 13 03 *Telex:* 611309

Transgene Laboratoires, 11 rue Molsheim, F-67000 Strasbourg. Tel: 88 22 24 90 Tlx: 880767

Developing genetic engineering and other techniques of molecular biology for commercial processes and products using bacteria, animal cell culture or viruses. Products under development include gamma interferon, Factor VIII and IX, recombinant rabies vaccine, AIDS vaccine, hirudin, alpha-1 antitrypsin analogues against emphysema and other respiratory system conditions, as well as developing genetically modified yeasts and lactic acid bacteria for use in production of beer, bakery and dairy products. Also produce fine chemicals and industrial enzymes.

Transia

8 rue Saint Jean de Dieu, F-69007 Lyon.

Tel: 72 73 03 81 Telex: 301051 Fax: 72 73 43 34

Contract research organisation offering services in biotechnical applications related to the food industry, and food quality in particular. Developing rapid diagnostic tests based on enzyme linked immunoassays using monoclonal or polyclonal antibodies. Products include tests for aflatoxins and pathogenic bacteria likely to cause problems to the seed industry as well as tests for lactic bacteriophagic viruses and Clostridia which cause misfermentation. Offers product licensing, collaboration in on-going projects and is interested in finding commercial partners for its product lines.

Tripos Associates

3 allee des Garays, Z I, F-91124 Palaiseau. *Tel*: 1 69 201647

Supplies molecular modelling and analysis systems for proteins and nucleic acids providing biopolymers and'small' molecules software in a single package (see Tripos Associates, US).

Unichema France SA

Developing chemicals from fats and oils as well as biological and enzymic conversion techniques.

Universite de Clermont Ferrand

Laboratoire de Genie Chimique Biologique

Complexe des Cezeaux - BP 45, F-63170 Aubiere.

Tel: 73 26 41 10

Studying biological reactors, including aspects of fermenter design and fermentation modelling related to the food industries.

Universite de Clermont Ferrand

Microbiologie Industrielle

28 place Henri Dunant, BP 38, F-63001 Clermont-Ferrand Cedex. Tel: 73 26 56 75

Studying the use of microorganisms in degradation of organic material including studies on fungal biodegradation.

Universite de Compiegne (UTC)

Department of Biological Engineering

Boite Postale 233, 25 rue Eugene Jaquet, F-60206 Compiegne. Tel: 44 20 99 60 Telex: 150110

Carrying out studies on immobilized enzyme systems, affinity chromatography, kinetics of immobilized enzyme systems and reactor kinetics with immobilized cells and enzyme electrodes as well as fermentation for energy, monoclonal antibodies, genetic manipulation and general animal genetics.

Universite de Dijon

Laboratoire d'Oenologie

Batiment Mirande, F-21100 Dijon.

Tel: 80 39 52 00

Studying colloids in wine as well as the nitrogen metabolism of lactic acid and malolactic acid fermentations.

Universite de Grenoble

Laboratoire de Microbiology Pharmaceutique Laboratoire de Bacteriologie et Virologie

Domaine de la Merci, F-38700 La Tronche.

Tel: 76 51 80 00

Studying microbiology and hybridomas, as well as immunofluorescence detection techniques, antibodies and immunology, production of human monoclonal antibodies and the production of new antibiotics.

Universite de Limoges

Laboratoire de Biologie Experimentale

123 rue Albert Thomas, F-87060 Limoges Cedex.

Tel: 55 79 46 22

Studying the biology of cell differentiation photosynthesis and processes of methanation.

Universite de Lyon

Department of Medical Microbiology

43 boulevard du 11 Novembre 1918, F-69621 Villerbaune.

Tel: 78 89 81 24

Studying the biology of strict anaerobic bacteria as well as the mechanism of action of pharmaceutical products.

Universite de Marseille

Laboratoire de Biotechnologies

Centre Saint Charles, F-13331 Marseille Cedex 3.

Tel: 91 95 90 71

Basic studies on fermentation and enzymology including the production of ethanol by Zymomonas mobilis, as well as the synthesis of thyrosine by immobilized cells.

Universite de Montpellier

Laboratoire de Genie Microbiologique

place Eugene Bataillon, F-34060 Montpellier Cedex.

Tel: 67 63 30 93

Researching the optimisation of aerobic fermentations as well as studies on immobilized microorganisms and the production of aromatic substances.

Universite de Nice

UER de Medecine

avenue de Valombrose, F-06034 Nice Cedex.

Tel: 93 37 77 77

Undertaking immunological studies on alpha-fetoprotein and developing radioimmunoassays.

Universite de Nice

Laboratoire de Biologie Vegetale

28 avenue Valrose, F-06034 Nice Cedex.

Tel: 93 52 98 98

Carrying out studies on nitrogen fixation in rhizobia as well as microbiology of soils.

Universite Paris XI

Laboratoire de Microbiologie

78 rue du Generale Leclerc, F-94270 Kremlin Bicetre.

Tel: (1) 45 21 36 32

Studying immuno-enzymic techniques for production of diagnostics for viral infections using monoclonal antibodies.

Universite de Toulouse

Laboratoire de Microbiologie

118 route de Narbonne, F-31400 Toulouse.

Tel: 61 55 66 11

Studies on microorganisms of industrial interest, biosynthesis and excretion of fungal enzymes.

University de Nancy

Laboratoire de Chimie Biologique

BP 239, F-54506 Nancy Cedex.

Tel: 83 91 20 00

Studying fermentations and bioconversions using anaerobic bacteria (clostridia).

Usifroid

BP 123, F-78312 Maurepas Cedex Tel: 1 30 51 21 27

Telex: 696322 Fax: 1 30 62 54 77

Design, manufacture and market a range of freeze-drying equipment, associated loading and unloading systems, sterilizers, gas removers and vacuum drying chambers. Subsidiary of Air Liquide.

Ussi Ingenierie

116 avenue Aristide-Briand, BP 72, F-92223 Bagneux. Telex: 200386 Fax: 1 46 64 84 90 Tel: 1 46 64 13 13

Provides services in separation and fermentation as well as tubular bioreactor technology. Has a testing centre for microalgae culture and processing.

Valorga SA

Bureau d'Etudes, 26 rue Henri Duhamel, F-38100 Grenoble.

Tel: 76 22 28 81 Design systems for recovery of products and energy from wastes and

residues. Have developed a high solids anaerobic digestion system for use with domestic solid wastes.

ZI de Gourhel, F-56800 Ploermel. Tel: 97 74 03 92 Telex: 95107 Telex: 951076

Produce heparin from pig intestine for use in blood treatment.

Boite Postale 12, quartier de Courtaboeuf, F-91441 Les Ulis Cedex. Tel: 69 07 78 26

Supplies instruments for chromatography and spectroscopy (see Varian Associates Inc, US).

Verre-Labo-Mula SA

ZI 19 Av de l'Industrie, F-69960 Corbas. Tel: 78 238 490 Telex: 370950

Supplies glass laboratory ware, general laboratory equipment and columns for liquid chromatography as well as tissue culture flasks.

VG Instruments SA

3 rue du Marechal de lattre de Tassigny, F-78150 Le Chesnay. Tel: (01) 39 55 51 20 Telex: 695845 Fax: (01) 39 63 22 01

Manufactures analytical instruments including gas chromatography/mass spectrometry systems for process monitoring suited to monitoring of fermentations and research into bioengineering systems and reactions.

Virbac Labs

BP 27, F-06511 Carros Cedex. Tel: 93 29 08 33

Developing veterinary products using recombinant DNA and monoclonal antibody technology.

Vital Scientifique Sarl

Avenue de la Baltique, ZA de Courtaboeuf, F-91940 Les Ulis. Tel: 6 928 64 70 Telex: 600966

Manufacture automated enzyme analyzers and osmometers.

Vitatron Sarl

ZA de Courtaboeuf, avenue de la Baltique, F-91940 Les Ulis. Tel: 69 28 64 70 Telex: 600966

Supplies reagents for discrete system autoanalyzers.

Waitaki

43 rue du Rocher, F-75008 Paris. Tel: 1 42 94 13 12 Telex: 42 281593

Distributor for biochemicals; products of Waitaki, Canada.

6 rue J P Timbaud, F-78180 Montigny les Bretonneux. Tel: 30 58 98 58

Supplies equipment and accessories for high performance liquid chromatography (see Waters Associates Inc, US).

Westfalia Separator France

18 avenue de l'Europe, BP 120, F-02400 Chateau-Thierry. Tel: 23 83 05 44 Telex: 140611

Manufacture equipment for clarification, separation, concentration and extraction by centrifugal means.

Whatman SA

5 rue Pougin de la Maisonneuve, F-45200 Montargis.

Tel: 38 98 37 13 Telex: 780229

Produces cellulose based ion exchangers for chromatography and protein purification as well as other types of chromatography medium, filter papers, etc.

Wild & Leitz France

89 avenue du 18 Juin 1940, F-92506 Rueil Malmaison.

Telex: 203334f Tel: 1 47 32 92 13

Supply microscopes and related optical instruments.

Ysebaert SA

49 rue Ernest Renan, F-95320 St Leu La Foret. Tel: 39 60 74 31 Telex: 697402f

Produce equipment for transfer of small amounts of liquid.

Tour Essor 93, 14 rue Scandicci, F-93508 Pantin.

Tel: (1) 48 43 61 31 Telex. 231229

Supplies an automated laboratory system for liquid transfer and routine quantitative functions; can be linked to more complex instruments and apparatus (see Zymark, US).

FR GERMANY

A & D Instruments GmbH

Lyoner Str 35, D-6000 Frankfurt Main. Supply micro and analytical balances.

Aachen Technical University

Department of Biophysics

D-5100 Aachen. Tel: (02461) 616711

Studying production of algae (including Aphanoteca and Tetraselmis) as a raw material for production of biofuels by cultivation in open ponds with the objective of developing large-scale production in coastal desert regions, followed by anaerobic digestion to produce biogas (methane).

Abimed Analysen-Technik GmbH

Raiffeisenstr 3, Postfqch 2141, D-4018 Langenfeld. Tel: 02173 72071 Telex: 8515940

Supply a wide range of scientific equipment including automated analyzers for ATP and NADH, elemental analyzers, analytical and preparative liquid chromatography equipment (pumps, detectors, fraction collectors, etc), and liquid handling (pipetters, automatic dosers, pumps).

Adrian Verstallen

Schiffhorst 208a, D-4600 Dortmund 16. Tel: 0231 800644 Telex: 231402 adver

Distributes laboratory and production microfluidizers for cell disruption, including special units for yeast and gram positive cells, and the preparation of ultrafine emulsions and liposomes.

AEW Plan GmbH

Huyssenalle 58-64, D-4300 Essen 1. Tel: (0201) 1898 1 Telex: 857 9826

Developing systems for the treatment of slaughterhouse wastes based on anaerobic treatment with the objective of producing methane and fertilizer. Also working on anaerobic sewage sludge treatment plant to produce gas and electricity to power an oxygen blown biological water purification

Agrar und Hydrotechnik GmbH

Postfach 100132, Huyssenallee 66-68, D-4300 Essen 1. Tel: (0201) 201 61 Telex: 857557

Consulting engineers. Associated with construction of a 300 cubic metre anaerobic digester for treatment of slaughterhouse wastes.

Postfach 104547, Andreas Hofer Weg 67, D-6900 Heidelberg 1. Telex: 461322 ags hd Tel: (06221) 474718

Carrying out research and development as well as production and marketing of products for research in the fields of molecular biology, cell biology, protein biochemistry and immunology. Manufactures restriction enzymes, nucleic acid modifying enzymes and fine chemicals for molecular biology research.

AHS Germany

Edisonstrasse 3, D-8044 Unterschliessheim, Munich. Tel: 049 893 17010 Telex: 841529438

Supply immunological and biological reagents. Distributor for Atlantic Antibodies, US.

Aldrich-Chemie GmbH & Co KG

D-7924 Steinham. Tel: 07329 870

Supplies fine chemicals including stains, solvents and standards; products of Aldrich Chemical Co, US.

Alfa Laval Separationstechnik GmbH

Postfach 800150, Bergnerstrasse 4, D-2050 Hamburg 80. Telex: 0217821 Tel: (040) 727 01

Manufactures separation and dewatering equipment including decanter centrifuges, central separators and heat exchangers for both cooling and pasteurization.

Alfred Fritsch & Co

D-6580 Idar-Oberstein 1

Tel: (089) 806081 Telex: 46203

Produces laboratory shakers, planetary ball mills, jaw crushers, rotary mills and micronizers.

Algal Culture Collection

Sammlung von Algenkulturen

Pflanzenphysiologgisches Institut, Gottingen Universitat, D-3400

Holds culture collection of algae for general botany and plant physiology research and teaching.

Alpha Therapeutic GmbH

Postfach 1107, Voltastrasse 10, D-6070 Langen.

Tel: 06103 73033 Telex: 415004

Supply immunological products and diagnostics of Green Cross Corp,

Altenburger Electronic GmbH

Schlossweg 2-7, D-7633 Seelbach. Tel: 07823 2061 Telex: 75498

Telex: 754983 Fax: 07823 2761

Manufacture membrane filters and materials for cross flow and batch systems in micro- and ultrafiltration, reverse pressure control stations and contact-pressure temperature chambers.

AME-Technik

Arend Mildner & Evers GmbH & Co

Lilienthalstr 1 Postfach 420, Postfach 420, D-3000 Hannover 1. Tel: 0511 6793 1 Telex: 922542

Provide mobile laboratory facilities fitted for environmental control and/or containment with air filtration as well as temperature and humidity

Amersham Buchler GmbH & Co KG

Gieselweg 1, D-3300 Braunschweig Tel: 05307 8080 Telex: 92830 Z Ambu D Fax: 05307 808237 Supplies radioactive and non-radioactive products for research in life

sciences and health care. (See Amersham International plc, UK.)

AMF Cuno-Deutschland/AMF Corp

AMF Building Konradinstr, D-6200 Wiesbaden-Erbenheim. Tel: 6121 718061 Telex: 4186712

Produce systems for filtration, microfiltration, molecular separation and purification as well as laboratory products and reagents, including culture

Amicon GmbH

Postfach 1103, Slinger Feld 32, D-5810 Witten. Tel: (02302) 801996 Telex: 8229030

Supplies ultrafiltration, microfiltration and membrane separation equipment, affinity chromatography supports and columns (see Amicon Corp, US).

Part III FR GERMANY

AnaKat Institut fur Biotechnologie GmbH

Kreuzbergstrasse 37/38, D-1000 Berlin 61. Tel: 030 785 0146

Offers contract services in biotechnological treatment on site of industrial land pollution problems.

AnalytiCon GmbH

Gustav Meyer Allee 25, D-1000 Berlin 65. Tel: 030 469 4107 Telex: 17 308145

08145 Fax: 030 469 4646

Supply fine chemicals for the pharmaceutical, biochemical and cosmetic industries.

Anderson GmbH & Co KG

Hesslingsweg 71, Postfach 10 78, D-4600 Dortmund.

Tel: 0231 257053 Telex: 82242510 Fax: 0231 257050

Supply a wide range of valves and pipe fittings suitable for biotechnical and/or sterile system use, including diaphragm valves, ball valves and butterfly valves as well as electric or pneumatic actuators and measuring and control equipment.

Andreas Hettich

Gartenstrasse 100, D-7200 Tuttlingen. Tel: 07461 7050 Telex: 762636 hetic

Manufacture laboratory, refrigerated and micro-processor controlled centrifuges, erythrocyte-washing apparatus and dispensing pipettes.

Antechnika GmbH

Postfach 210155, D-7500 Karlsruhe 21. *Tel*: (841) 078 26870

Supplies equipment and accessories for gas, liquid and thin layer chromatography, as well as infra-red spectroscopy.

Antek Instruments

Wacholderstrasse 7, D-4000 Dusseldorf 31. Tel: 0203 743 25 Telex: 8589297

Supplies nitrogen analysis systems (see Antek Instruments Inc, US).

Anton Hubner KG

Schlosstrasse 15, D-7801 Ehrenkirchen 1. *Tel*: (07633) 60 81

Produces pharmaceuticals, cosmetics and diet foods.

API-Biomerieux GmbH

Werastrasse 25, D-7440 Nurtingen. Tel: (07022) 330 35 Telex: 7267414

Distributes diagnostic products for routine laboratory use in clinical chemistry, diagnostic work, bacteriology, virology and various immunological techniques including radioimmunoassay. Subsidiary of BioMerieux SA, France.

Applied Biosystems GmbH

Robert Koch Strasse 16, D-6108 Weiterstadt. Tel: 06151 87 940 Telex: 4197318

Supplies instruments for DNA synthesis and gas-phase protein sequencing, as well as supplying reagents for manual DNA synthesis and providing custom synthesis service (see Applied Biosystems, US).

APV Shroder GmbH

Mecklenburger Strasse 223, Postfach 160167, D-2400 Lubeck 16. Tel: 0451 693010 Telex: 26355 Fax: 690866

Manufacture high pressure homogenizers for use in the mechanical disintegration of microorganisms as well as in mixing of chemical and pharmaceutical formulations. Machines are available with special design features to facilitate cleaning and use in ascptic processes. Available in a range of sizes suitable for either laboratory use or for pilot and small production scale use.

Aqua-Tek GmbH

Schluterstrasse 39, Kurfuerstendamm, D-1000 Berlin 12. Tel: 030 883 5858/883 5800 Telex: 186001 intas

Developing processes for large scale human cell cultures for production of cells, cell fractions and monoclonal antibodies. Also working on aquacultural projects, for example shrimp and prawn farming.

ARGUS Umweltbiotechnologie GmbH

Saatwinkler Damm 24, D-1000 Berlin 13. *Tel*: 030 345 2017

Offer contract services in biotechnological treatment on site of diesel fuel contamination of land, as well as supplying a range of tests for biodegradation products and biotoxins.

Ashland Chemical Co

Postfach 5107, D-6800 Mannheim. Tel: (0621) 238 56 Telex: 462189

Supplies hydrogenated castor oil, epoxidized soya bean oil, stearic acid, isostearic acid and other fatty acids, as well as resins, antioxidants and industrial chemicals.

Astra Werke AG

Chemische Fabrik

Produces pharmaeuticals. Subsidiary of Degussa AG, Germany.

Avebe Deutschland GmbH

Produces glucose and starch derivatives.

B Braun Diessel Biotech GmbH

B Braun Melsungen AG

Postfach 110 & 120, Carl-Braun-Strasse 1, D-3508 Melsungen. Tel: 05661 71 0 Telex: 99944 360 bm Fax: 05661 71 3702

Manufacture and distribute a wide range of laboratory, industrial and domestic equipment and appliances including fermenters, homogenizers, water baths, thermostats, electrotransfectors, infusion pumps and measurement equipment for gas exchange in cell, tissue or enzyme systems (Warburg apparatus). Manufacture fermenters suitable for industrial and research applications.

B & M Spectronik

Bachem Biochemica GmbH

Lessingstrasse 26, D-6900 Heidelberg.

Manufacture biologically active peptides as well as amino acid derivatives and phospholipids. Provide a custom synthesis service. Subsidiary of Bachem, Switzerland.

Baker Chemikalien GmbH

Supplies a wide range of laboratory chemicals, industrial fine chemicals, enzymes and other diagnostic products materials for chromatography and scintillation counting, as well as enzymes for genetic manipulation (see JT Baker Chemical Co, US).

Balston GmbH

Postfach 1203, D-2000 Norderstedt. Tel: 040 522 8603/040 522 8662

Produce filters and separation equipment for industrial applications as well as systems for quantitative determination of solids and liquids in gases.

Basf AG

Produces over 6000 different chemical products, including pharmaceuticals and agrochemicals. Company also has an engineering and construction department that, in addition to in-house operations, offers services to outside clients. Also offers licences for a variety of chemical manufacturing processes.

FR GERMANY Part III

Battelle Institute

Postfach 900160, D-6000 Frankfurt am Main 90. Tel: (079) 08 28 11 Telex: 0411966

Contract research organization. Carries out multi-client studies, work for individual clients and basic investigations in many areas of science and technology, including biotechnology and genetic engineering (see Battelle Memorial Institute, US).

Bayer AG

Pharamceutical Division

D-5090 Leverkusen-Bayerwerk. Telex: 851030 by Tel: (0214) 301

Manufactures pharmaceutical products for human and veterinary use, agrochemicals etc, as well as chemicals, rubber, plastics, polymers, and photochemicals and phototechnical products in other divisions. Has active research programmes in basic and applied aspects of microbiology fermentation, pathology, parasitology, etc.

Bayer Diagnostic & Electronic

Steinerstrasse 15, Postfach 701360, D-8000 Muenchen 70. Tel: 04989 724030 Telex: 522406

Supply immobilized and conjugated antibodies (see Miles, US).

Bayerische Landesanstalt fur Weinbau und Gartenbau

Residenplatz 3, Wurzburg.

Holds culture collection of yeasts for agricultural microbiology research.

Institut fur Pflanzenschutz im Forst

Biologische Bundesanstalt fur Land- und Forstwirtschaft, Messeweg 11-12, D-3300 Braunschweig.

Holds culture collection containing fungi for forest mycology research. Offer services in fungal identification.

BCC

Bio-Chem-Color Spezialgerate GmbH

Guterbahnhofstr 11, Postfach 1414, D-3400 Gottingen.

Tel: 0551 49 55 90 Telex: 96788 schue

Supply a wide range of bioreactors, fermenters and downstream separation equipment as well as associated measuring and control equipment for both laboratory scale and production units. Products include general purpose fermenters as well as tissue culture bioreactors, solid substrate fermenters, special units for vaccine production and bio-filtration units.

Beckman Instruments GmbH

Frankfurter Ring 115, Postfach 1416, D-8000 Munchen 40. Tel: 089 38 871 Telex: 851 838 7511

Supply a wide range of laboratory and analytical equipment including high speed centrifuges, liquid chromatography and radioactivity counters as well as chemicals, enzymes and reagents (see Beckman Instruments Inc and SmithKline Beckman, US).

Becton Dickinson GmbH

Tullastrasse 8-12, Postfach 101629, D-6900 Heidelberg 1. Tel: 06221 30 5200 Telex: 461534

Supplies instruments, laboratoryware, reagents and biological products for research and laboratory diagnostic use including fluorescent activated cell sorters (see Becton Dickinson & Co, US).

Beecham-Wulang GmbH & Co KG

Postfach 25, Stresemannallee 6, D-4040 Neuss 1.

Tel: (02101) 1951 Telex: 851798

Produces pharmaceuticals (see Beecham Pharmaceutical Co Ltd, UK).

Behringwerke AG Diagnostica

Postfach 1140, D-3550 Marburg 1.

Manufactures clinical test instrumentation including a dual-channel coagulometer.

Beiersdorf AG

Unnastrasse 48, D-2000 Hamburg 20.

Tel: 040 569 3157

Developing an in vitro model with isolated heart muscle cells to replace animal testing in collaboration with Hamburg University

Bender & Hobein GmbH

PO Box 150 229, D-8000 Muenchen.

Produces starches, glucose and related products for the food, feed, pharmaceutical, paper and textile industries (see Avebe, Netherlands).

Bergbau Forschung GmbH

Forschungsinstitut des Deutschen Steinkohlenbergbaus

Postfach 130140, Franz-Fischer-Weg 61, D-4300 Essen-Kray 13. Fax: (0201) 105 437 Tel: (0201) 105 1 Telex: 857 830 bergb

Produce systems for biogas production from wastewater treatment.

Berghof Labor- und Automationstechnik GmbH

Harretstrasse 1, D-7412 Eningen u A. Tel: 07121 8 9010 Telex: 729529

Manufactures a wide range of fluoroplastic laboratory ware and ultrafiltration equipment.

Berlin Free University

Institut f Molekularbiologie und Biochemie

Arnimallee 22, D-1000 Berlin 33. Tel: 030 838 2964/2565/6243

Offer information services in molecular biology and gene technology, have developed a nucleotide and protein sequence databank in a joint venture with Soft Gene Berlin. Other projects include, work on glycoprotein oligosaccharides, and methods of high performance liquid affinity chromatography with proetein in a joint venture with Bischoff GmbH.

Berlin Free University

Institut fur Pharmacie

Koenigin Luise Strasse 2-4, D-1000 Berlin 33.

Tel: 030 838 3273

Carrying out research on cell culture systems, haematopoietic colony tests and somatostatin.

Berlin Free University

Institut fur Kristallographie

Takustrasse 6, D-1000 Berlin 33.

Tel: 030 838 3410

Carrying out research in areas of protein crystallography and genetics including work on intelligent protein design.

Berlin Free University

Institut fur Biochemie

Thielallee 63, D-1000 Berlin 33.

Tel: 030 838 6002

Developing techniques of high performance liquid affinity chromatography of nucleic acids using crown ethers atached to silica gel as ligands, in conjunction with Dr Herbert Knauer GmbH.

Berlin Technical University

Institute of Biochemistry and Molecular Biology

Franklinstrasse 29, D-1000 Berlin 10.

Tel: 030 3 14 42 05

Carrying out studies on peptide and antibiotic biosynthesis in bacterial or fungal systems including gramicidin, tyrocidin gramicidin S, bacitracin, enniatin and beauvericin, leading to investigation on the pesticidal properties of related products such as bassianolide, destruxin and cyclosporin. Other studies include the biosynthesis of surfactants (including surfactin and bacillomycin L), actinomycins, ergot peptide alkaloids, beta-lactams and an insect octapeptide, lophyrotomin. In addition, research programmes are continuing on chloroplast proteins, carnosine and neuro-peptides, as well as on the microbial degradation of lignin.

Berthold Hermle GmbH

Postfach 1240, Industriestrasse 8, D-7209 Gosheim/Baden-Wurrttemberg. Telex: 760613 Fax: 07426 67170 Tel: (07426) 670 Supplies refrigerated centrifuges.

BEST GmbH

Vor dem Hassel 3, D-2094 Brackel. Tel: 04185 5161 Telex: 2189780

Manufacture precision tube, high vacuum and chromatographic fittings, valves etc.

Part III FR GERMANY

Bielefeld University

Department of Genetics

Postfach 8640, D-4800 Bielefeld 1.

Developing vectors for insertion of foreign genes into genomes of gram negative bacteria not related to E coli, derived from the commonly used vectors pACYC184, pACYC177 and pBR325, that are unable to replicate in strains outside the enteric bacterial group and are thus applicable as transposon carrier replicons for random transposon mutagenesis in any strain into which they can be mobilized but not stably maintained.

Biesterfeld & Co

Ferdinandstr 41, D-2000 Hamburg.

Supply a wide range of chromatographic media and adsorbents based on titania, kieselguhr, agarose-composites, agarose ion exchangers, etc products of Sterling Organics, UK.

Bio-consult

Brueder-Grimm-Strasse 32, D-6000 Frankfurt/Main 60. Tel: 069 43 16 96

Offer consultancy in marketing, contract research, financing and technology transfer, and strategic studies in retrovirals, diabetes mellitus, granulosite proteins, recombinant affinity proteins and diagnostic enzymes, food enzymes, cell culture of yeast, Aspergillus, Bacillus and mammalian

Bio-medizinische Technik

Am Koenigspark 21, D-4150 Krefeld 29.

Supply polyclonal antibodies; products of One Lambda, US.

Bio-Rad Laboratories GmbH

Postfach 500167, Dachauerstrasse 511 & 364, D-8000 Munchen 50. Tel: 089 149 90 50 Telex: 529514 Fax: 089 149 90 514

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Bio Sigma GmbH

Grafelinger Strasse 133A, D-8000 Munchen 70. Tel: (089) 70 10 41 Telex: 524724 munich

Supplies immunofluorescent diagnostic kits for detection of virus infections, including cytomegalovirus, herpes simplex virus, infectious mononucleosis virus, etc. Also markets other clinical diagnostics and reagents. Agent for Gull Laboratories Inc, US.

Biochemische Synthesetechnik GmbH & Co

Stresemannstrasse 268, D-2000 Hamburg 50. Tel: (040) 850 00 51 Telex: 212347 biosy

Provides a customer service to support genetic engineering programmes. Undertakes custom synthesis of primers and probes including incorporation of modified bases, synthesis of linker molecules and total or partial synthesis of structural genes and regulatory DNA sequences. Also designs and develops genetically engineered microorganisms for production of proteins useful for medicine, pharmacy and agriculture. Offers long-term contract research opportunities.

Biochrom KG

Leonorenstrasse 2-6, D-1000 Berlin 46.

Tel: 03077 18047/99060 Telex: 185821 bio Fax: 03077 10012

Supply products for cell and tissue culture including serums, liquid media, powdered media, formulated trace additives etc, as well as plastic labware for cell cultivation. Also developing diagnostics including antiserums, Rubella HiG test, IgM combination, HIV ELISA, anti-HIV proteins antibodies, epitopes and synthetic peptides as well as offering custom synthesis and purification. Distributor for Sanbio, Netherlands.

Biocon GmbH

Rosenheimer Strasse 9, D-8208 Kolbermoor. Tel: (8031) 96066 Telex: 525709

Supplies enzymes, natural colours and related products for the following industries: brewing, distilling, food, baking/ milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Bioferon GmbH

Postfach 320, D-7958 Laupheim 1. Tel: (07392) 60 76

Produces fibroblast interferon on a large scale for therapeutic use; licensed as fiblaferon in Germany for treatment of herpes. Subsidiary of Rentschler AG, Germany.

Biogenzia Lemania GmbH

Im Kempken 24, D-4630 Bochum 1. Tel: 0234 74004 Telex: 825373

Supplies diagnostic reagents, both human and animal antiserums, monoclonal antibodies and other immunological products of Nordic Laboratories BV, Netherlands.

Bioinvest Engineering

Fr J Curie Strasse, Sofia 1040. Tel: 7381 Telex: 23162

Manufacture bioreactors and fermenters, including systems suitable for plant and animal cell culture.

Biometra Biomedizinische Analytik GmbH

Wagenstieg 5, D-3400 Gottingen. Telex: 965213 Tel: 0551 37 10 32 34

Supplies equipment for electrophoresis including an elutor which concentrates and elutes biomolecules from electrophoretic gels as well as biosensors for determination of acetylcholine and choline, the C1-C4 alcohols, glucose and galactose

Biomol Feinchemikalien GmbH

Waidmannstrasse 35, D-2000 Hamburg 50.

**Talor: 2166391 Fax: 040 851 19 29

Produce biochemical reagents for molecular biology, genetic engineering and microbiology including amino acids and derivatives, human proteins, nucleosides and nucleotides, biologically active peptides, biological buffers, enzymes, carbohydrates, proteins, electrophoresis reagents, substrates andtetrazolium salts.

Biosearch

Industriestrasse 17, D-6056 Heusenstamm. Tel: 06104 5036 38 Fax: 06104 655 99

Supplies equipment and reagents for DNA synthesis using evanoethyl phosphoramidite or H-phosphonate protocols for either short oligonucleotides or sequences in excess of 100 bases. Products of Biosearch Inc. US.

Biotec-Fischer GmbH

Daimlerstrasse 6, D-6301 Reiskirchen 3.

Tel: 06408 6072 Telex: 4821019 Fax: 06408 64165

Produce equipment for use in electrophoresis, isoelectric focusing, preparative electrophoresis, electro-elution and electro-blotting including cellulose-acetate/nitrate and nylon membranes and agarose as well as peristaltic pumps, orbital shakers etc.

Biotechnologie Kempe

Pariserstrasse 6, D-1000 Berlin 46. *Tel*: 030 779 9060

Market hardware and software packages with biotechnological applications.

Biotest AG

Landsteinerstrasse 5, D-6072 Dreieich.

Tel: 06103 801434

Carrying out research and development in DNA probes for human leucocyte antigen typing, diagnostic tests for HIV-1 and HIV-2 and interleukin-2. Supply a wide range of monoclonal antibodies to T and B cells, IgG,IgM and IgA etc. Subsidiary of Biotest-Serum-Institut GmbH, Germany.

Biotest-Serum-Institut GmbH

Flughafenstrasse 4, Postfach 730260, D-6000 Frankfurt 73.

Tel: (069) 67071 Telex: 4185429

Landsteinerstrasse 5, D-6072 Dreieich.

Tel: (06103) 8 01 0 Tx: 4185429 Fax: (06103) 8 82 79

Manufactures and supplies blood-grouping and tissue-typing reagents, immunological reagents and bacterial growth media. Products include antibodies and antiserums to albumins, complement, gamma-globulins, immunoglobulins etc, and monoclonal antibodies.

FR GERMANY Part III

Biotronik Wissenschaftliche Gerate GmbH

Edmund Seng Strasse 3-5, D-6457 Maintal 1. Tel: 06181 492082/87 Telex: 4184005

Supply dedicated amino acid and carbohydrate analyzers, ion chromatographs and neopterine analyzers (for diagnosis and monitoring of malignant disease, transplant rejection, viral infection and aids) based on liquid chromatography as well as other HPLC equipment including automated sample injectors. Specialise in mobile laboratories built to customer specifications.

Bischoff Analysentechnik und Gerate GmbH

Ulmer Strasse 2, D-7250 Leonberg. Tel: 07152 46804 Telex: 7245783 bana

Manufactures a micro-processor controlled HPLC Pump as well as multi type chromatography columns. Developing a method of high performance liquid affinity chromatography with protein in collaboration with Berlin Free University.

Bissendorf Biochemicals GmbH

Feodor-Lynen-Strasse 5, D-3000 Hannover 61. Tel: 0511 53 00 40/439 Telex: 9230534 Fax: 0511 53 00 479

Undertake large scale peptide synthesis. Products include a synthetic growth hormone release stimulator.

Bochum University

Department of Medical Microbiology and Immunology

Postfach 102148, D-4630 Bochum 1.

Carrying out research in the field of monoclonal antibodies to tissue and tumour antigens.

Bodenseewerk Perkin-Elmer & Co GmbH

Postfach 1120, Askaniaweg 1, D-7770 Uberlingen. Telex: 733902 bsw Tel: 07551 81 0

Produce a wide range of spectrophotometers (including UV/visible/near infra-red and infra-red machines) as well as equipment for gas chromatography, liquid chromatography, fluorescence spectroscopy, thermal analysis etc. Also manufacture laboratory robots and offer computerized laboratory data handling systems.

Bodo Fischer

Hermannstrasse 40-45, D-2000 Hamburg 1. Tel: 040 33 00 71

Consultants specializing in environmental problems of air, water and soil pollution, with facilities for analysis and evaluation in waste management.

Boehringer Ingelheim AG

Chemicals Division

D-6507 Ingelheim

Tel: (06132) 77 21 91 Telex: 041879122

Manufactures chemicals and intermediates for pharmaceuticals.

Boehringer Mannheim GmbH

Biochemicals Division

Postfach 310120, Sandhoferstrasse 116, D-6800 Mannheim 31. Telex: 463193 bm Tel: 0621 7591 Fax: 0621 759 2890

Research and Development, Bahnhofstrasse 9-15, D-8132 Tutzing, Tx: 841

Supplies wide range of fine chemicals and reagents for research and analysis, including enzymes and enzyme kits, immunochemicals, monoclonal antibodies, affinity isolated antibodies, antiserums, immunology markers, nick translation kits, interleukin-II, coenzymes of high purity, proteases, biochemicals for molecular biology, nucleotides, nucleosides, oligo and polynucleotides and synthetic linkers. Enzymes include ribonucleases and restriction enzymes such as Alu I, BamH I, BgI, EcoR I, Hind III, HpA I etc. Developing DNA cloning kits and carrying out research in bioprocess engineering.

Bonn University

Institute of Botany

Kirchalle 1, D-5300 Bonn 1.

Producing green algae (Chlorogonium elongatum) and studying its use as raw material for production of biogas (methane), as well as studying production of hydrogen, ethanol, butanediol and glycerol from a variety of green algae including species of Chlorella and Chlamydomonas.

Braunschweig Technical University

Institue of Biochemistry and Biotechnology

Konstant in-Uhde-Strasse 8, D-3300 Braunschweig.

Researching into production of pharmaceuticals and other industrially useful compounds using both free suspension cultures and immobilized microbial cells.

Braunschweig Technical University

Institute for Technical Chemistry

Hans Sommerstrasse 10, D-3300 Braunschweig.

Studying methods of cell and enzyme immobilization, kinetics and transport phenomina, biocatlysis and process development.

Braunschweiger Biotechnologie

Braunschweiger Productionsgesellschaft mbH fur Biotechnologie Mascheroder Weg 3, D-3300 Braunschweig. Tel: 0531 6 16 84 Telex: 9230534

An association offering the services of several international companies. Carry out research, process amd product development in screening; microorganism, yeast and mammalian cell fermentation; purification of intra- amd extra-cellular products; and environmental problems. Manufacture and sell products to pharmaceutical, chemical, food and environmental markets. Also carry out contract manufacturing of microorganisms, enzymes, proteins and peptides. Organized in four divisions: peptide synthesis, pharmaceutical production, environmental biotechnology & biocatalysts based on Bachem Inc, SIBA and Phillips Biosciences, all US.

Bremen University

Faculty of Biology

Postfach 330440, D-2800 Bremen 33.

Investigating applications of affinity chromatography to synthesis of chemicals by immobilized biocatalysts and kinetics as well as studying mass transfer in immobilized enzyme systems.

Bremerhaven College

Columbustrasse 2, D-2850 Bremerhaven.

Investigating production of methane by anaerobic digestion of cattle manure in a system based on modification of an existing slurry pit.

Bruker Analytische Messtechnik GmbH

Am Silberstreifen, D-7512 Rheinstetten 4. Tel: 0721 5161-0 Telex: 7826836 brul

Fax: 0721 51 71 01 Telex: 7826836 bruk

Wikingerstrasse 13, D-7500 Karlsruhe 21. Tel: 0721 5967 0 Tx: 7825656 bam

Manufactures high resolution automated nuclear magnetic resonance spectrophotometers, mass spectrometers and high performance liquid chromatographs as well as data processing systems.

Bruker-Franzen Analytik GmbH

Kattenturmer Heerstrasse 122, D-2800 Bremen 61.

Tel: 0421 87 0080 Telex: 246404 Fax: 0421 87 5292

Manufactures high resolution automated nuclear magnetic resonance spectrophotometers, mass spectrometers and high performance liquid chromatographs as well as data processing systems.

BTN Biotec Nordhorn

Enschedestrasse 14, D-4460 Nordhorn.

Telex: 5921814 stywnoh Fax: 05921 17950

Offer services in custom peptide synthesis for medical and pharmaceutical research. Products include protected amino acid derivatives, resins and linkers for solid-phase synthesis, reversed phase silica for preparative separation of peptides and proteins via semi-pressure liquid chromatography.

Buchi Laboratoriums-Technik GmbH

Esslinger Strasse 8, D-7320 Goppingen. Tel: 07161 6710 0 Telex: 727711

Manufacture a wide range of laboratory equipment including rotary evaporators, laboratory spray dryers, fluid bed driers, autoclaves, water stills, elemental analyzers, distillation apparatus, etc as well as preparative scale liquid chromatographs, pumps and columns.

Part III FR GERMANY

Buckau-Walther AG

Water Treatment Division

Postfach 100460, Lindenstrasse 43, D-4048 Gravenbroich 1. Telex: 517111 Tel: (02181) 60 20

Supplies equipment for treatment of wastewater, industrial effluents and production of potable water, including activated sludge treatment, biofiltration, ultrafiltration, reverse osmosis, pasteurization, filtration, distillation, flotation, coagulation evaporation etc.

Buerkert GmbH

Christian Buerkert Strasse 13-17, D-7118 Ingelfingen. Telex: 74116 Tel: 07940 10 0

Manufacture gas and fluid handling equipment including valves, control instruments and systems.

BYK Mallinckrodt

Von Hevesy Strasse 1-3, D-6057 Dietzenbach-Steinberg. Telex: 419 1574 Tel: (060) 74 4011

Supplies a wide range of fine chemicals, reagents, enzymes and clinical diagnostics (see Mallinckrodt Inc, US).

C A Greiner & Sons Labortechnik

Galgenbergstr 9, Postfach 1320, D-7440 Nurtingen. Tel: 07022 5011 Telex: 07267349

Supply general laboratory equipment, products for cells and tissue culture as well as disposable labware

C Gerhardt GmbH & Co

Bornheimer Strasse 100, Postfach 1628, D-5300 Bonn 1. Tel: 0228 65 3075 Telex: 886427

Supply general laboratory equipment, including pH meters, hot plates, magnetic stirrers and water baths as well as distillation apparatus and apparatus for nitrogen, BOD and heavy metal determination.

CAMAG & Co GmbH

Bismarckstrasse 27-29, Postfach 410865, D-1000 Berlin 41. Telex: 184017 Tel: (030) 7 95 70 81

Supplies equipment for automated thin layer chromatography as well as electrophoresis and gel scanning.

Cambridge Instruments GmbH

Harnackstrasse 35-43, D-4600 Dortmund 1. Tel: (0231) 12 60 86 Telex: 8227346

Reichart-Jung Division: Heidelberger Str 17-19, D-6907 Nussloch. Tel: 06224 143 0 Tx: 466627

Supplies scanning electron microscopes (see Cambridge Instruments, UK).

Camon Labor-Service GmbH

Bahnstrasse 9a, Postfach 129505, D-6200 Wiesbaden. Tel: 06121 702846 Telex: 4186955

Supplies conjugated and biotinylated antibodies and other immunochemical products (see Vector Laboratories Inc, US). Also distributes products of Australian Monoclonal Development Pty Ltd, Cedarlane Laboratories, Canada, Serotec, UK and Vector Laboratories,

Captair Filtersystem GmbH

Volmerswerther Strasse 80-86, D-4000 Dusseldorf 1. Tel: 0211 395041 Telex: 8586708 Fax: 0211 3982215 Supply laboratory filter systems.

Carl Roth GmbH & Co KG

Postfach 211162, Schoemperlenstrasse 1-5, D-7500 Karlsruhe 21. Tel: (0721) 59 10 11 Telex: 07826526

Supplies rare chemicals and extracts from plant materials.

Carl Zeiss Geschaftsbereich Mikroskopie

Postfach 1369/1380, Carl-Zeiss Strasse 22, D-7082 Oberkochen. Tel: 07364 20 0 Telex: 71375155

Manufacture precision optical instruments including an inverted microscope with heatable stage and micromanipulator suitable for microinjection techniques as well as research light microscopes (UV, phase etc), electron microscopes, instruments for image microanalysis and microscopic photometry, opto-medical instruments, consumer goods and high performance lenses.

Cassella AG

Hanauer Lanstrasse 526, D-6000 Frankfurt am Main 61.

Telex: 411208 Tel: (0611) 410 91

Produces pharmaceuticals, chemicals and resins. Subsidiary of Hoechst AG, Germany.

Postfach 1043 20, D-2000 Hamburg 1. Tel: 040 28841 Telex: 2162361

Produces high fructose and glucose syrup from maize.

Chemap GmbH

Wilhelm Bergner Strasse 1, D-2056 Glinde. Tel: 0407 225001 Telex: 2166000

Offer a wide range of fermenters and bioreactors including laboratory, pilot and production facility scale systems of both conventional and advanced design (airlift systems). Also produce probes, detectors and control systems as well as data handling software and hardware for temperature, pH, oxygen, redox, carbon dioxide, and gas analysis by mass spectrometry.

Chemie Meiendorf Fabrikation Pharmaceutische und Chemische Produckte GMBH

Zum Ehrenhain 36, D-2000 Barsbuttel. Tel: (040) 670 10 85 Telex: 0212633

Produces antibiotics, vitamins, veterinary products and sulpha drugs.

Chemische Fabrik Berg GmbH

Postfach 1347, Altenaerstrasse 23, D-5880 Ludenscheid. Telex: 0826825

Tel: (02351) 226 13

Produces pharmaceuticals, biochemicals, water-treatment chemicals and other similar products.

Chromatix GmbH

Heisenbergstrasse 10, D-8057 Eching. Telex: 526512 Tel: (081 65) 54 48

Distributes analytical laboratory instruments for gel permeation and liquid chromatography and for light-scattering measurements (see Chromatix Inc. US).

Ciba-Geigy GmbH

Postfach 1160, Oeflinger Strasse, D-7867 Wehr/Baden.

Tel: (07762) 821 Telex: 0792702

Produces pharmaceuticals, agrochemicals (insecticides, herbicides and fungicides), dyes and plastics (see Ciba Geigy, Switzerland).

Clausthal Technical University

Institut fur Thermische Verfahrenstechnik

Leibnizstrasse 15, D-3392 Clausthal-Zellerfeld.

Tel: 05323 722120 Telex: 953828

Developing processes for the treatment of domestic and industrial waste waters and effluents and for the separation of activated sludge.

Cologne University

Institut fur Genetik

Weverfal 121, D-5000 Koln 41.

Carrying out research in molecular biology and cell biology including protein chemistry and nucleic acid synthesis.

Conco

Laboratory Division

Lothringerstrasse 30, D-6200 Wiesbaden.

Tel: 06121 404108

Supply immunological and biological reagents. Distributor for Zymed Laboratories, US.

Contraves GmbH

Postfach 800145, 7 Stuttgart 80.

Supply a wide range of viscometers as well as computer controlled laboratory reactors; products of Contraves AG, Switzerland.

Crvo System GmbH

Industriestrasse 125, D-5905 Freudenberg-Niederndorf.

Supplies cryogenic equipment including liquid gas holders and low temperature transporters.

FR GERMANY Part III

Cuno Europe GmbH

Wilhelm Theodor Romheld Strasse 30, D-6500 Mainz-Weisenau. Tel: 06131 830901 Telex: 4187411 cohy

Manufacturer of filtration and separation products and systems with applications in pharmaceuticals and biotechnology including ion exchange and affinity chromatography and HPLC.

Dakopatts GmbH

Supplies reagents and diagnostic kits for immunological purposes (see Dako, US).

Damon Biotech GmbH

Supply bulk monoclonal antibodies and other proteins to the pharmaceutical and diagnostic industries produced using micro encapsulation techniques. Offer contract production of monoclonal antibodies and other cell proteins.

Danimex Aussen & Grosshandels GmbH

Manufactures proteases for the pharmaceutical industry including bromelain, chymotrypsin, papain, pepsin, trypsin and pancreatin. Also produces lysozyme.

Darmstadt Technical University

Institute of Macromolecular Chemistry

Schlossgartenstrasse 4-6, D-6100 Darmstadt.

Tel: (06151) 16 21 75

Studying protein synthesis and structure.

Davy Bamag GmbH

Carries out the design, engineering, construction and commissioning of wastewater and effluent treatment plants.

Dechema

Deutsche Gesellschaft fur Chemisches Apparatewesen Chemische Technik und Biotechnologie eV

Organizes technical courses and workshops in biotechnology. Has a research group working on immobilized biocatalysts and cellulose hydrolysis.

Degussa AG

Produces a wide range of amino acids and amino acid related products for the pharmaceutical, food, feed and cosmetic industries.

Desaga GmbH

Manufactures equipment for electrophoresis including that suitable for use with agarose, agar, polyacrylamide and starch gel as well as apparatus for horizontal isoelectric focusing and power supplies of up to 6000 V, current up to 1000 mA and power up to 200 W. Part of the Schott group.

Deutsche ICI GmbH

Markets products of Imperial Chemical Industries plc UK.

Deutsche Kabivitrum GmbH

Levelingstrasse 18, D-8000 Munchen 80. Tel: (089) 431 930 Telex: 524838

Supplies pharmaceuticals (see Kabivitrum AB, Sweden).

Deutsche Metrohm GmbH & Co

Plattenhardt-In den Birken, D-7024 Filderstadt. Tel: 0711 772044 Telex: 7255855

Manufactures bioreactors in range 1 to 300 litres for bacterial and cell cultures with automated instrumentation for measurement and control of stirrer speed, temperature, pressure, pH, redox, dissolved gases etc.

Deutsche Shell Chemie GmbH

Koelner Strasse, D-6236 Eschborn/Ts. *Tel*: 06196 4740

Produce amino acid derivatives for use in peptide synthesis.

Deutsche Wellcome GmbH

Postfach 109, D-3006 Burgwedel 1. *Tel:* (05139) 3001 *Telex:* 922799

Supplies a wide range of medical and veterinary pharmaceuticals, fine chemicals, medicines, vaccines, laboratory reagents, insecticides etc, for use in agriculture, industry and the home (see Wellcome Diagnostics, UK).

Diagen GmbH

Supply solid phase rapid DNA extraction cartridges, tips and tubes as well as plasmid preparation kits.

Diamal

Postfach 400469, Friedrichstrasse 18, D-8000 Munchen 40.

Produces bulk industrial enzymes for use in the textile and leather industries, including amylases and proteases, from animal and microbial sources.

Dianorm Gerate

Postfach 650126, D-8000 Munchen 65. Tel: 089 811 44 47

Manufactures equilibrium dialysis apparatus which allows for 20 samples to be run at the same time under standard conditions using sample volumes down to 125 microlitres; can be used for both routine and research studies in binding and distribution between components of various biological systems. Also supply instrumentation for liposome production. Using recombinant DNA techniques and developing liposome-based drugs and therapeutics.

Dianova GmbH

Postfach 1903, Milchstrasse 3, D-2000 Hamburg 13. Tel: 040 4105091 Telex: 2165254

Supply immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories and Immunotech, US.

Diessel GmbH & Co

Steven 1, PO Box 100 363, D-3200 Hildesheim. Tel: 05121 7420 Telex: 927116 Fax: 05121 511500

Produce fermenters and bioreactors for cell culture as well as industrial scale systems offering processing vats, fermenters and sterile facilities for large scale media production. Also offer flow metering and control systems suitable for use in the beverage, food and pharmaceutical indstries.

Diosynth GmbH

Saalburgstrasse 79A, D-6380 Bad Homburg. *Tel*: (6172) 31077 *Telex*: 0415109

Supplies bulk pharmaceutical raw materials, including peptides and steroids, such as testosterone, pancreatin, insulin, gonadotropin and hydrocortisone. Subsidiary of Diosynth BV, Netherlands.

Domnick Hunter Filter GmbH

Postfach 130252, D-4150 Krefeld.

Tel: 02151 36041 Telex: 8531166 Fax: 02151 395779

Produces on-line air filters for bacteriological purposes as well as filters for liquid sterilization, cell concentration and solids/liquid separation including prefiltration and general clarification.

Part III FR GERMANY

Dornier Systems GmbH

Postfach 1360, D-7990 Friedrichshaften. Tel: (0745) 81 Telex: 073210

Consulting engineering company. Has carried out feasability studies related to the production of fuel ethanol in Germany for crops such as sugar beet, fodder beet, etc. Produces equipment for monitoring and controlling sewage treatment plant including pH, oxygen, total organic carbon, data recording and transmission.

Dortmund University

Department of Technical Chemistry

Postfach 500500, D-4600 Dortmund 50.

Undertaking development of and research on loop airlift bioreactors and fermenters including studies on the use of Thiobacillus thiooxida and T ferrooxidans for recovery of copper and zinc from waste materials.

Dow Corning GmbH

Pelkovenstrasse 152, D-8000 Munchen 50.

Tel: (089) 5215654

Supplies products of Dow Corning Corp, US.

Dr Bruno Lange GmbH

Postfach 370363, Konigsweg 10, D-1000 Berlin 37. Tel. (030) 80 10 21 Telex: 0183163

Postfach 190229, Willstatterstrasse 11, D-4000 Dusseldorf 11.

Tel: 0211 52 88 0 Tx: 8588757 Fax: 0211 52 88 143

Manufactures analytical equipment and diagnostics including microprocessor-controlled automated digital photometers capable of 300 substrate tests per hour, as well as pH meters, reagents for water analysis, turbidity meters and luminescence measuring devices.

Dr Bruno Stellmach GmbH & Co KG

Extrakt Chemie

Postfach 204, Blyinghausen 8, D-3060 Stadthagen. Tel: 05721 1021/2/3 Telex: 972267 ecs

Produce plant extracts and enzymes for the cosmetic, pharmaceutical and food industries.

Dr Christian Brunnengraber Chemische Fabrik GmbH

Ratzeburger Allee 106, D-2400 Lubeck.

Tel: (0451) 59 68 66 Telex: 26246

Produces and distributes pharmaceuticals and pharmaceutical raw materials. Subsidiary of Ciba-Geigy GmbH, Germany.

Dr Herbert Knauer Wissenschaftliche Gerate KG

Heuchelheimer Strasse 9, D-6380 Bad Homburg.

Tel: 06172 35064 Fax: 06172 31768 Telex: 410 762

Factory: Hegauer Weg 38, D-1000 Berlin 37.

Tel: 030 801 8031 Tx: 183155 Fax: 030 801 50 10

Manufactures detectors (including variable wavelength monitors and UV/VIS rapid scanning detectors), amino acid analyzers, protein and peptide sequencing equipment, columns & injector systems for HPLC as well as osmometers for medical use and molecular weight determination Developing a novel high performance liquid affinity chromatography system for nucleic acids in collaboration with Berlin Free University.

Dr Hoiss & Partner GmbH

Triebstr 9, D-8000 Munchen 50.

Tel: (089) 14 60 61 Telex: 17898152 hpsco

Manufactures autoclaves.

Dr Molter GmbH

Postfach 1320, D-6903 Neckargemund.

Supplies cell separation media of Nyegaard, and immunologicals of Nycomed, Norway.

Dr Paul Lohmann GmbH KG

Postfach 1220, Haupstrasse 2, D-3254 Emmerthal 1. Tel: (05155) 70 11 Telex: 92858

Produces fine chemicals for the food and pharmaceutical industries including acetates, albuminates, citrates, formates, glycerophosphates, lactates, proprionates, succinates, tartrates and similar compounds.

Dr R Wobser KG

Messgeratewerk Lauda

Postfach 1251, Pfarrstrasse 16-43, D-6970 Lauda/Koenigshofen 1. Tel: 09343 5030 Telex: 689523 mgwla

Manufacture temperature controllers, monitors and recorders including thermostats and cryogenic systems as well as viscometers, incubators, shakers etc.

Dr U Noack

Laboratorium fur angewandte Biologie

Richthofenstrasse 29, D-3200 Hildesheim.

Tel: 05121 760353/54 Telex: 5121826 tzhd

Undertakes contract research in culturing and mass production of microalgae in photobioreactors, development of biosensors and continuous monitoring of bioreactor processes as well as offering monitoring, screening and ecotoxicological testing services.

Dr Wolfgang Kernchen GmbH

Stockener Strasse 26, Postfach 20140, D-3016 Seelze 2.

Tel: (0511) 40 19 61 Telex: 921550

Manufactures chromatography detectors.

Dragoco Gerberding & Co GmbH

Dragocostrass, D-3450 Holzminden.

Tel: (05531) 70 41 Telex: 965336

Produces flavours, perfumes and aromatic chemicals.

DRG Instruments GmbH

Schwanallee 44, D-3550 Marburg.

Tel: (06421) 21242 Telex: 482398

Supplies instruments and reagents for laboratory and clinical use, including electrophoresis apparatus, labelled and unlabelled antiserums to human proteins, and immunomicroscopy systems.

Du Pont de Nemours (Deutschland) GmbH

Biotechnology Systems Division

Postfach 401240, D-6072 Dreieich.

Telex: 417993 nen Tel: 06103 803113

Distributes DNA and peptide synthesizers, HPLC columns and packing material, radioactive labelled chemicals, DNA probes centrifuges, instruments for thermal analysis etc. Subsidiary of E I Du Pont de Nemours & Co. US.

Dunn Labortechnik & Gerateenwicklung

Zurheiden 6, D-5464 Asbach.

Tel: 02683 43306 Telex: 863735

Supplies products for cell and tissue culture such as media and serums, antibodies and antiserums, sterile working benches, bioreactors, antibody purification systems, cell harvesters and radionuclide counters. Agent for CRBS, US, Sanko, Japan, Sera-Lab, UK and SBA, US.

Dynatech Deutschland GmbH

Justinus Kerner Strasse 32, D-7306 Denkendorf.

Tel: 0711 3461078 Telex: 7256690 Fax: 0711 3460509

Supplies laboratory instruments, immunodiagnostic reagents and a Salmonella test kit, as well as data systems and other engineering services (see Dynatech, Dynatech Diagnostics and Kirkegaard & Perry Laboratories, US).

E Becker & Co GmbH

Postfach 024542, D-4620 Castrop-Rauxel. Tel: 02305 72031 Telex: 8229544

Supply laboratory equipment including incubators and viscometers.

F. Merck

Postfach 4119, Frankfurter Strasse 250, D-6100 Darmstadt 1. Telex: 4193280 em Tel: 06151 72 0 Fax: 06151 723368

Supplies a broad range of biochemicals and reagents, including enzymes and coenzymes, steroids, vitamins, amino acids, carbohydrates, fatty acids, reagents for amino acid analysis, protein separation, density gradient separation, electrophoresis, HPLC and protein sequencing and group-specific reagents for protein and peptide chemistry including ten ion-pair reagent sets (salt + buffer) and 12 salts for selfmixing as well as reversed-phase, prepacked ion exchange columns. Also supplies products for molecular biology, including DNA-building blocks and reagents for DNA-synthesis as well as primers, linkers, vectors etc and test systems for immunohistochemistry, and membrane filters for HPLC sample preparation.

Edmund Buhler GmbH & Co

Rottenburger Strasse 3, D-7454 Bodelshausen. Tel: 07471 707 0 Telex: 747116 Fax: 07471 70788

Supplies scientific apparatus for laboratory use, environmental technology and biotechnology. Products include cell culture units for growth of cells on microcarriers in bioreactors having a capacity from 50 to 1000 ml as well as X-ray diffraction equipment, homogenizers, shaking machines and

EGA Chemie KG

D-7924 Steinham Albuch. Telex: 841714838 Tel: (07329) 6011

Supplies a wide range of fine chemicals for research and industrial use (see Aldrich Chemical Co, US).

Ekato Ruehr- und Mischtechnik GmbH

PO Box 1110/20, D-7860 Schopfheim. Tel: 07622 29 0

Telex: 773211 Fax: 07622 29 213

Develop, design, construct, manufacture and install complete industrial agitators and plants for fluid products.

Electro-Nucleonics International Ltd

Eichwiesenring 14, D-7000 Stuttgart 80.

Tel: 0711 715 6001/6005 Telex: 7255631 Fax: 0711 715 9003

Supplies equipment in the field of separation technology including large scale continuous flow centrifuges.

Elektrochemische Fabrik Kempen GmbH

Postfach 100260, D-4512 Kempen 1. Telex: 853218 Tel: (02152) 40 41

Produces hydrolyzed proteins, gelatin and gluten glues, as well as surfactants and chemicals for use in the leather, fur and textile industries.

Enka AG Produktgruppe Membrana

Ohder Strasse 28, Postfach 200916, D-5600 Wuppertal 2. Tel: 0202 60991 Telex: 8591832 Fax: 0202 605715 Tel: 0202 60991 Telex: 8591832

Produce crossflow microfiltration systems suitable for applications in cell culturing, cell concentration, enzyme filtration, sterile filtration, bubble free aeration systems and for use in continuous fermentation systems.

Eppendorf-Netheler-Hinz GmbH

Manufacture analytical instrumentation for research and application in medicine, chemistry, biochemistry, microbiology, industry and genetic engineering. Products of the two divisions, sample preparation and analytical instrumentation, include: pipettes, dispensers, centrifuges, diluters, thermostats, thermomixers, disposable pipette tips, cuvettes and micro test tubes; microinjector, micromanipulator, cell separation system, capillaries for microinjection and pipette tips for gel electrophoresis; atomic emission spectrometers and analytical systems; selective analyzer, selective multi-test analyzers and glucose analyzer.

ERGO Forschungsgesellschaft mbH

Luruper Chaussee 145, D-2000 Hamburg 50. Tel: 040 89 692322 Telex: 0211822

Offer services in biotechnology laboratory research in areas of plant tissue and cell culture for production of secondary plant products including analytical screening, protoplast isolation, fusion and regeneration.

Erich Alhauser GmbH

Postfach 551, Industriegebiet Struth, D-5412 Ransbach-Baumbach. Tel: 02623 8910 Telex: 2623955 Fax: 02623 891220

Manufacture systems for the production of highly purified water suitable for HPLC, AAS, enzymology, chromatography and UV spectroscopy, by ion exchange, reverse osmosis and membrane filtration.

Erlangen University

Institute for Clinical Virology

Loschgestrasse 7, D-8520 Erlsngen. Tel: (9131) 853563

Studying structure and oncogenic effects of the pathogenic herpes virus.

Erlangen University

Dept of Microbiology

Cauerstrasse 9, D-8520 Erlangen.

Telex: 629830 unier Tel: 09131 857197

Studying the structure of genomes of Rhizobium and Agrobacterium tumefaciens, as well as investigating the mechanisms whereby they interact with the higher plant genome during nodulation or induction of tumour formation. Developing monitoring procedures for Rhizobium in soil and process for bacterial protein production.

Ernst Leitz Wetzlar GmbH

Ernst-Leitz-Strasse, Postfach 2020, D-6330 Wetzlar 1 Tel: 06441 290 Telex: 483849 Fax: 06441 29 3399

Supplies a wide range of microscopes and other optical equipment.

ETI Process Technique GmbH

Peiner Strasse 23, Postfach 1095, D-3163 Sehnde 1. Fax: 05138 8006 Tel: 05138 8001 Telex: 921489

Offer equipment for biochemistry and cell culture which includes automatic, water jacketed, carbon dioxide incubators with digital display, a complete range of shakers (both orbital and linear), water baths and other temperature controlled devices etc, as well as washing machines for laboratory glassware.

Europepta GmbH

Hans-Boeckler-Allee 20, D-3000 Hannover 1. Tel: 0511 857 2257 Fax: 0511 817 380 Telex: 922755 Synthesise peptides.

Eurotherm Regler GmbH

Ottostrasse 1, Postfach 1453, D-6250 Limburg a d Lahn 1. Tel: 06431 29050 Telex: 484791 Fax: 06431 290519

Market a range of thermal detectors, recorders and controllers for industrial plant use.

Evans & Sutherland

Stahlgruberring 32, D-8000 Munich 82. Tel: 089 429041

Supplies computer graphics systems designed for the creation, manipulation, modification and dynamic viewing of complex three dimensional molecular structures, as well as a variety of molecular science and molecular graphics software. Systems are used by researchers in crystallography, drug design, protein research, genetic engineering and polymer research.

F Kurt Retsch GmbH & C0 KG

Rheinische Str 36, Postfach 1554, D-5657 Haan 1. Tel: 02129 5561 0 Telex: 859445 Fax: 02129 8702

Manufacture sample preparation equipment for disintegration, division and particle size analysis suitable for use with small quantities from feed sizes 40mm or less to final sizes of 0.5mm or less.

F Von Lochow-Petkus GmbH

PO Box 1311, D-3103 Bergen. Tel: 05051 706 Telex: 925906 fvlpb

Seed supplier specializing in cereals. Associated with variety trials at KWS

FR GERMANY Part III

Federal Organization for Geosciences and Raw Materials

Bundesanstalt fur Geowissenschaften & Rohstoffe

Postfach 510153, Stilleweg 2, D-3000 Hannover 51.

Studying the culture of thiobacilli for leaching of minerals, such as copper, zinc, nickel, chromium, titanium and vanadium from filtration processes as well as the use of heterotrophic microorganisms for the extraction of nickel from nonsulphidic ores.

Federal Research Centre for Agriculture

Institute of Economics

Bundesallee 50, D-3300 Braunschweig. Tel: (0531) 5961

Carried out studies on the economics of production of biogas (methane) by anaerobic digestion of farm wastes.

Feldman Chemie GmbH

Postfach 60, Salzstrasse 18, D-8084 Ining/Ammersee. Tel: (081143) 10 43 Telex: 0527997

Produces chemicals for brewing and soft drinks industries, as well as chemicals for water treatment and industrial cleaning.

Feodor Burgmann Dichtungswerke GmbH & Co

Aussere Sauerlacher Strasse 6-10, D-8190 Wolfratshausen 1. Tel: 08171 23 0 Telex: 527430

Manufacture equipment for pumps, agitators, dryers, filters, fermenters, reactors and other sterile applications.

Filtron Molekularfiltertechnik GmbH

Welzheimer Strasse 19a, Postfach 505, D-8757 Karlstein 1. Tel: 06188 5759 Telex: 176188932

Produce a range of ultrafiltration membranes and other filtration media including air bubble generating diffusers for use in fermenters, tangential flow stainless steel cartridges, disposable molecular filters of 10ml or 150ml capacity, cell harvesting cassette systems, pilot scale ultrafiltration systems of from 1 litre to 300 litres and process ultrafiltration cut off systems from 4500 to 45000 square centimeters. Products have a wide range of molecular cutoffs at 1 to 1000 kD.

Finnigan MAT

Barkhausenstr 2, Postfach 14 4062, D-2800 Bremen 14. Fax: 0421 5493396 Tel: 0421 54930 Telex: 245332

Supply high resolution mass spectrometers for use with both inorganic and organic samples.

Flow Laboratories GmbH

Muhlgrabenstrasse 10, Postfach 1249, D-5309 Meckenheim bei Bonn. Telex: 8869334 Fax: 02225 880581 Tel: 02225 8805 0

Supplies wide range of chemicals and reagents for cell culture, research and clinical diagnostics, immunoassays etc, as well as fibroblast interferon (see Flow Laboratories Inc, US).

Fluka Feinchemikalien GmbH

Messerschmittstrasse 17, D-7910 Neu-Ulm. Tel: 0731 7408889/70111 Telex: 712316 fluka Fax: 0731 750 44

Supplies a wide range of fine chemicals including neutral ionophores for ion-selective electrodes, silanizing agents and cocktails for ion-selective membranes for use in microelectrodes (see Fluka AG, Switzerland).

Forestry Institute

Bundersforschungsanstalt fur Forst und Holzwirtschaft

Leuschnerstrasse 91, D-2050 Hamburg 80. Tel: (040) 73 91 91

Studying fermentation of xylans recovered from lignocellulosic residues, such as straw, by steam extraction using Thermoanaerobacter ethanolicus and Clostridium thermohydrosulphuricum to produce ethanol. Also studying production of aspen hybrids using tissue-culture techniques.

Fr Kammerer GmbH

Industriestrasse 86-88, D-7530 Pforzheim-Huchenfeld. Tel: 07231 7860 Telex: 783826

Manufacture fermenter vessels, agitator tanks, heat exchangers, heating or cooling coils, columns, vacuum chambers, cryostats and a hydrogen/oxygen steam generator for steam sterilisation and heating in biotechnology, pharmacy, medical and food technology etc.

Franz Morat KG

Hoechst 7, D-7821 Eisenbach 1, Hochschwarzwald. Tel: 07657 88 0 Telex: 17765711

Supply a computerized titration calorimeter with autosampling, data acquisition and analysis equipment.

Fraunhofer Institute

Fraunhofer Institut fur Grenzflachen- und Bioverfahrenstechnik Nobelstrasse 12, D-7000 Stuttgart 80. Telex: 7255168 iz s Tel: (0711) 68 68 01

Developing two-stage anaerobic processes for the generation of methane during waste water treatment using tower reactors

Fraunhofer Institute of Food Processing and Packaging

Schragenhofstrasse 35, D-8000 Muenchen 50. Tel: 089 149009 0

Carrying out research in all aspects of food from quality control to packaging. Areas of interest include development of bioreactors for solid state fermentation, enzymes and cultures of microrganisms for bioconversion.

Fresenius Chem Pharm Industrie KG

Postfach 1809, Borkenberg 14, D-6370 Oberusel/Taunus 1. Telex: 410805 freka Tel: (06171) 60 1

Supplies immunological research reagents and diagnostic test kits. Agents for Litton Bionetics, US.

Fried Krupp GmbH

Krupp Forschungsinstitut

Muenchener Strasse 100, D-4300 Essen 1.

Tel: 0201 188 2794

Carry out a wide programme of research and development in process technology, equipment and machinery, instrumentation and control as well as materials research in a number of areas including biotechnology, chemical separation and extraction.

Friedrich August Thiem

Postfach 630644, Lademannbogen 6, D-2000 Hamburg 63.

Tel: (040) 538 10 51 Telex: 0212139

Produces sodium alginate, agar, plant gums, tannic acid, gallic acid and pyrogallic acid.

Friedrich Witte

Postfach 740114, D-6000 Frankfurt am Main 74. *Tel*: (0611) 81 16 23

Manufactures peptones for bacteriological use.

Friedrich & Hofmann

Benzstrasse 28, D-8031 Puchheim/Munchen.

Tel: (089) 806081

Supplies fermentation equipment (see LH Fermentation UK).

Fritsch GmbH

542 Haupstrasse, D-6580 Idor-Oberstein 1. Tel: (06781) 270 92 Telex: 426203

Supplies equipment for cell screening.

Garlock GmbH

Welserstrasse 1, Postfach 10 05 49, D-4040 Neuss Uedesheim. Tel: 02101 37025 Telex: 8517987 Fax: 02101 39759

Produce sterilization equipment for use in the pharmaceutical and chemical industries including sterile seal steam surrounded valves and special electrostatic conductive linings for avoidance of bacterial contamination.

GAT GmbH

Gamma Analysentechnik GmbH

Dioysiusstr 6, D-2850 Bremerhaven. Tel: 0471 51809 Telex: 238751

Supplies chromatography detector systems and accessories including support materials and HPLC columns as well as photometers, fluorometers and chemiluminescence instruments for the measurement of ATP.

FR GERMANY Part III

GBF

Gesellschaft fur Biotechnologische Forschung mbH

Mascheroder Weg 1, D-3300 Braunschweig.

Tel: 0531 6181 0 Telex: 952667 gebio Fax: 0531 6181 515

Develop microbial processes for large scale production of beta-interferon, DNA and enzymes. Carrying out research and development on automatic bioreactor process control and scale up systems, improved computer aided protein design, the German Collection of Microorganisms and a databank for biotechnology in collaborative projects.

GBI eG

Paul Lincke Ufer 41, D-1000 Berlin 36. Tel: 030 6185076

Manufacture environment protection equipment including a bacterial testing system for continuous monitoring in water treatment plant.

GEA Ahlborn GmbH & Co KG

Postfach 1180, Voss-Strasse 11/13, D-3203 Sarstedt.

Tel: 05066 85 0 Telex: 927377

Manufacture a wide range of equipment for ultrafiltration and other processes particularly for the cheesemaking industry but also for brewing and soft drinks, including storage tanks, pumps, separators and automatic thermal process control systems.

Gen-bio-tec GmbH

Gesellschaft fur gentechnologische und biotechnologische Forschung mbH Czernyring 22, D-6900 Heidelberg. Tel: 06221 15016 Telex: 6221935

Synthesise and manufacture proteins and nucleic acids for medical use. Products include oligodeoxyribonucleotides and double stranded DNA fragments. Eight therapeutical proteins have been synthesised by chemical/enzymatic methods and cloned in E coli. Also offer contract fermentation, optimization of fermentation processes and downstream processing as well as carrying out DNA sequencing.

German Appropriate Technology Exchange (GATE)

Deutsches Zentrum fur Entivicklungstechnologien

Postfach 5180, D-6236 Eschborn *Tel*: 0619679 0 *Telex*: 40751

Telex: 40751 0

Carries out development projects in third-world countries and provides free information on appropriate technology to institutions in developing countries. Maintains a biogas technology, advance training and dissemination programme and has carried out experimental work both in Germany, on slops from sugar cane factories, and abroad. Under the biogas extension service, is funding a number of demonstration and pilot plants. Publishes information on biogas plant. Part of the Ministry for Economics Cooperation, Germany.

German Cancer Research Centre

Im Neuenheimer Feld 280, D-6900 Heidelberg.

Carrying out research in all aspects of cancer.

German Collection of Microorganisms

Deutsche Sammlung von Mikroorganismen

Grisebachstrasse 8, D-3400 Gottingen.

Tel: 0551 393827 Telex: 952667

A national service collection of bacteria, fungi and yeasts for general and industrial microbiology research and teaching. Offers the following services; collection, maintenance and preservation of cultures relevant to applied microbiology, biotechnology, education and science; publishes information on the collection; supplies cultures to outside clients; serves as a depository for patented organisms; offers training services; conducts research on collection related matters and microbial taxonomy. Also offers specialised services: safe deposit of organisms; freeze drying of samples for clients; identification of bacteria, yeasts and fungi (excluding pathogens).

Gesellschaft fur Immunchemie und Immunbiologie GmbH

Osterstrasse 86, D-2000 Hamburg 20. *Tel*: (040) 49 97 27

Supplies selected diagnostics and kits from international producers for use in research, medical diagnostics and veterinary medicine.

Gesellschaft fur Klinische Specialpraparate GmbH

Fehlandtstrasse 3, D-2000 Hamburg 36.

Tel: (040) 359 08 51

Telex: 841213181

Supplies immunodiagnostics and reagents for clinical research use, including lectins, agglutinins, antibodies and antisera. Agent for EY Laboratories, US.

Gesellschaft fur Reproduktionsbiologie GmbH

Repromed

Osterstrasse 86, D-2000 Hamburg 20.

Tel: 040 499727

Develop and produce radioimmunoassays and enzyme based immunoassays for monitoring and diagnosis of drugs.

Gesellschaft fur Labortechnik mbH

Schulze-Delizsch-Strasse 4, D-3006 Burgwedel 1.

Tel: 05139 3076 Telex: 921596 gflha

Supply equipment designed for biotechnology laboratories including bio-freezers to -90 C, shakers and water baths as well as drying and sterilizing cabinets.

Gibco/BRL

Dieselstrasse 5, Postfach 1212, D-7514 Eggenstein.

Tel: 0721 705006 Telex: 07825957 Fax: 0721 70291

Supply products for cell biology tissue culture and microbiology including: blood serums, liquid media, dry powder formulations, plant tissue culture media, peptone extracts and hydrolysates, agar plates, bloods, blood culture bottles, antibiotics and other biochemicals, and balanced salt solutions. Also supply products for molecular biology including restriction endonucleases and DNA modifying enzymes, reagent systems (labelling, cloning, sequencing, synthesis), linkers, molecular weight standards, chromatography materials and products for immunology.

Girindus Pharmachemie GmbH

Schildergasse 49, D-5000 Koln 1.

Tel: (0221) 210767 Telex: 8883513

Produces pharmaceutical intermediates and bulk pharmaceuticals.

Gissen University

Institute for Virology

Frankfurterstrasse 107, D-6300 Giessen 11.

Tel: (0641) 7024990

Studying virology and immunology related to virus diseases as well as the use of monoclonal antibodies in purification of viruses.

Gissen University

Institute for Biochemistry

Franfurterstrasse 100, D-6300 Giessen 11.

Tel: (0641) 702 49 90

Researching into immobilized cells and enzyme systems.

Glasgeratebau Hirschmann

Hauptstrasse 7-15, D-7101 Eberstadt.

Tel: 07134 4031/4033 Telex: 728318 em

Supply volumetric glassware, disposable pipettes and other laboratory apparatus for liquid handling.

Godecke AG

Mooswaldallee 1-9, D-7800 Freiburg im Breisgau.

Major pharmaceutical company, carrying out research in cell culture, radioimmunoassay development etc. Affiliated with Warner Lambert/Parke Davis, US.

Goettingen University

Institute of Microbiology

Grisebachstrasse 8, D-3400 Gottingen.

Investigating genetic modification of strains of Clostridium acetobutylicum to improve productivity, increase butanol production and reduce sensitivity to inhibition by solvent. Also developed continuous culture of various anaerobic thermophiles for the overproduction of thermostable starch hydrolyzing enzymes.

Part III FR GERMANY

Gonotec

Gesellschaft fur Mess- und Regeltechnik mbH Eisenacherstrasse 56, D-1000 Berlin 62. Tel: (030) 784 60 27 Telex: 186218 gonot Manufactures high quality osmometers.

Gottingen University

Institute of Microbiology

Wilhelmsplatz 1, D-3400 Gottingen.

Developing procedures for the isolation of enzymes and bacteria suitable for use as biosensors and for the treatment of pollutants such as carbon monoxide, hydrocyanic acid and nitrites. Also investigating the production of thermostable enzymes for starch hydrolysis, alpha-amylase, pullulanase, and alpha-glucosidase, from a newly isolated strain of Clostridium.

Gottingen University

Institute for Crop Science & Animal Hygiene in the Tropics & Subtropics Wilhelmsplatz 1, D-3400 Gottingen.

Using head-space gas-chromatography to analyze metabolically produced alcohols and fatty acids from bacterial pathogens using on-line systems in order to identify the culture. Also developing continuous production of bacterial antigens using a microprocessor controlled bioreactor directly connected to a tangential cascade filtration unit for concentration of large amounts of the antigen.

Gottingen University

German Primate Centre

Wilhelmsplatz 1, D-3400 Gottingen.

Carrying out research on the characterization of genomes, with subsequent production of nucleic acid hybridization probes, detecting enteroviruses, coxsackievirus group B and other predicted oligonucleotides for use in diagnostics for virus recognition.

Greiner u Sohne GmbH & Co KG

Galgenbergstrasse 9C, D-7440 Nuertingen. Tel: 07022 501 0 Telex: 07267349 greiner

Supply cell and tissue culture products, disposable labware, laboratory instruments, serums and media.

Grinstedvaerket GmbH

Postfach 540947, Kellerbleek 3, D-2000 Hamburg 54. Telex: 214899 gvdan Tel: (040) 584052

Supplies food additives, industrial enzymes and vitamins (see Grinsted Products AS, Denmark).

GSG Mess- und Analysengerate mbH

Karlsburgstrasse 6, Postfach 410368, D-7500 Karlsruhe 41. Tel: 0721 402033 Telex: 7826618

Supply mass spectrometers suitable for plasma desorption spectrometry for use in analysis of high molecular weight biomolecules as well as quadrapole systems for analysis of gas mixtures and low resolution systems for coupling to gas or liquid chromatographs; products of Kratos Analytical, US.

GTZ GmbH

German Agency for Technical Cooperation

PO Box 5180, D-6236 Eschborn 1. Telex: 40751 0 tz Tel: 06196 79 0

Runs cooperative projects in developing countries using alternative technology

GUA

Gesellschaft fur Umweltanalytik

Mindener Strasse 205, D-4500 Osnabrueck.

Tel: 0541 7102183

Offer chemical and microbiological analytical services of water, soil, air, foods and overall environmental pollution control.

Gustav Parmentier

Eichendorffstrasse 37, D-6000 Frankfurt am Main. Tel: (0611) 56 10 34 Telex: 041457

Supplies vitamin E and gelatin for the pharmaceutical industry.

Gynkotek

Gesellschaft fur den Bau wissenschaftlich-technischer Gerate mbH

Landsberger Strasse 65, D-8034 Germering b Munchen.

Tel: (089) 8 49 37 91 Telex: 528586 gynko Elmwarteweg 10, D-3305 Erkerode/Braunschweig

Tel: 05305 25 57

Manufactures high performance liquid chromatographs.

H Juergens & Co GmbH

Langenstrasse 7680, D-2800 Brenmen 1.

Fax: 0421 15830 Telex: 244787 Tel: 0421 14967

Supply Kelomat, Austria steam sterilizers.

Haake Mess-Technik GmbH & Co

Dieselstrasse 4, D-7500 Karlsruhe 41. Tel: 0721 40941 Telex: 7826739

Fax: 0721 4094300

Manufactures scientific equipment and analytical apparatus including heating and chilling circulators and cryostats as well as fully automated viscometers with microprocessor control and data handling, calorimeters, blood bank refrigerators and deep freezers to -135 C.

Haarman & Reimer GmbH

Postfach 1253, D-3450 Holzminden.

Tel: (05531) 70 11

Produces flavours, fragrances and essential oils. Subsidiary of Bayer AG, Germany.

Hamburg University

Edmund Siemers Allee 1, D-2000 Hamburg 13. Tel: 040 41 23 4104/4366 Telex: 214732 unihh

Developing techniques of nutrient control in plant cell culture using a multi-ionostat, investigating cytotoxicity of environmental pollutants, aroma and fragrance compounds derived from fungal cultures, enzyme engineering and immobilization, optimization of meat quality as well as developing in vitro model using isolated adult cardiac myocytes for biochemical and pharmacological investigations of the mammalian heart.

Hamburg University

Universitats-Krankenhaus Eppendorf Hautklinik

Martinistrasse 52, D-2000 Hamburg 20.

Tel: 040 4 68 26 46

Carrying out investigations in the field of dermatology using ultrasound techniques.

Hamilton Darmstadt GmbH

Daimlerweg 5A, D-6100 Darmstadt.

Tel: 06151 8 50 85 Telex: 419684 Fax: 06151 8 91 733

Supplies all the products of Hamilton Bonaduz AG, Switzerland.

Hannover University

Institute of Technical Chemistry

Callistrasse 3, D-3000 Hannover 1.

Tel: 0511 762 - 0 Telex: 923868

Research projects include: fermentation studies and downstream processing for production of penicillin, cephalosporin and amino acids using airlift fermenters; enzyme technology producing amino acids, ampicillin and precursors of prostaglandins using liquid membrane enzyme emulsions; and process control and analysis using laser-flow cytometry.

Hannover University

Institute for Biophysics

Herrenhauser Strasse 2, D-3000 Hannover 21.

Tel: 0511 762 - 0 Telex: 923868

Carrying out research into the eco-physiological characterization of micro-aerophilic nitrogen fixing bacteria from the rhizophere of grasses using fluorescent-labelled antibodies.

Hannover University

Institute of Domestic Wastewater Treatment

Welfengarten 1, D-3000 Hannover 1.

Telex: 923868 unihn Tel: 0511 762 2276

Developing biological and chemical treatments of waste and wastewater as well as water purification for large scale aerobic and anaerobic processes for treatment of wastewaters from the food, drink, paper, cellulose and oil industries including new technology for the elimination of N/P and suspended solids.

FR GERMANY Part III

Hans Hartge GmbH

Glockengiesserwall 14, D-2000 Hamburg 1. Tel: (040) 32 12 14 Telex: 216 1272

Supplies protein hydrolysates, peptones, yeast extract, yeast autolysates and culture media ingredients for biological use and the fermentation industries.

Hans Landgraf Laborgerate u Apparatebau

Magdeburger Strasse 3, D-3012 Langenhagen7. Tel: 0511 748382 Telex: 922127

Supply a range of laboratory and scientific equipment and apparatus, including distillation and steam generation systems as well as materials for NMR spectroscopy.

Hartmann & Braun AG

Graefstrasse 97, D-6000 Frankfurt 90. Tel: 069 799 1 Telex: 414071 hbfm

Manufacture equipment for monitoring and control of fermentation processes including continuous gas analyzers, recorders and microcomputer-based compact loop controllers.

Heidelberg Instruments GmbH

Im Neuenheimer Feld 518, D-6900 Heidelberg 18. Tel: 06221 403 30 Telex: 17622143

Manufacture quantitative 3D fluorescent microscopes based on laser scanning and a Motorola 68000 computer system which can be programmed to interact with other computer systems such as VAX and PDP.

Heidolph-Elektro GmbH & C0 KG

Starenstrasse 23, D-8420 Kelheim/Donau. Tel: 09441 707 0 Telex: 065415 heidk

Supply laboratory equipment including stirrers, rotary evaporators, shakers, mixers and pumps.

Henkel KG

Posfach 1100, D-4000 Dusseldorf 1.

Manufacture bulk industrial enzymes, including proteases, as well as detergents, other cleaning products, cosmetics and organic chemicals.

Heraeus-Christ Separationstechnik GmbH

Manufacture high speed refrigerated centrifuges as well as a range of bench-top equipment including general laboratory, high speed micro-, micro-haematocrit and large capacity centrifuges.

Heraeus Sepatech GmbH

Postfach 1220, D-3360 Osterode.

Manufacture laboratory and cooling centrifuges designed for biotechnology separation processes.

Hermann Biermann Importe

Lindestrasse 16, D-6350 Bad Nauheim. *Tel*: (06032) 31951 *Telex*: 4184170

Supplies antiserums, histochemical antibodies radioimmunoassay kits and other reagents and diagnostics for endocrinology and neurobiology. Agent for Immuno Nuclear Corp, US.

Hettich-Zentrifugen

Gartenstrasse 100, Postfach 260, D-7200 Tuttlingen.

Tel: (07461) 705 0 Telex: 762636 hetic Fax: 07461 705 125

Manufactures microprocessor controlled refrigerated centrifuges with a wide range of holders from 600 ml blood bag systems to multiple (up to 192) tube systems.

Heyl Chemische-Pharmazeutische Fabrik GmbH & Co KG

Goerzallee 253, D-1000 Berlin.

Tel: 038 8176052

Produce pharmaceuticals, chemicals and monoclonal antibodies. Developing diagnostics.

HGF Hamburgische GmbH

Hamburger Strasse 11, D-2000 Hamburg 76. *Tel*: 040 2270190

Promotes new businesses and serves as a consultant to international and national companies; establishing a biotechnology based industrial park in Hamburg.

Hoechst AG

Postfach 800320, D-6230 Frankfurt am Main 80. Tel: (069) 305 1 Telex: 41612 hoead

Manufactures antibiotics, pharmaceuticals, clinical diagnostics and bulk industrial enzymes for the textile industry (amylases), as well as insecticides, herbicides, fungicides and other chemicals. Working on the development of synthetic insulin and other applications of molecular biology to pharmaceuticals and food products.

Hoechst-Behring

Manufactures fine chemicals, radioimmunoassay kits and reagents, and other supplies for clinical chemistry. Subsidiary of Hoechst AG, Germany.

Hoerstron GmbH

Nibelungenring 57, D-2000 Elmshorn, Hamburg. *Tel*: 4121 73772 *Telex*: 8410218448

Manufacture temperature monitoring and control devices.

Hoffmann GmbH & Co KG

Hauerstrasse 2-4, Postfach 1168, D-3325 Lengede. Tel: 05344 7074/75 Telex: 175344810 Fax: 05344 810

Manufactures a wide range of industrial filters.

Hoffmann-La Roche

Diagnostic Division

Emil-Barell Strasse 1, D-7889 Grenzach-Wyhlen.

Products include microbiological diagnostics including rapid automated identification tests (see Hoffmann-La Roche, Switzerland).

Hoffmann-La Roche AG

Emil Barell Strasse 1, D-7889 Grenzach Wyhlen. *Tel*: (07624) 141 *Telex:* 773174

Produces clinical diagnostic products, vitamins speciality chemicals and pharmaceuticals (see Hoffmann-La Roche & Co AG, Switzerland).

Hohenheim University

Institut fur Biologische Chemie und Ernahrungswissenschaften Schloss-Mittelbau, Postfach 700562, D-7000 Stuttgart 70.

Tel: 0711 459 2001 Telex: 722959 uniho

Carrying out enzyme catalyzed synthesis of short chain peptides. Developing methods of large scale fermentation, antibiotic monitoring by HPLC and optimized isolation procedures for a group of membrane modifying polypeptide antibiotics produced by Trichoderma, Gliocladium and Emericellopsis.

Holag Technologie AG

Industriestrasse 11, D-3200 Hildesheim.

Tel: 05121 7615 0

Supply fermenters, processing vats, reactors, magnetic agitators for sterile use and complete systems for the biochemical and pharmaceutical industries.

Holurieka GmbH

Postfach 1525, D-4240 Emmerich. Tel: (02822) 4020 Telex: 8125142

Manufactures industrial scale stainless steel fermenters and storage vessels.

Hybritech GmbH

Beasweg 1, D-6200 Weisbaden.

Supplies a wide range of diagnostic kits and reagents based on monoclonal antibodies (see Hybritech Inc, US).

Part III FR GERMANY

IBL GmbH

International Biotechnology Laboratories

Technologiepark Heidelberg, Im Neuenheimer Feld 517, D-6900 Heidelberg

Tel: 06221 400521

Offer contract research services in microbial strain improvement, process development and product screening as well as supplying fermenters and bioreactors of Marubishi (Japan) and Kraftanlangen Heidelberg AG (Germany) which are available at both lab-scale and pilot-scale designs suitable for culture of either microorganisms or cell cultures; with magnetic drives, automatic sampling and full automation of control and data acquisition. Also supply systems for denitrification of drinking water and serum free medium for tissue culture.

IBR Forschungs GmbH

Institute for Contract Research

Suedkampen 31, D-3030 Walsrode 2 Tel: 05166 5066 Telex: 924342 ibr

Carries out contract chemical-pharmaceutical and pharmacological-toxicological testing and bioassay of biotechnological products required for registrations.

IC Chemikalien GmbH

Sohnckestrasse 17, D-8000 Muenchen 71. Tel: 089 791 46 47 Telex: 17898948 scr

Supplies isotope-labelled compounds and stable isotopes; products of Merck Sharp & Dohme, Canada as well as immunologicals of Genzyme, US.

ICI Pharma

Otto Hahn Strasse, D-6831 Plankstadt. Tel: (06202) 821 Telex: 466331

Produces pharmaceuticals. Subsidiary of Deutsche ICI GmbH, Germany.

ICN Biomedicals GmbH

Thuringer Strasse 15, Postfach 369, D-3340 Eschwege Tel: 05651 8711 Telex: 175651818 icn Fax: 056 511 0611

Supply biochemical products, including anti-serums, radiochemicals, stable isoptopes, chemicals and reagents for immuno-diffusion and immunization histo-chemistry as well as lectins, peptides, enzymes, animal research diets and adsorbents for chromatography etc; products of Miles USA.

ICN Micromedic Systems Deutschland GmbH

Thuringer Strasse 15, Postfach 369, D-3340 Eschwege. Tel: 05651 8711 Telex: 5651818 icn

Supply automatic dispensers and pipetting stations as well as gamma and beta counters, automated radioimmunoassay analyzers and radioimmunoassay diagnostics and test kits.

ICT Handels GmbH

Antoniterstrasse 27, D-6230 Frankfurt 80. Tel: 069 31 60 03 Telex: 411320 ict

Supply large columns for preparative chromatography as well as equipment and accessories for gas chromatography, HPLC, immuonoassays and histology

IFFA Merieux GmbH

Postfach 340, Conrad Adenauer Strasse 23, D-7958 Laupheim. Tel: (92) 20 27 Telex: 719418 iffa

Institut Merieux (France).

Supplies veterinary vaccines, serums and antigens.

IMA GmbH

Institut fur Molekularbiologie und Analytik Eisenbahnstrasse 102-104, Postfach 30 11 63, D-6072

Dreieich/Buchschlag. Tel: 06103 672 02

Develop process control systems for use in laboratory and industrial fermentation and protein separation including computerized control systems and data loggers for use with bioreactors as well as controllers for electrophoretic separations. Products include a bench-top airlift fermenter, nucleosides for synthesis of oligonucleotides, enzymes, coenzymes, soil and groundwater analytical and in situ decontamination products.

Immuno Diagnostika GmbH

Franz-Marc Strasse, Heidelberg 1.
Tel: (06221) 377 26 Telex: 461477

Supplies blood products and diagnostic kits (see Immuno Ltd, UK).

Incon Analgentechnik GmbH

D-6650 Homburg/Saar.

Develops methods of treating raw materials containing sugar and starch for production of sugar syrups as fermentation substrates using a combination of elevated temperature and pressure with enzymes, such as thermophilic amylase, in a continuous process.

Infors GmbH

Aidenbachstrasse 144a, Postfach 710529, D-8000 Muenchen 71. Tel: 089 783377 Telex: 5216954

Supplies fermenters for laboratories and pilot plant as well as shakers and incubator shakers

Ingold Messtechnik GmbH

Siemenstrasse 9, D-6374 Steinbach/Ts.

Tel: 06171 70010 Telex: 417419 Fax: 06171 700199

Manufacture a wide range of sensors suitable for biotechnical applications including ion-selective and gas sensitive electrodes, sterilizable and autoclavable pH and redox electrodes, dissolved oxygen monitors, and on-line fluorosensor systems for measurement of NADH fluorescence.

Institut fur angewandte Chromatographie

Bluecherstrasse 22, D-1000 Berlin 61.

Tel: 030 691 8505

Developing methods of analysis and separation of biopolymers through high performance liquid chromatography.

Institut fur Betriebswirtschaft

Bundesforschungsanstalt für Landwirschaft

D-3300 Braunschweig-Volkenrode.

Tel: (0531) 596553

Carrying out studies on economic and technical feasibility of production of ethanol from both purpose-grown crops and wastes and residues in Germany.

Institut fur Geringesgesverbe und Biotechnologie

Seestrasse 13, D-1000 Berlin 65.

Has developed a continuous countercurrent process for enzymic treatment of starch. Other areas of research include brewing and malting technology, technology of bakers' yeast, pentose fermentations and biochemical engineering design. Offers consultancy service in these areas

Institut fur Hormon und Fortpflanzungsstorungen

Osterstrasse 86, D-2000 Hamburg 20.

Tel: 040 49 9727

Offers services and products as follows: supply and distribution of selected diagnostic kits from international producers for research, medical and veterinary use; supply of products for cell culture, hybridoma production, DNA synthesis, sequencing and cloning as well as isolation of proteins and peptides; development and production of radio and enzyme based immunoassays for drug monitoring and diagnostics. Services on offer in association with Gesellschaft fur Immunchemie und Immunologie, Repromed and McKnight Laboratories, all Germany.

Institut fur Monoklonale Antikorper

Feodor-Lynen-Strasse 5, Postfach 610424, D-3000 Hannover 61.

Carrying out research and development in hybridoma technology and monoclonal development for diagnostic and therapeutic use. Develops new monoclonal antibodies as well as diagnostic kits on a contract basis.

Institute for Wood Chemistry

Leuschnerstrasse 91, D-2050 Hamburg 80. Tel: (040) 73962210

Studying the separation of components of lignocellulose using low-boiling-point alcohols.

Institute of Forest Genetics

D-2070 Grosshansdorf 2

Developing tissue culture and organ culture techniques for propagation of aspen hybrids in order to generate fast-growing trees for use in short-rotation energy production systems.

FR GERMANY Part III

Institute of Wool Research

Deutsches Wollforschungsinstitut

Veltmanplatz 8, D-5100 Aachen. Tel: 36454 Telex: 832829

Researching into production of wool, silk and other natural fibres. Studying chemistry of collagen synthesis and animal hormones, including insulin.

Instrumentation Laboratory GmbH

Kleinstrasse 14, D-5303 Bornheim 2. Tel: 22 22 83 10 Telex: 8869361

Supplies diagnostic instruments including differential cell counters.

Interatom

Internationale Atomreaktorbau GmbH

D-5060 Bergisch Gladbach 1.

Studying technical feasibility and economics of improvement in the quality of biogas by removal of carbon dioxide using a variety of techniques, including absorption, adsorption, cryogenic separation, membrane separation and chemical conversion.

Intospace GmbH

Prinzenstrasse 17, D-3000 Hannover 1.

Joint venture by a number of companies internationally to act as an agency to mediate between specialists in space technology at space systems such as Spacelab and research organizations and industries interested in using outer space as a laboratory or production site to utilize microgravitation in experiments and processing.

IRE Diagnostic Vertriebs GmbH

Cecilienallee 36, D-4000 Dusseldorf 30.

Tel: (0211) 43 98 67 Telex: 858 8898 ired

Supplies diagnostics based on monoclonal antibodies.

Ismatec Laboratoriumstechnik GmbH

Vier-Morgen-Strasse 23, D-6980 Wertheim-Mondfeld. Tel: 09377 1232 Telex: 689287

Manufactures a range of metering pumps including small peristaltic pumps, multichannel peristaltic pumps, universal peristaltic pumps and gear pumps with magnetic coupling.

ITE

Intertechnik Elze GmbH & Co KG

Postfach 209, Lessingweg 1/2, D-3210 Elze 1. Tel: 05068 2347 Telex: 927241

Agent for Waukesha pumps of Waukesha Foundry Division Abex Corporation, US; products suitable for aseptic use in the food and pharmaceutical industries in aseptic drum filling, aseptic cookers, filler metering and aseptic batch metering.

J C Binzer KG

Berleburger Strasse 71, D-3559 Hatzfeld/Eder. Tel: (06467) 80 10 Telex: 0482224

Manufacture analytical filter media, technical filter media, pre-filters for membranes, activated carbon treated media for deodorizing air filters, carrier medium made of micro glass fibre and glass fibre based diaphragms. Also maufacture agglomerators and equipment for phase separation.

J S Reinraumtechnik

Steinbeker Hauptstrasse 109, D-2000 Hamburg 74. *Tel*: 040 713 31 10

Supply clean air cabinets for microbial laboratory processes.

JA Benckiser GmbH

Postfach 210167, D-6700 Ludwigshaften Rhein. Tel: (0621) 590 31 Telex: 0464872

Produces tartaric acid, citric acid and their salts and derivatives, sodium gluconate, detergents, etc.

Janke & Kunkel GmbH & Co KG

IKA-Werk

Neumagenstrasse 27, Postfach 1263, D-7813 Staufen im Breisgau. Tel: 07633 831 0 Telex: 17763317 Fax: 07633 831 98

Manufactures stirrer systems for homogenous cell culture, laboratory reactors, dispersers, shakers, pumps and rotary evaporators as well a range of products for heating, grinding, analysing, measuring, regulating and controlling etclaboratory processes.

Janssen Chimica

Janssen Life Sciences Products
Poststrasse 56, D-1054 Nettetal 2.
Tel: 02157 1035

Distributes products of Janssen Life Sciences Products, Belgium.

Johannes Gutenberg University

Institute of Medical Microbiology

Augustusplatz (Hochhaus), D-6500 Mainz.

Investigating the structure, function and molecular biology of the complement system.

Joyce Loebl GmbH

Emanual Leutz Strasse 1, D-4000 Dusseldorf 11. Tel: (0211) 59 40 91 Telex: 8581998

Supplies scaning densitometers which can be used with all types of media up to 210 mm square, including gel strips, rods or slabs, TLC and HPLC plates, acetate and paper, in the following modes: reflectance, transmittance, fluorescence and quench fluorescence in the visible or ultra-violet light range as well as computerized image analyzers. A Vickers (UK) Company.

Julabo Labortechnik GmbH

Eisenbahnstrasse 45, D-7633 Seelbach/Schw. Tel: 07823 2001 Telex: 754988

Supplies a wide range of temperature controlled equipment in the range -90 to \pm 300 C.

Jurgen Schramm Reinraumtechnik

Steinbeker Hauptstrasse 109, D-2000 Hamburg 74. Tel: 040 713 3110

Manufacture clean, sterile and microbiological containment systems and rooms.

Kalger GmbH

Postfach 1116, D-6451 Neuberg.

Tel: 06183 2036 Telex: 4184184 peka

Supply a wide range of bioreactors from 2 litres to 5 cubic metres for cell culture fermentation and monoclonal antibody production; products of SGI, France.

Kali-Chemie AG

Hans-Boeckler-Allee 20, Postfach 220, D-3000 Hannover 1. Tel: 0511 857 1 Telex: 922755 Fax: 0511 817 338

Specializes in processing of biological raw materials to produce a wide range of acids and derivatives including trifluoroacetic acid, trifluoroactic acid peptide grade, trifluoroacetic acidethylester, trifluoroacetic acidmethylester and trifluoroethanol, peptides, whey proteins, lactose based products, proteins, enzymes and whey protein hydrolyzates. Also supplies protein hydrolysates, feed additives, reagents for protein synthesis, adsorbents and carrier systems for cell culture including silica microspheres.

Kallestad Diagnostica GmbH

Hapsburgerstrasse 4, D-7800 Freiburg.

Supplies immunodiagnostics and immunoassay reagents (see Kallestad Diagnostics US).

Karl Hammacher GmbH

Steinendorfer Strasse 27, Postfach 120209, D-5650 Solingen 12. Tel: 0212 66047 Telex: 8514803 hame

Supplies micro-dissecting instruments, medical instruments and other similar products.

Part III FR GERMANY

KC Biological

Supplies media and serums for cell culture, as well as microcarriers and large scale culture systems. Agents for Biotec Inc, US and Skatron AS, Norway. Subsidiary of KC Biologicals Inc, US.

Kessler & Luch GmbH

Rathenaustrasse 8, D-6300 Giessen 1. Tel: 0641 7071 Telex: 482864

Manufactures clean room modules.

KFA Kernforschungsanlage Julich GmbH

Institut fur Biotechnologie

Wilhelm-Johnen-Strasse, Postfach 1913, D-5170 Julich 1. Tel: 02461 61 4666 Telex: 83355670 kf Fax: 02461 61 4661

Technologie Transfer Buro, Postfach 1913, D-5170 Julich 1. Tel: 02461 61 4320 Tlx: 833556 Fax: 02461 61 3178

Carrying out research and development on new fermentation processes and bioreactors, including bacterial ethanol and acetic acid fermentation, production of L-amino acids and rotating systems for denitrification of water as well as aspects of anaerobic digestion, biological waste water purification and drinking water conditioning, enzyme technology, immobilized enzyme systems and membrane reactors.

Kleinfeld GmbH & Co Labortechnik

Leisewitz Strasse 47, Postfach 3303, D-3000 Hanover 1. Tel: 0511 85 20 41 Telex: 923811

Supplies a wide range of laboratory equipment and apparatus including laboratory stills, anaerobic culture equipment, digesters, pumps, centrifuges and colony counters as well as an automatic chlorophyll fluorometer. Also adistributor for Gallenkamp, UK.

Klockner & Co

Frankfurterstrasse 83, D-6096 Raunheim. Tel: (061 42) 40 70 Telex: 4182131

Supplies media and serums for cell culture, as well as microcarriers and large-scale culture systems. Agents for Biotec Inc, US and Skatron AS, Norway.

Knick Elektronische Messgerate GmbH & Co

Beuckerstrasse 22, D-1000 Berlin 37. Tel: 030 80 01 1 Telex: 0184529

Manufacturers of instruments and systems for measurement and control of pH and conductivity in chemical laboratories and production processes including battery powered pH meters for field applications.

Knoll AG

Postfach 210805, Knollstrasse 50, D-6700 Ludwigshafen. Tel: 0621 561 51/5890 Telex: 0464823

Manufactures pharmaceutical intermediates and finished products. Subsidiary of BASF, Germany.

Knut H Escher GmbH

Schulstrasse 86a, Postfach 740146, D-4100 Duisburg 74-Baerl. Tel: 02841 8211 Telex: 8121201

Supplies a wide range of equipment for gas handling and low temperature (cryogenic) work.

Komposterden GmbH

Altriper Strasse 60, D-6800 Mannheim 24. Tel: (0621) 85 10 12

Has developed a composting procedure which also recovers heat in an aerobic rotting process. The system consists of a cylindrical reactor through which air is blown to produce heat as well as compost. The heat generated can be equal to about 50% of that of the heat of combustion of the raw material used.

Konstanz University

Faculty of Biology

Postfach 5560, D-7750 Konstanz. Telex: 0733359 Tel: (07531) 88 21 01

Carrying out research on the production of hydrogen by phototrophic microorganisms including blue-green algae (cyanobacteria).

Kontron Instruments GmbH

Oscar-von-Miller Strasse 1, D-8057 Eching bei Muenchen. Telex: 526719 Tel: 08165 606 0

Produce laboratory and analytical equipment including radioactive counters, UV/visible spectrophotometers, spectrofluorometers, amino acid analyzers and high speed refrigerated and ultracentrifuges.

Kottermann GmbH & Co Labortechnik

Industriestrasse 2-10, D-3162 Uetze-Hanigsen. Fax: 05147 7650 Tel: 051 47 760 Telex: 5147810

Manufacture deep freeze stores and chests, refrigerated cabinets, incubators and safety/glove boxes.

Kraeber GmbH & Co

Hochallee 80, D-2000 Hamburg 13. Tel: 040 44 50 61 Telex: 17 403443

Fax: 040 45 51 63

Manufactures animal blood fractions for microbiology and diagnostics as well as pharmaceutical bulk substances and intermediates including heparin and mucopolysaccharides.

Kraftanlagen Heidelberg AG

Im Breitspiel 7, PO Box 103420, D-6900 Heidelberg 1. Fax: 06221 394 707 Tel: 06221 3941 Telex: 0461831

 $Engineering\ company\ offering\ services\ in\ fermenter\ design,\ downstream$ processing and effluent treatment.

Kraftwerk Union AG

Postfach 101063, D-6050 Offenbach/Main. Telex: 41529930 Tel: 069 8 07 32 38

Abt PK 32: Hammerbacherstrasse 12/114, D-8520 Erlangen,

Wiesenstrasse 35, D-4330 Mulheim an der Ruhr

Major engineering contractor involved in thermal power plant construction as well as waste conditioning and disposal water treatment facilities and anaerobic digestion processes for use with heavily polluted industrial effluent. A subsidiary of Siemens AG.

Kratos GmbH

Postfach 410368, Karlsburgstrasse 6, D-7500 Karlsruhe 41. Tel: (0721) 40 20 33 Telex: 7826618

Supplies instruments and accessories for liquid chromatography.

Kruess GmbH

Borsteler Chaussee 85-99a, D-2000 Hamburg 61. Tel: 040 511 60 33 Telex: 2174898 krue

Licensees for manufacture and marketing of equipment for electrofusion of cells, based on the process developed at the Nuclear Research Centre. Germany. Products also include tensiometers, contactanglemeter, film balance, refractometers and apparatus for membrane technology.

Kuratorium fur Technik und Bauwesen in der Landwirtschaft eV (KTBL)

Bartningstrasse 49, D-6100 Darmstadt 12. *Tel*: (06151) 340 71

Studying practicalities and economics of on-farm generation of electricity using generators driven by internal combustion engines fuelled using biogas

KW Pfannenschmidt

Postfach 200105, D-2000 Hamburg 20. Tel: (040) 56 10 91 Telex: 21913 kwps

Supplies chromatography standards and fine research chemicals, including custom synthesis.

KWS Kleinwanzlebener Saatzucht AG

Variety Selection Institute

PO Box 146, D-3352 Einbeck.

Telex: 965612 kws Tel: 05561 31 11 Fax: 05561 31 1322

Developing new crop varieties with higher productivity and increased resistance to disease including sugar beet, maize, cereals, vegetables, potatoes and forage plants using modern methods of cell and molecular biology.

FR GERMANY Part III

Labsystems GmbH

Postfach 120907, D-8000 Muenchen 12. Telex: 5214140

Supplies diagnostics, monoclonal antibodies, clinical instruments and pipette systems; products of Labsystems OY, Finland.

Landeshauptstadt Hannover

Postfach 125, Trammplatz 2, D-3000 Hannover 1. Telex: 923842 Fax: 168 5351 Tel: 0511 168 5929

A new centre for companies in the fields of medical technology and biotechnology on a 25 hectare site close to the University Medical School.

Landkreis Luchow Dannenberg

D-3130 Luchow

Investigating and designing systems in which decentralized biogas production on farms is linked to a centralized gas storage, processing and distribution centre.

Lang Labortechnik

Grasmeierstrasse 12, D-8000 Muenchen 40. Tel: 089 32 55 21 Fax: 089 32 32 779

Manufacture a measuring and controlling system for optical density, aspecialized laboratory fermenter system of 1-10 litres for continuous culture, biological control systems, including ecotoxicological tests for water, and pumps.

Latek Labortechnik Gerate GmbH

Gueteramstrasse 19A, D-6900 Heidelberg. Tel: (06221) 10662 Telex: 461634

Supplies accessories, reagents and adsorption media for gas and liquid chromatography. Agents for Phase Separations Ltd, UK.

LEE GmbH

Rebstoecker Strasse 33-39, D-6000 Frankfurt/Main 19. Telex: 4189461 lee Tel: 069 735033

Manufacture miniature solenoid valves for all gases and liquids with applications in peptide sequencers, flow injection, amino acid analysis sample preparation and micro-dosing as well as static mixers for HPLC applications and a range of fittings, adapters and connector systems.

Lentia GmbH

Schwanthalerstrasse 39, D-8000 Munchen 2. Tel: (089) 55 44 81 Telex: 0523875

Products include amino acids (DL-aspartic acid), succinic acid, including its salts and derivatives, and glutaric acid. Also produces glues and disinfectants.

Leybold AG

Bonner Strasse 498, Postfach 510760, D-5000 Koln 51. Telex: 888481 Fax: 0221 347 1250

Wilhelm-Rohn-Strasse 25 Postfach 1555 D-6450 Hanau 1. Tel: 06181 340 Tx: 8884810 Fax: 06181 34 4330

Manufacture analytical instruments including advanced IR-Visible-UV gas analyzers and freeze dryers. Part of Degussa AG, Germany.

Lipp GmbH

D-7091 Tannhausen/Ostalbkreis. Tel: (07964) 436 Telex: 74546

Manufactures and constructs fodder silos and liquid manure tanks. Has developed a stirred contact digester for production of biogas (methane) on farms from liquid manures.

3-M Deutschland GmbH

Postfach 643, Carl Schurz Strasse 1, D-4040 Neuss 1. Tel: (02101) 141 Telex: 08517511

Supplies a wide range of pharmaceuticals, medical, dental, radiological and other products (see 3-M Co, US).

Macherey-Nagel GmbH & Co KG

Postfach 101352, D-5160 Duren.

Tel: 02421 698 0 Telex: 833893 Fax: 02421 66716

Manufactures chromatography cartridges and a range of equipment for liquid chromatography including paper, pumps, preparative and accessories, thin layer chromatography plates, and HPLC columns.

Madaus Diagnostik

Ostmerheimerstr 198, D-5000 Koln 91.

Supplies laboratory diagnostic kits and immunological products, ELISA test kits, complement and antiserums of Cordis Laboratories Inc, US.

Maihak AG

Semperstrasse 38, Postfach 601709, D-2000 Hamburg. Tel: 040 27 160 Telex: 211158 Fax: 040 27 16242

Supplies a wide range of analytical equipment including total carbon, oxygen and gas analyzer systems designed for measurement of air pollution and emission sources. Also supplies data acquisition and evaluation systems as well as laboratory and process plant analyzers.

Mainz University

Institute for Medical Microbiology

Am Pulverturm B, D-6500 Mainz.

Tel: (0613) 17 31 80

Carrying out studies on microbial pathogens and immunology including aspects of molecular genetics in such organisms.

Maizena Industrieprodukte GmbH

Dusseldorfer Strasse 191, D-4150 Krefeld-Linn.

Tel: 02151 5751 Telex: 853820 Fax: 02151 572 583

Produce starch, modified starches and syrups. Subsidiary of CPC Europe, Belgium.

Mallinckrodt Diagnostica GmbH

Postfach 2060, Von Hevesystrasse 1-3, D-6057 Dietzenbach/Steinberg 2. Tel: 06074 401241/401200 Telex: 4191574

Supplies radioimmunoassay and diagnostic reagents (see Mallinckrodt Inc, US). Distributor for Centocor, US.

Mannesmann Veba Umwelttechnik GmbH

Sudstrasse 41, D-4690 Herne 2.

Developing a stable high-rate anaerobic process based on two-step sewage sludge treatment with separation of liquifaction and acid fermentation from methane fermentation resulting in hydraulic retention time of less than two days.

Marburg University

Institute of Microbiology

Auf den Lahnbergen, D-3550 Marburg an der Lahn.

Carrying out research on microbiology of anaerobic processes.

Martin Christ GmbH & Co KG

An der unteren Soese, Postfach 1208, D-3360 Osterode/Harz. Telex: 965101 Tel: 05522 5007 0

Manufacture freeze driers as well as laboratory and refrigerated

Mast Diagnostica

Laboratoriums Preparate GmbH

Schubertstrasse 5, D-2000 Hamburg 76.

Tel: (040) 220 1427

Supplies laboratory diagnostics, antibiotic susceptibility testing products, culture media and test kits for bacterial identification.

Mattson Instruments GmbH

Rotenwaldstrasse 100, D-7000 Stuttgart 1.

Telex: 721874 Tel: 0711 6565 254 Fax: 0711 6565 213

Supply infra red spectrometers and related software supported by an extensive library of commercial spectra.

Max Planck Institute for Biochemistry

Am Klopferspitz, D-8033 Martinsried bei Muenchen. Tel: 089 8578 2339 Telex: 521740 mpib

Carrying out research on microbial biochemistry, mechanisms of control of gene expression and transcription and molecular embryology as well as sequencing of proteins and biologically active peptides.

Max Planck Institute for Biophysics

Kennedyallee 70, D-6000 Frankfurt am Main 70.

Investigating the structure and function of biological membranes.

Part III FR GERMANY

Max Planck Institute for Breeding Research

D-5000 Koln 30.

Undertaking studies on the Ti plasmid, infection of higher plants and biosynthesis of opines.

Max Planck Institute for Molecular Genetics

Ihnestrasse 63-73, D-1000 Berlin 33.

Carrying out studies over a broad range of molecular biology, including investigations of structure and function of oncogenes, transformation, specific proteins, monoclonal and synthetic peptide antibodies and expression cloning in bacteria.

McKnight Laboratories GmbH

Osterstrasse 86, D-2000 Hamburg 20. *Tel*: 040 499727

Offer consultancy in bio-availability studies, planning, non-clinical testing, biometrical evaluations and project reporting.

MDH GmbH

Microflow, Dent & Hellyer

Eisenstrasse 48, D-6090 Russelsheim. Tel: 061 42 68029 Telex: 4182803

Manufacture sterile chambers, glove boxes, fume hoods, etc as well as constructing larger controlled environment facilities, supplying protective clothing and offering a range of filters for laboratory, medical and industrial applications.

Medac GmbH

Fehlandtstrasse 3, D-2000 Hamburg. *Tel*: 0403 40931 *Telex*: 215321

Supplies clinical diagnostics, affinity, purified and conjugated antibodies, and other products for immunology (see Milab, Sweden).

Mediapharm GmbH

Erthalstrasse 1A, D-8750 Aschaffenburg. Tel: (06021) 26073

Supplies biological products for immunology, tissue extracts and reagents for histochemical assays. Agent for Northeast Biomedical Laboratories Ltd, UK. Subsidiary of Laboratoires Eurobio SA, France.

Medite GmbH

Alt Ahrbeck 11, D-3167 Burgdorf. Tel: 05136 3096 Fax: 05136 86848

Supply tissue processing equipment and materials.

Membran-Tecknik-Hamburg

Zum Fuerstenmoor 11, D-2100 Hamburg 90. *Tel*: 040 790 6727

Carrying out research and development and marketing of mammalian cell culture systems including a fluidized bed reactor with membrane oxygenation for culture of shear-sensitive cells on micro-carriers, and membrane gas exchange systems.

Memmert GmbH

PO Box 1520, Aeussere Rittersbacher Strasse 38, D-8540 Schwabach. Tel: (091) 22 40 31 Telex: 624973

Manufacture drying, warming, testing, measuring, incubating and sterilizing equipment including ovens, incubators, etc.

Messer Greisheim GmbH

Offer cryogenic systems for long term preservation controlled freezers for preparation of material and transport modules for frozen materials. Also supply technical gases, speciality gases, cryogenic gases and equipment as well as liquid nitrogen and liquid helium delivery services. Offer hire and storage space in the Krefeld Cryo-Bank.

Messerschmitt Bolkow Blohm GmbH

Unternehmensbereich Raumfahrt

Two-phase (acidogenic and methanogenic) production of methane from manure by anaerobic digestion integrated into complete systems with heat recovery, gas compression and gas engine-electricity generation unit. Additional collection of post-fermentation gas from waste lagoon, using an inflatable, floating gas store. Process is run in the thermophilic range; the two-stage system serves to lower production of hydrogen sulphide to a negligible level. Projection sponsored by the German Ministry for Research and Technology.

Micromeritics GmbH

Hammfelddamm 10, D-4040 Neuss. Tel: 02101 120034 Fax: 02101 103035

Supplies amino acid analyzers, chromatography accessories and detectors.

Miles GmbH

Steinerstrasse 15, D-8000 Munchen 70. Tel: (089) 724040 Telex: 522406

Supplies a wide range of biochemicals and enzymes for research, clinical and industrial use (see Miles Laboratories Inc, US).

Miles Kali-Chemie GmbH & Co KG

Manufacture industrial enzymes; products include amylases (alpha- and gluco-) glucose isomerase, glucose oxidase, protease, pectinase, cellulase and hemicellulase for use in the starch processing, detergent and beverage industries. Developing new microbial enzymes and new biocatalytic systems in collaboration with the research groups of Miles Laboratories Inc, US and Kali-Chemie AG, Germany. A Member of the Solvay group.

Millipore GmbH

Millipore Membrane Technology Waters Chromatography Milligen DNA/Peptide Technology

Hauptstrasse 71-79, D-6236 Eschborn.

Lepsiusstrasse 39, D-1000 Berlin 41, Tel: 030 7914055, Nordring 6, D-2087 Bonningstedt, Tel: 040 5566636, Pfarrer Klein Strasse 7, D-5090 Leverkunen, Tel: 02171, 51933

Supply a full range of equipment, columns and accessories for HPLC including gradient formers, on-line analyzers, fully automated sample injection systems, etc designed for research applications as well as analysis of specific products in the food, beverage and pharmaceutical industries. Also supply instruments and chemicals for DNA and peptide synthesis, a peptide sequenzer and a complete range of membrane technologies for laboratories and industrial scale use.

Milton Roy Co Analytical Products Division

Munchner Strasse 72, D-8043 Unterfohring.

Manufacture a range of spectrophotometers (visible or UV/visible) as well as refractometers, image analyzers and spectrophotometric standards. Formerly a division of Bausch and Lomb.

Milton Roy (Deutschland) GmbH

Supplies equipment, reagents, standards etc, for liquid and high performance chromatography (see Milton Roy, US).

Mitsubishi Chemical Industries Ltd

Am Seestern Niederkasseler, Lohweg 8, D-4000 Dusseldorf 11. Tel: 0211 596045 Telex: 8587716

Supply microprocessor-controlled titration equipment for moisture determination as well as other products of Mitsubishi, Japan.

Molnar

Blucherstrasse 22, D-1000 Berlin 61. *Tel*: 030 691 8505

Provide computer software including a simulation package for HPLC.

Montedison (Deutschland) GmbH

Branch Office for Montedison, Italy

FR GERMANY Part III

MTW Vorlander & Co

Ob Kuhlenberg 96, D-8700 Wurzburg. Tel: 0931 24820 Telex: 68446

Manufacture a wide range of freezers, refrigerators, blood bank freezers and cold storage facilities including walk-in systems.

Muetek GmbH

Arzbergerstrasse 10, D-8036 Herrsching.

Tel: 08152 2046 Telex: 5270249 Fax: 08152 4374

Supplies particle size analyzers including laser analyzers capable of measuring particles or droplets in the range 0.003-1800 microns. Distributor for Malvern Instruments.

Munich Technical University

Arcisstrasse 21, D-8000 Muenchen 2.

Tel: 089 21 05 2774 Telex: 522854 tumue

Studying biochemical engineering of reactors for methane production and stress sensitivity of microorganisms, centrifugal field bioreactor, gene probes for bacteria, new host-vector system in Staphyloccus carnosus and lipase production in a dialysis fermenter.

Munich Technical University

Department of Organic Chemistry & Biochemistry

Lichtenbergstasse 4, D-8046 Garching.

Carrying out research on enzymes (hydrogenases, in particular) and their application for stereospecific bioconversions.

Munich Technical University

Department of Chemistry & Biochemistry

D-8050 Freisung.

Researching into enzyme immobilization, cofactor regeneration and analytical systems based on enzymes.

Munich University

Botanical Institute

Mezingerstrasse 67, D-8000 Munchen 19.

Tel: (089) 1792 229

Undertaking studies on ecology of microbial populations in anaerobic digestion and, in particular, the effect of antimicrobial agents, at both mesophilic and thermophilic temperatures. Has isolated pure strains of some of the bacteria concerned in the overall process.

Munster University

Institute for Microbiology

Tibustrasse 7-15, D-4400 Munster/Westfal.

Investigating metabolism of microbial alkane degradation and studying biology of microorganisms in immobilized systems.

Naarden International Deutschland

Supplies flavours and fragrances (see Naarden International NV, Netherlands).

NATEC

Institut fur Naturwissenschaftlichtechnische Dienste GmbH

Behringstrasse 154, Postfach 1568, D-2000 Hamburg 50.

Tel: 040 8 83 00 10 Telex: 2164293

Offer services in problem solving in natural science and technology including studies and contract research. Operate internationally mainly within the fields of analytical chemistry in relation to toxicological safety, synthesis of radioactive and other chemicals and additives, as well as packaging materials particularly with respect to food legislation. Concerned with pollution control, environmental and consumer protection.

National Starch & Chemical GmbH & C0 KG

D-6730 Neustadt 17.

Manufacture dextrins and speciality starches.

Nationales Referenzzentrum fur Adenoviren

Abteilung für Virologie des Institutes für Hygiene und Mikrobiologie

Universitat des Saarlandes, D-6650 Homburg.

Holds culture collection containing animal viruses for medical microbiology research. Offers identification service.

Nattermann GmbH

Nattermannallee 1, D-5000 Koln RFA.

Tel: 0221 509 01 Telex: 8882663 drog

Fax: 0221 509 2711

Member of the Rhone-Poulenc Group, France.

Naue GmbH

Am Rotboll 5, D-6108 Weiterstadt 2. *Tel*: 06150 82568 *Telex*: 419355

Produce a wide range of stainless steel products including sterile couplings, filter housings, containers for storage and transport, diaphragm pressure

Netzsch-Mohnopumpen GmbH

Liebigstrasse 28, D-8264 Waldkraiburg.

Tel: (08638) 63-1 Telex: 056421

Manufactures laboratory and high pressure pumps.

detectors, heat exchangers and diaphragm valves.

New Brunswick Scientific GmbH

Industriestrasse 17, D-6056 Heusenstamm.

Tel: 06104 5036 Telex: 4170726 nbs Fax: 06104 65599

Produce a wide range of equipment for cell culture and molecular biology including DNA and peptide synthesizers, membrane filtration systems, cell culture fermenters, agar sterilizers, petri dish filling systems, carbon dioxide incubators, freezers and reagents for molecular biology and biochemistry.

New England Biolabs GmbH

Supplies restriction enzymes, cloning vectors, linkers, markers, DNA and DNA sequencing reagents (see New England Biolabs Inc, US).

New England Nuclear GmbH

NEN GmbH

Postfach 401240, D-6072 Dreieich.

Tel: (06103) 8030 Telex: 417993 nen

Manufactures radiochemicals for research and medical diagnosis, as well as chemicals and standards for liquid scintillation counting (see New England Nuclear Corp, US). Produces high-purity enzymes for use in molecular biology, including DNA ligase, DNA polymerase, exonuclease, polynucleotide polymerase, restriction enzymes (eg BamH I, BgI II, EcoR I), plasmid pBR322, lambda DNA and plasmid DNA molecular-weight markers. Also produces monoclonal antibodies (anti-human, anti-mouse, anti-viral), T and B cell-typing systems and complete monoclonal antibody-screen systems for murine immunoglobulins based on colour reaction.

Nordmark Werk GmbH

Postfach 1244, Pinnauallee 4, D-2082 Uetereen 1.

Tel: (04122) 71 21 Telex: 218522

Produces pharmaceutical specialities and chemicals. Subsidiary of BASF AG, Germany.

Novo Industrie GmbH

Postfach 2840, D-6500 Mainz.

Tel: (06131) 31001 Telex: 4187627

Major producer of enzymes (see Novo Industri AS, Denmark) and pharmaeuticals (see Novo Laboratories Ltd, UK).

Nuclear Enterprises GmbH

Bodenseestrasse 113, D-8000 Munchen 60.

Tel: (089) 839 450 Telex: 529615

Supplies isotope counters for life science applications (see Nuclear Enterprises Ltd, UK).

Nuclepore GmbH

Bodenseestrasse 133, D-7400 Tubingen.

Tel: (07071) 641 39 Telex: 726 2899

Supplies apparatus and membranes for filtration, ultrafiltration and microfiltration (see Nuclepore Corp, US).

Part III FR GERMANY

NUNC GmbH

Hagenauerstrasse 21A, D-6200 Wiesbaden-Biebrich. Tel: 06121 67095 Telex: 4186746

Supplies laboratory instruments including immuno-reader, equipment for ELISA, centrifuges, freeze drying equipment, freezers, safety and anaerobic cabinets as well as disposables for tissue culture, immunology and ELISA, cryo-tubes for nitrogen storage, centrifuge tubes etc.

Oekotop GmbH

Binger Strasse 25a, D-1000 Berlin 33. Tel: 030 824 2082 Telex: 184452 oek

Design and install small scale biogas plant (6-50 cubic metres) as well as carrying out research, testing and dissemination of appropriate technologies in developing areas.

Oko Data

Gesellschaft zur Aufarbeitung von Umweltdaten

Hermannstrasse 46, D-2000 Hamburg 1. *Tel.* 040 32 67 28

Consultants specializing in environmental problems of air, water and soil pollution, with facilities for analysis and evaluation in waste management.

Olympus Optical Co (Europa) GmbH

Manufacture a wide range of optical microscopes and related products including inverted systems, stereomicroscopes, scanning acoustic microscopes, image analysis systems etc as well as analytical instruments and research reagents for immunology.

Organogen GmbH

Czernyring 22, D-6900 Heidelberg 1. *Tel*: 062 21 270 82/83

Develop and market a range of biologically active peptides. Products include hormones, vaccines, monoclonal and polyclonal antibodies and kits, immunoregulators, enzymes and amino acids. Developing high rate processes for peptide synthesis as well as products for HPLC, gas phase sequencing and cytofluorography.

Organon Teknika GmbH

Tullastrasse 605, D-7800 Freiburg/Breisgau. Tel: 07615 10060 Telex: 772880

Supplies immunological reagents and diagnostics; products of Organon Teknika, US.

Orpegen GmbH

Czernyring 22, D-6900 Heidelberg. *Tel*: 06221 27082-5 *Telex*: 461362 orgen

Produce protected amino acids, peptides (antigens hormones, thymic substances), reverse phase silica media for HPLC, serum-free medium for cell culture and mini-equipment for molecular biology - electrophoresis, electroclution, blotting, evaporation and sample concentration, etc. Offer services in gas phase sequencing of proteins and peptides, amino acid analysis, flow cytometry and cell sorting and immunological tests. Have a research and development programme in isolation, purification, characterization and synthesis of immunoregulatory peptides, especially those with hormonal or vaccine properties.

Osmota-Membrantechnik GmbH

Sigmaringer Strasse 121, Postfach 810366, D-7000 Stuttgart 81. Tel: 0711 713060 Telex: 07255847

Manufacture membrane systems for industrial and laboratory use including systems for microfiltration, ultrafiltration, hyperfiltration and reverse osmosis. Products include spiral wound and tubular systems as well as flat membranes suitable for use under pressure and with steam sterilization.

Otto Aldag

66 Curslacker Neuer Deich, D-2050 Hamburg 80. Tel: 040 72591 Telex: 217811

Importer/exporter and distributor of oils and fats, chemicals and fertilizers as well as pharmaceutical intermediates and raw materials for the food industries. Products include whey derivatives, caseine and caseinates, agar and gelatins, citric and tartaric acid, natural colourants, peptones and protein hydrolysates, lactose, vegetable oils and animal feedstuff raw materials.

Otto Norwald KG

Supply culture media, immunological reagents, agars and agaroses.

Oxoid Deutschland GmbH

Supplies dehydrated bacteriological culture media and antibiotic susceptibility tests (see Oxoid Ltd, UK).

P-L Biochemicals GmbH

Postfach 51, Ulmenhof 28, D-5401 Sankt Goar. *Tel*: (6741) 1515 *Telex*: 42308 plbio

Distributes research diagnostics, enzymes and diagnostic kits. Products include reagents and protected deoxynucleotides for the synthesis of oligodeoxynucleotides. Also offers a custom synthesis service (see P-L Biochemicals Inc, US).

Packard Instrument GmbH

Hanauer Landstrasse 220, D-6000 Frankfurt/Main. Tel: 069 663010 Telex: 416037 Fax: 069 6665921

Manufacture liquid scintillation counting equipment, gamma counters, gas chromatography, including gas/mass spectrometry systems and microprocessor-controlled systems. Products also include equipment and supplies for luminescence, cell culture, HPLC, radioimmunoassay and associated computer controls and software.

Paesel GmbH

Postfach 630347, Borsigallee 6, D-6000 Frankfurt am Main 63. *Tel:* 0611 422097 *Telex:* 413202

Manufactures and supplies biochemicals, diagnostics and pharmaceuticals. Products include antiserums and immunochemicals, blood fractions, steroids, enzymes, peptides, substrates, carbohydrates, hormones, growth factors and essential nutrients for serum-free cell cultures, prostaglandins and products for genetic engineering including restriction endonculeases such as BamH I, EcoR I, Hind III, nucleotides and derivatives as well as oligo and polynucleotides. Distributor for Australian Monoclonal Development Pty Ltd, Biozyme Laboratories, Porton Products and Cambridge Research Biochemicals, UK, Biosoft, France and Hemagen Diagnostics and Kent Laboratories, US.

Palatinit Sussungmittel GmbH

Wormser Strasse 8, D-6719 Obrigheim/Pfalz.

Tel: 06359 80 09 0 Telex: 451205 Fax: 06359 80 09 90

Manufacture hydrogenated isomaltulose.

Pall Filtrationstechnik GmbH

Supplies a wide range of laboratory and industrial filtration systems and equipment (see Pall Process Filtration, UK and US).

Panchem

Gesellschaft fur Chemische Produckte mbH

Postfach 50, Schlosstrasse 3, D-8751 Kleinwallstadt. Tel: (06022) 21005 Telex: 04188144 panc

Supplies reagent kits and monoclonal antibodies for clinical laboratories. Agent for OY Medix AB, Finland.

PerCon Prufgerate Gmbh

Manufacture the Inframatic 8120 absorption spectrophotometer for detection of proteins, fats, starches and moisture content as well as infrared spectrophotometers, laboratory mills and other near infra-red analysis equipment.

Pfeifer & Langen

Produce starch derivatives and polysaccharides for use in pharmaceutical and food applications: products include separation media, microcarriers, technical dextrans, derivatized dextrans for use in chromatography and clinical dextrans as well as glucose syrups, maltose syrups, vital gluten and ethanol.

FR GERMANY Part III

Pfizer GmbH

Pfizerstrasse 1, D-7500 Karlsruhe 1. Tel: (0721) 61011 Telex: 7825624

Pfizer Chemie, Schone Aussicht 44, D-6200 Wiesbaden

Supplies pharmaceuticals, food additives, chemicals, etc (see Pfizer Inc, US).

Pharmacia LKB Biotechnology GmbH

Munzingerstrasse 9, Postfach 5480, D-7800 Freiberg im Breisgau 1. Tel: 0761 4903 0 Telex: 7721513 Fax: 0761 4903 159

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectric focusing, amino acid analysis, DNA and peptide synthesis and cell studies as well as restriction enzymes and cloning vectors (see Pharmacia LKB, Sweden).

Pharmacia-LKB Instrument GmbH

Supplies instruments and chemicals for use in liquid chromatography, electrophoresis, isotachophoresis, electrofocusing, fermentation, calorimetry and microtomy (see LKB-Produkter AB, Sweden).

Philipp Hige GmbH

D-6501 Bodenheim.

Manufactures industrial pumps for brewery and similar industries.

Philips GmbH

Postfach 310 & 320, D-3500 Kassel.

Tel: 561-5010

Supplies a wide range of analytical equipment including spectrophotometers, electron microscopes, chromatographs etc (see Philips NV, Netherlands).

Pierce GmbH

Daimlerstrasse 15-17, D-6054 Rodgau 6 (Weiskirchen). Tel: 06106 13286 Telex: 416224

Supply reagents and speciality labware for use in affinity chromatography, amino acid analysis, chemical cross-linking, DNA and peptide synthesis, gas chromatography, HPLC, protein modification and sequencing, thin layer chromatography and clinical diagnostics.

PLANO W Plannet GmbH

Marburgerstr 90, D-3550 Marburg 7. Tel: 06421 41077 Telex: 4821122

Supplies diagnostics and other products of Janssen Life Sciences, Belgium.

Progen Biotechnik GmbH

Im Neuenheimer Feld 519, Technologie Park, D-6900 Heidelberg. Tel: 06221 40350 Telex: 461124 Fax: 06221 403535

Supply immunological reagents and diagnostics for cancer developed in cooperation with the German Cancer Research Centre in Heidelberg including molecular markers for tumour differentiation as well as monoclonal antibodies against infectious diseases and growth factors.

Pyrion Chemie GmbH

Geulenstrasse 94, D-4040 Neuss 1. Tel: (02101) 272597 Telex: 8517459

 $Supplies\ biocides, antioxidants\ and\ pharmaceutical\ intermediates.$

Radiometer Deutschland GmbH

Am Nordkanal 8, D-4156 Willich 3. Tel: 02154 8180

Supply microbiological diagnostics including an automated system for rapid antibiogrammes and bacterial identification using fluorescence.

Ragis GmbH

PO Box 2529, D-2120 Lueneburg. Tel: 04131 430 05/7 Telex: 2182127 ragis

Specialist supplier of a wide selection of potato varieties. Associated with variety trials at KWS AG.

RauCon GmbH

PO Box 1069, D-6912 Dielheim. Tel: 06222 73562 Fax: 06222 74884

Biotechnology consultants offering market analyses, and information reports and newsletters.

Regensburg University

Department of Microbiology

Universitatsstrasse 31, D-8400 Regensburg. Tel: 0941 943 3161 Telex: 065658 unire

Carrying out research projects on the isolation, investigation and development of large scale fermentation of extremely thermophilic archaebacteria.

Repromed GmbH

Osterstrasse 86, D-2000 Hamburg 19. *Tel*: (040) 499727

Supplies very highly purified reagents, intermediates and funtionalized supports for solid-phase olignucleotide sequence synthesis (see Cruachem Inc, US).

Research Institute for International Technical Cooperation

Forschungsinstitut fur Internationale Technischewirtschaftliche Zusammenarbeit

Technische Hochschule Aachen, Henricistrasse 50, D-5100 Aachen. Tel: 21049 Telex: 832704

Undertakes information research and dissemination in relation to technology transfer. Studying the control of water hyacinth and its conversion for the production of fuel, food, fertilizer, etc.

Retsch

Rheinische Strasse 36, PO Box 1554, D-5657 Haan 1. Tel: 02129 55 61 0 Fax: 02129 87 02

Manufactures sample preparation and analyzing equipment.

Rhein Biotech GmbH

Erkrather Strasse 230, D-4000 Duesseldorf 1. *Tel*: 0211 7334848

Developing products for pharmaceutical, food and environmental biotechnology using gene cloning and molecular biology.

Riedel-de Haen AG

Wunstorfer Strasse 40, D-3016 Seelze 1/Hannover.

Tel· 5137 7 07 1 Telex: 921295 Fax: 5137 9 1979

Supply laboratory reagents and buffers including pyridine-free reagents for Karl Fischer titration, materials for volumetric and standard solutions, high purity pesticides and solvents for residue analysis, materials for gas and thin layer chromatography, polymer carrier for the covalent immobilization of enzymes, adsorbent resin, as well as lab cleansers and a wide selection of general laboratory chemicals. Represented overseas by Hoechst AG, Germany.

Rohm GmbH

Chemische Fabrik

Postfach 4242, Kirchenallee, D-6100 Darmstadt. Tel: 06151 184647 Telex: 41947435 rd

Manufactures bulk enzymes for the food and beverage industry, including amylases from both bacterial and fungal sources, amyloglucosidases, invertases, hemicellulases, cellulases, pectinases, pentosanases, proteases (animals, microbial and plant), as well as preparations with mixed activity and immobilized enzymes. Also supplies reagent-grade chemicals, fine chemicals and research enzymes.

Rohm Pharma GmbH

Manufactures and markets speciality products for pharmaceutical, diagnostics and research purposes, including support materials for affinity chromatography (see Rohm GmbH, Germany).

Rubarth Apparate GmbH

Ikarusallee 2, D-3000 Hannover 1.

Tel: 0511 632783

Supplies equipment, media and reagents for microbiology.

Part III FR GERMANY

Rudolf Brand GmbH & Co

Postfach 310, D-6980 Wertheim. Tel: (09342) 8080 Telex: 17934281

Manufactures a cell sorting system consisting of a peristaltic pump, fraction collector and sedimentation chamber. The system, permits different cells or organelles to be separated at various stages of their life cycle with a high degree of resolution.

Saarberg-Interplan GmbH

Stengelstrasse 1, D-6000 Saarbrucken.

Undertaking studies on use of thiobacilli as a means of recovering uranium by dump leaching of low-grade ores, carrying out pilot tests on 1-tonne reactors

Salzgitter Industriebau GmbH

PO Box 411169, D-3320 Salzgitter 41.

Tel: 05341 21 1 Telex: 954481 44 sg Fax: 05341 21 4310

Engineers and contractors supplying complete biotechnology laboratories and pilot plants in partnership with GBF, Germany.

Sammlung von Conjugaten-Kulturen

Institutfur Allgemeine Botanik, Ohnhorststrasse 18, D-2000 Hamburg 52. Holds culture collection containing algae for phycology research and teaching.

Sanofi Bio-Industries GmbH

Produce enzymes, growth hormones and other reagents for development of therapeutics.

Sarstedt

Rommelsdorf, D-5223 Numbrecht. *Tel*: (02293) 523

Manufactures automated 10-channel coagulometers.

Sartorius GmbH

Manufactures a wide range of membranes for crossflow filtration and microfiltration for use in microbial examinations, analysis, sterilisation or ultrafiltration, based on the following media: cellulose acetate, cellulose nitrate, regenerated cellulose, PTFE, and gelatin. Pore size ranges from 0.01 micrometres up. Also produce asymmetric cellulose acetate ultrafilters with nominal molecular weight cutoffs of 5, 10 and 20 thousand, as well as disposable filtration units for production of sterile solutions.

Schering AG

Werk Charlottenberg:, Max Dorne Strasse, D-1000 Berlin 1

Manufactures and distributes pharmaceuticals; especially steroids, agrochemicals and industrial chemicals.

Schleicher & Schuell GmbH

Postfach 4, Hahnestrasse 3, D-3354 Dassel.

Produce a wide range of membranes and filter media as well as small scale equipment for electroelution, electrodialysis and electroconcentration. Specialises in membranes for molecular biology including materials for use in hybridization, dot-blots, immobilization of nucleic acids, electro-blots, Western blots, transfer techniques and separations.

Schmidt Reuter GmbH

Graeffstrasse 5, D-5000 Koln 30.

Tel: (0221) 57 41 1 Telex: 8882252

Developing systems for the treatment of slaughterhouse wastes based on anaerobic treatment with the objective of producing methane and fertilizer.

Schnakenberg & Co GmbH

Produces equipment for measuring biological oxygen demand and dissolved oxygen in wastewaters, as well as water samplers, gas scrubbers, etc.

Schott-Gerate GmbH

Im Langgewann 5, Postfach 1130, D-6238 Hofheim a Ts.

Tel: 06192 2091 0 Telex: 4072115 sgh Fax: 06192 80 86

Manufacture automatic titration equipment including a microprocessor controlled piston burette as well as hot plates, vicometers, pH and redox electrodes, insertion probes, measuring instruments for pH, redox potential, oxygen, conductivity and temperature and other laboratory apparatus.

Schott Glaswerke

Chemical Division

Hattenberger-Strasse 10, Postfach 2480, D-6500 Mainz 1.

Tel: 06131 50 64 213/202 Telex: 41879225 sm Fax: 06131 50 64

Manufactures laboratory water stills and glassware, special glass and glass-ceramic components for advanced technologies, scientific equipment and electronic instruments including as well as porous glass in membranes for microfiltration and ultrafiltration and in granular form for immobilization of microorganisms in processes such as aerobic sewage treatment and anaerobic sewage digestion, solid phase extraction, and for affinity and adsorption chromatography. Also produce falling film evaporators, extraction units, microprocessor control pumps and sterilizable pH and redox electrodes and probes. Offer custom services.

Schraufstetter Anlagenbau

Entsorgungs, Agar und Energietechnologie

Mayerbacherstrasse 69, Postfach 1240, D-8045 Ismaning bei Munchen. Tel: 089 96 50 91

Telex: 5213352

Engineering and equipment manufacturing company active in the agricultural, energy and waste treatment sectors. Activities include the development and supply of anaerobic digesters for the treatment of stillage from distilleries with integrated gas use for process energy. Also supplies electrophoretic equipment for recovery of protein from the spent biomass in sludge from anaerobic digesters.

Schuett Labortechnik

Gueterbahnhofstrasse 11, D-3400 Goettingen. Tel: 0551 4955 0 Telex: 96788

Supply equipment for microbiology, bacteriology and biotechnology including sterilizers, incubators, pumps, electrophoresis apparatus and gel dryer as well as handling equipment and disposables.

Scientific Glass Engineering GmbH

Fichtenweg 15, D-6108 Weiterstadt 1. Tel: 06150 40662 Telex: 419518 sge

Manufactures products for gas chromatography and HPLC and accessories including a range of microlitre syringes.

Sebak GmbH

Hollerbach 20, D-8359 Aidenbach. Tel: 08543 3636 Telex: 57530

Supply immunological and biological reagents. Distributor for R1BI Immunochem Research and Zymed Laboratories, US and Australian Monoclonal Development Pty Ltd.

Separex GmbH

Chromatography Division of Labomatic GmbH Sunnisheim Ring 83-85, D-6920 Sinsheim.

Tel: 07261 64993 Telex: 782484 biola

Supply complete systems, preparative and accessories for HPLC and liquid chromatography at laboratory, pilot plant and production level.

Serono Diagnostika GmbH

Merzhauserstrasse 134, D-7800 Freiburg im Breisgau.

Tel: 0761 40928 Telex: 761117

Supplies diagnostic test kits based on monoclonal antibodies using a magnetic separation technique. Part of Ares-Serono Group.

Serva Feinbiochemica GmbH

Supplies fine biochemicals for industrial and scientific laboratory use, as well as products for chromatography, dialysis and electrophoresis.

Manufactures cell culture media and serums. Distributor for Promega, US.

FR GERMANY Part III

SES GmbH

Spezielle Elektronische Systeme

Goldbergstrasse 5-7, Postfach 45, D-6501 Nieder-Olm. Telex: 04 187 169 Tel: 061 36 4994

Supplies advanced analytical and data management systems including chromatography data handling systems, laboratory information management systems, continuous flow analyzers, flow injection analyzers, TLC/FID analyzers etc, as well as printer plotters.

Shandon GmbH

Postfach 501029, Karl von Drais Strasse 18, D-6000 Frankfurt. Tel: (0611) 54 10 65 Telex: 416358

Supplies materials for histology, cytology, biochemistry and high performance liquid chromatography (see Shandon Southern Inc, US).

Shimadzu GmbH

Albert-Hahn-Strasse 6-10, D-4100 Duisburg.

Fax: 0203 76 66 25 Tel: 0203 76 870 Telex: 855220 shim

Supplies spectrophotometers, particle analyzers and other analytical equipment including automated preparative HPLC.

Siemens AG

Postfach 156, D-8510 Fuerth. Tel: 0911 30 01 1 Telex: 623313

Produce advanced analytical x-ray instrumentation and electron microscopes as well as gas chromatographs.

Siergert & Cie GmbH

Postfach 2065, Behringstrasse 83-89, D-5450 Neuwied. Tel: (02631) 220 68

Produces fatty acid and their derivatives.

Sigma Chemie GmbH

Gruenwalder Weg 30, D-8024 Deisenhofen. Telex: 528252 sigma Tel: 089 613010

Supply enzymes, reagents and equipment for molecular biology and tissue culture including restriction endonucleases, nucleic acids and modifying enzymes, terminal transferase, T4 enzymes, ribonuclease A etc, as well as buffer solutions in dispensers, acrylamide, ethidium bromide, bovine serum albumin, test kits, automated analyzer reagents and a very wide range of general and speciality chemicals and biochemicals.

Skalar Analytic GmbH

Muhlenstrasse 7, D-5140 Erkelenz. Tel: 02431 2091

Produce a wide range of analyzers, segmented flow analyzers, automatic digestion systems and sample processors suitable for use in the food, beverage, pharmaceutical, chemical and agricultural industries as well as for water, pollution and environmental monitoring. Includes dedicated systems or modular systems capable of performing over 250 different tests on sugars, nutrients, vitamins, inorganic nutrients, ammonia, chemical oxygen demand, etc.

Skatron GmbH

Wilstedter Weg 2A, D-2000 Norderstedt.

Tel: 040 5246866

Supplies equipment for flow cytometry, automatic microplate handling and washing, cell harvesting, fluid dispensing and cytotoxicity testing.

SLT-Labinstruments Deutschland GmbH

Auf der Kaule 13, D-5063 Overath.

Supplies laboratory equipment for ELISA immuno diagnostics, including readers, washers, dispensers and microplates; products of SLT Labinstruments GmbH, Austria.

Soft Gene Berlin

Offenbacher Strasse 5, D-1000 Berlin 33.

Tel: 030 821 1407

Market software (MacMolly) for molecular biology and gene technology in collaboration with Free University Berlin.

Sorbios GmbH

Ackerstrasse 71-76, D-1000 Berlin 65

Telex: 17 3081 45 big Tel: 030 469 4631

Supply products in ozone technology and electrostatics for sterilization etc with applications in the medical, pharmaceutical and biotechnology industries.

Spectra Physics GmbH

Siemensstrasse 20, D-6100 Darmstadt-Kranichstein. Tel: 06151 708 0 Telex: 419471 Fax: 0615 Fax: 06151 708232

Supplies equipment for liquid and gas chromatography: complete systems, monitoring and detection, data logging and processing, columns and accessories (see Spectra Physics Inc, US).

Spectro GmbH

Boschstrasse 10, D-4190 Kleve. Tel: 02821 26068 Telex: 811734

Supplies spectrometry equipment and accessories.

Spezielle Elektronische Systeme GmbH

Goldbergstrasse 5-7, D-6501 Nieder-Olm/Mainz. Telex: 04 187169 Tel: 0 61 36 49 94

Supply the Trivector Trinet Laboratory Information Management System including both hardware and software modules. The system allows networking of many different types of inputs, from integrators or balances to dedicated analyzers. Software available includes sample tracking and report generation; or the user can modify the packages using Basic, Pascal or C. Systems can be tailored to individual needs.

Stoe und Cie GmbH

Postfach 4110, Hilpertstrasse 10, D-6100 Darmstadt.

Tel: (06151) 891225 Telex: 419336

Manufacture X-ray diffraction equipment.

Stratagene GmbH

Postfach 105466, D-6900 Heidelberg.

Tel: 06221 40 06 34 Fax: 06221 40 06 39

preparation of gene libraries etc, and information services (see Stratagene, US). Supply reagents and kits for molecular biology. Offer custom services in

Stuttgart University

Department of Brewing Technology

Garbenstrasse 25, D-7000 Stuttgart 1.

Undertaking studies on the use of enzymes and unit operations in distilleries.

Stuttgart University

Institute of Microbiology

Garenstrasse 30, D-7000 Stuttgart 1.

Carrying out studies on the biological degradation of chlorinated aromatic compounds.

Stuttgart University

Institute of Biotechnology

Nobelstrasse 12, D-7000 Stuttgart 1.

Studying methods of cell and enzyme immobilization and design of bioreactors for anaerobic processes.

Stuttgart University

Department of Chemical Engineering

Boblingerstrasse 72, D-7000 Stuttgart 1.

Have been designing bioreactors and air-lift fermenters in particular.

Sulzer-Escher Wyss GmbH

Postfach 1380, D-7980 Ravensburg. Tel: 751 83 0 Telex: 723901 eswrv Fax: 751 83 2396

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user (analog and DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

Supelchem GmbH

Am Laubach 3, Postfach 1127, D-6231 Sulzbach/Taunus. Tel: 06 196 26088 Telex: 4175070 sup

Supplies laboratory separation products.

Sybron Lab Products International

Saarbrueckener Strasse 248, D-3300 Braunschweig.

Telex: 952228 sybr

Supplies products for analysis and maintenance of water purity including reverse osmosis system and a range of disposables and plasticware (see Sybron Corp, US).

Part III FR GERMANY

TBZ Hamburg

Technologieberatungszentrum Hamburg Zippelhaus 5, D-2000 Hamburg 11. Tel: 040 33 1186

Offer consultancy in technology, finance and marketing as well as organizing seminars, workshops and information services.

Tecator GmbH

Ludwigstrasse 24-26, D-6054 Rodgau 1. Tel: 06106 130 72/73 Telex: 416224 tecat

Supplies laboratory and industrial analytical equipment including HPLC systems, spectrophotometers, and dedicated analyzers for carbohydrates and fats; products of Tecator Inc, US.

Techlab GmbH

Evessener Strasse 2, D-3305 Erkerode/Braunschweig. Tel: 05305 3003 Telex: 952963 tech

Offer sales and service in instruments for HPLC and amino acid analyzers. Products include pumps, columns, refractive index, fluorescence and UV-detectors, autosamplers and integrators etc.

Technical University Braunschweig

Institute for Agricultural and Sugar Technology

Pockelstrasse 14, Postfach 3329, D-3300 Braunschweig. Tel: 0531 340928 Telex: 0952526

Carrying out research on hydrolytic enzymes from plant wastes and by-products of the sugar industry; anaerobic digestion of sugar wastes as well as scale up studies and anaerobic digestion of stillage using an anaerobic fixed film reactor.

Technical University Braunschweig

Institute for Biochemistry and Biotechnology

Postfach 3329, Pockelstrasse 14, D-3300 Braunschweig. *Tel*: 0531 391 3786 *Telex*: 0952526

Carrying out research on process development for the production of microbial metabolites including stable polysaccharides and interfacially active glycolipids and lipopeptides, the enzymic synthesis of amino acids, including tryptophane as well as immobilized enzymes and biosurfactants for decontamination and degradation of aromatic compounds.

Technical University Braunschweig

Institute of Technical Chemistry

Pockelstrasse 14, D-3300 Braunschweig. Tel: 0531 391 5360 Telex: 0952526

Carrying out research on immobilization of cells and enzymes as well as process development for the environmental, food and pharmaceutical industries and development of sensors in bioreactor control.

Technical University Braunschweig

Botany Institute

Pockelstrasse 14, D-3300 Braunschweig. Tel: 0531 391 3692 Telex: 0952526

Developing methods for mass culturing microalgae, optimizing culture conditions for enrichment of cellular components such as pigments, antioxidants, vitamins etc and processes of extraction and purification of useful cell components.

Technical University Hamburg-Harburg

Arbeitsbereich Biotechnologie I Bioprozess und Bioverfahrenstechnik Eissendorfer Strasse 38, D-2100 Hamburg 90. Tel: 040 77 18 2693

Developing techniques in fermentation using membrane bioreactors, and HPLC chromatography on laboratory scale, as well as investigating, large scale sewage and water treatment.

Technical University Hamburg-Harburg

Arbeitsbereich Biotechnologie II Biotransformation und sensorik Eissendorfer strasse 38, D-2100 Hamburg 90. Tel: 040 468 2693

Developing imobilized enzyme and membrane bioreactor technology as well as on-line analytical processes based on HPLC detection for monitoring bioreactors.

Technicon GmbH

Supplies automated equipment for monitoring, analysis or measurement of pollutants, as well as multi-channel or multi-sample automated laboratory and industrial analyzers.

Technoma GmbH

Im Neuenheimer Feld 519, D-6900 Heidelberg. Tel: 06221 40 0624

Offer consultancy and development advice in the application of mathematics and computer services to biotechnology. Services include supply of standard software for molecular biology, software for use with laboratory equipment, custom design software. Also offer on-line search facilities of databanks, information on patents, state of the art, market reviews and executive summaries.

Tecnomara Deutschland GmbH

Ruhberg 4, D-6301 Fernwald.

Tel: 06404 809 0 Telex: 482993 tecma Fax: 06404 5865

Supplies equipment for microbiology, cell biology, biotechnological production, immunology, molecular biology and genetic engineering, including sterilizers, autoclaves, laminar flow cabinets, agar sterilizers, roller apparatus, automatic pipetters and hollow fibre bioreactors.

THEN GmbH

Manufacture computer operating systems and data acquisition and control systems for laboratory instrumentation. Offer services in engineering and design.

thermo-DUX GmbH

Ferd-Friedrich Strasse 5, D-6980 Wertheim. Tel: 09342 84800 Telex: 689150

Supplies stirrers for suspension of cell culture and microcarrier, bioreactors, thermostats, sample concentrators etc.

Tietz Video and Image Processing Systems GmbH

Herbststrasse 7, D-8035 Gauting. Tel: 089 8506567 Fax: 089 8506567

Manufactures, sells and supports a range of TV-based fast digital image processing systems for varied applications in science, medicine and industry. Products include: complete image processing systems for microscopy; real-time, floating point and array processors; supporting software and instrument feedback control.

Tonwerke Erpel

Werner E Gabler GmbH

Postfach 46, D-5465 Erpel/Rhein. Tel: 026 44 20 07 Telex: 861512

Offer various trace elements, macro elements and minerals for use as animal feed additives or as fertilizer or foliar feed nutrients. A major activity is the production of tailor-made premixes for animal feeds. Also produce whey-based products in spray-dried and condensed form, free flow agents, special clays and carriers. Member of the Solvay group.

TosoHaas

In der Kron 4, D-6000 Frankfurt/Main 90. Tel: 069 78996 0 Fax: 069 789 5356

Supply HPLC, ion and liquid chromatography equipment, accessories and associated computer software as well as filtration equipment.

Tracor Europa

Lusshardtstrasse 6, D-7520 Bruchsal

Supplies a wide range of analytical instruments for chromatography and spectroscopy; products of Tracor Instruments, US.

Travenol GmbH

Postfach 202429, Nymphenburger Strasse 1, D-8000 Munich 2. Tel: 089 5994 0 Telex: 524163 tramu

Supplies radioimmunoassay kits and other diagnostics.

FR GERMANY Part III

Trocknungsanlagen GmbH

Andreas-Hofer-Strasse 3, D-7500 Karlsruhe 21. Tel: (0721) 59 10 57 Telex: 7825478

Supplies separation and dewatering equipment. Subsidiary of Niro Atomizer, Denmark.

Tubingen University

Department of Clinical Science

Calwerstrasse 7, D-7400 Tubingen.

Researching into immunology, immunochemistry and tumour immunology.

Tubingen University

Institute of Biology

Auf den Morgenstelle 28, D-7400 Tubingen.

Undertaking studies on the production of antibiotics active against fungi (nikkomycins) from Streptomyces tendae, as well as studies on other aspects of secondary metabolite production.

UBD

Institut fur Umwelt-Boden-Deponie-Analytik GmbH

Hermannstrasse 46, D-2000 Hamburg 1.

Tel: 040 31 69 87

Carries out evaluation studies, analysis and information work on pollution and the environment.

Uhde GmbH

Friedrich-Uhde Strasse 15, D-4600 Dortmund 1.

Tel: (0231) 54 70 Telex: 822841

Engineering company which acts as general contractor for large-scale projects, as well as providing consulting services, market and feasibility studies, procurement services, project financing, training of customers' personnel, management and plant supervision. A member the Hoechst Group, Germany.

Ulm University

Department of Virology

PO Box 4066, D-7600 Ulm. Tel: 0731 176 2838/07071 603358

Carrying out research on molecular and immunological control of persistent viral infections including the expression of HIV genes in different recombinant viral vectors such as vaccinia for testing antigenicity and immunogenicity of proteins and peptides.

Ultrafilter GmbH Dusseldorf

Bussingstrasse 4, D-5657 Haan 1. Tel: 02129 2012

Telex: 02129308 Supplies industrial filtration equipment.

Unichema Chemie GmbH

PO Box 1280, D-4240 Emmerich.

Tel: 02822 721 Telex: 08125113

Developing chemicals from fats and oils as well as biological and enzymic conversion techniques

UniEquip

Fraunhoferstrasse 11, D-8033 Martinsried b Munchen.

Tel: (089) 857 52 00 Telex: 5213223

Supplies laboratory equipment for tissue culture, including lamina flow cabinets in all safety classifications, and water-jacketed automatic incubators with both oxygen and carbon dioxide injection systems.

Uniferm GmbH & Co

Postfach 47, D-4019 Monheim/Rhld

Tel: (02) 1734 10 41 Telex: 8515794

Produces fresh yeast, dried yeast and bakers' sundries. Subsidiary of Gist-brocades NV, Netherlands.

United Electric Controls (Germany)

Ander Zentilinde 21, D-6120 Erbach.

Telex: 4191645 Tel: 06062 17400 Fax: 06062 7501

Manufacture temperature monitoring and control devices.

University of Hannover

Institute of Plant Disease and Protection

Herrenhauser Strasse 2, D-3000 Hannover 21.

Tel: 0511 762 - 0 Telex: 923868

Investigating the production of VA mycorrhizal fungi inoculant and its application in intensive plant production as well as for use in developing countries with difficult agricultural conditions.

Uranerzbergau GmbH

Abteilung Forschung und Entwicklung

Kolnstrasse 367, D-5300 Bonn 1.

Studying use of bacteria for microbial leaching of low-grade uranium ore.

Utech GmbH

Tollendorf 9, D-3139 Goehrde 1.

Developing low-temperature (psychrophilic) anaerobic digesters for on-farm production of methane from agricultural wastes.

Van Waveren-Pflanzenzucht GmbH

PO Box 3942, D-3400 Goettingen.

Tel: 0551 789020 Telex: 96843 wavern

Seed supplier specializing in vegetable crops including a wide variety of beans, peas, carrots and others. Associated with variety trials at KWS AG.

Vega Grieshaber GmbH & Co

Postfach 10, D-7622 Schiltach.

Tel: (07836) 500

Supplies level measuring, monitoring and control equipment for liquids and

Verder Deutschland GmbH

Himmelgeister Strasse 60, Po Box 250262, D-4000 Duesseldorf 1.

Telex: 8585539 Tel: 0211 310 08 0

Manufacture a wide range of pumps and mixers for laboratory and industrial use including peristaltic pumps, magnetically driven gear pumps, centrifugal pumps, static mixers and hydraulic diaphragm pumps.

VG Instruments GmbH

Postfach 5869, Gustav-Nachtigal Strasse 4, D-6200 Wiesbaden. Fax: 06121 71 99 99

Tel: 06121 71 09 0 Telex: 4186556

Manufactures analytical instruments including combined gas chromatography/mass spectrometry systems suited to monitoring of fermentations and research on bioengineering systems and reactions.

Virotech System-Diagnostika GmbH

Loewenplatz 5, D-6090 Ruesselsheim.

Tel: 06142 65065 Telex: 4064300 Fax: 06142 82621

Distributor for Janssen Biochimica, Belgium.

Vitatron GmbH

Robert Perthel Strasse 2-4, D-5000 Koln 60.

Tel: (0221) 17 50 94 Telex: 8883209

Supplies reagents for discrete system autoanalyzers.

Vitri GmbH & Co Ltd

Rheinstrasse 37, D-6109 Muehltal.

Telex: 419492 Tel: 06151 14031

Supply labware and glass apparatus.

Vogel GmbH & Co KG

Postfach 6526, Marburger Strasse 81, D-6300 Giessen.

Tel: (0641) 340 52 Telex: 482918

Supplies laboratory and clinical equipment including discrete chemical analyzers capable of 320 tests per hour with a RS232 interface for all computer link-ups with over 100 programmable routines available.

Volkswagenwerk AG

Energy Research & New Technology Department

D-3180 Wolfsburg. Tel: (05361) 92 38 77

Telex: 095860

Has developed a biogas engine generator system, as well as engines which run on alcohol (ethanol or methanol). Has carried out studies on use of methane, ethanol and vegetable oils as fuels for internal combustion engines.

Part III FR GERMANY

Volpi Deutschland GmbH

Postfach 1280, D-7809 Denzlingen. Tel: (07666) 1018 Telex: 7721495 Tel: (07666) 1018

Supplies fibre optic illumination for microscopy, fibre optic inspection instruments and fibre optic electronic control systems (see Volpi AG, Switzerland and American Volpi Corp, US).

W C Heraeus GmbH

Producktbereich Electrowarme

Supply a range of laboratory apparatus including incubators for cell culture, carbon dioxide incubators, tissue-culture vessels, laminar-flow workbenches, clean facilities, vacuum ovens and drying ovens.

W Ehret GmbH

Fabrikstrasse 2, D-7830 Emmendingen 14. Tel: 07641 1066 Telex: 7722417

Manufactures laboratory and industrial equipment including incubators, drying ovens, hot-air sterilizers, clean room equipment etc.

W Krannich GmbH & Co KG

Elliehauser Weg 17, D-3400 Gottingen. Tel: 0551 64096 Telex: 96621

Manufacture laboratory equipment including compact electrophoresis apparatus, extraction systems, chromatography columns and rotary viscometers.

W Pabisch GmbH & Co KG

Atterseestrasse 16, D-8000 Muenchen 60. Tel: 089 839407 0 Telex: 524334

Supply laboratory equipment including freezers, blood bank refrigerators, plasma freezers, carbon dioxide incubator, freeze drying and cryostorage

W Vogel

Marburgestrasse 81, D-6300 Giessen. Tel: (0641) 34052 Telex: 482918

Manufactures apparatus and equipment for immunological applications, including serum electrophoresis systems, enzyme and substrate analyzers and ultrafiltration apparatus.

Wako Chemicals GmbH

Nissanstrasse 2, D-4040 Neuss 1.

Tel: 02101 35011 Telex: 8517001 wako Fax: 02101 39879

Distributes fine chemicals for industrial and laboratory use, as well as clinical reagents (see Wako Pure Chemicals Industries Ltd, Japan).

Waldner Laboreinrichtungen GmbH & C0

Postfach 98, D-7988 Wangen/Allg. Tel: 07522 721 Telex: 732612

Design, construct and sell furniture for biotechnical laboratories.

Wallace & Tiernan GmbH

Produces analytical and control instruments for monitoring water purity in food processing and chemical industries.

Waters Chromatographie

Hauptstrasse 71-79, D-6236 Eschborn. Tel: 06196 4940 Telex: 418180 See Millipore GmbH, Germany.

Werner & Pleiderer

Postfach 301220, Theodorstrasse 10, D-7000 Stuttgart 30. Tel: (0711) 895 61 Telex: 22696

Produces twin-screw or four-screw extrusion plant for use in food chemical and other industries.

Westfalia Separator AG

Werner-Habig-Strasse 1, Postfach 3720, D-4740 Oelde 1. Tel: 02522 77 0 Telex: 89474 Fax: 02522 77 488 Fax: 02522 77 488 Telex: 89474

Supplies centrifugal equipment and processing lines for continuous clarification, separation, concentration, de-watering and extraction in pharmaceutical and food processing industries.

Wild Leitz GmbH

D-6330 Wetzlar.

Tel: 06441 29 0 Fax: 06441 29 33 99

Supplies light microscopes and related optical equipment.

Wilhelm Werner GmbH

Buchholzstrasse 73, D-5060 Bergisch Gladbach 2. Tel: 02202 51054 Telex: 8873759

Produce a range of reverse osmosis and purified water systems.

William Jan De Reuter

Rautenstrauchstrasse 47, D-5205 St Augustin 11.

Tel: (02241) 33 15 88

Consultant for manufacture and supply of fine and organic chemicals.

Wimmer GmbH

D-8399 Rhustorf/Rott 2. Tel: (08503) 416

Produces industrial centrifuges.

Wissenschaftlich-Technische Werkstatten GmbH

Trifthofstrasse 57a, Postfach 59, D-8120 Weilheim. Tel: 0881 1830

Manufacture laboratory, industrial and field instruments for measurement of parameters of value in pollution control and environmental protection including: pH meters, dissolved oxygen analyzers, conductivity meters, thermometers, etc as well as multipurpose and sampling devices for determination of biological oxygen demand (BOD) and chemical oxygen demand (COD).

Witeg KG

am Bildacker 16, D-6980 Wettheim/Main.

Supplies a wdie range of laboratory equipment including incubators, chromatography columns, ion and pH electrodes, stills, pipetters, pipette tips, molecular weight apparatus and filters.

Wurzburg University

Institute for Genetics & Microbiology

Rontgenring 11, D-8700 Wurzburg.

Developing techniques in recombinant DNA technology. Studying location and genetics of structural and regulatory genes in production of antibiotics by Streptomycetes, including the role of plasmids.

Zinsser Analytic GmbH

Eschborner Landstrasse 135, D-6000 Frankfurt am Main 94. Tel: 069 7891 06 0 Telex: 414265 zins

Supplies high-precision scintillation counters and vials in linear polyethylene with low solvent diffusion as well as immunological and biological reagents of Collaborative Research, US and equipment for combustion, chromatography, liquid handling, protein synthesis, microbiology and cell culture.

Zirbus-Verfahrenstechnik

Admiral-Zenker-Strasse 25, D-3360 Osterode am Harz. Telex: 965166 zioha Tel: 05522 2088

Supply laboratory equipment including autoclaves, carbon dioxide incubators, freeze driers (both laboratory and industrial scale), homogenizers, deep freezers, laminar flow cabinets and centrifuges including high speed refrigerated models.

GREECE

Abbott Laboratories (Hellas) SA

Sygrou Avenue 194, Callithea, Athens. Tel: 951 6511 Telex: 215771

Manufactures pharmaceuticals including antibiotics (erthyromycin and penicillin), diagnostics, vaccines and multivitamin preparations (see Abbott Laboratories, US).

Adelco Chromatourgia Athinon

E Colocotronis Bros Inc

Pireos Street 37, Moshaton, Athens. Tel: 481 9311 Telex: 212816

Supplies pharmaceuticals, veterinary products, cosmetics and dyes.

Agmartin

Karaiskou Street 80, Piraeus Telex: 214635 Tel: 417 0629

Supplies proteins and peptides with hormonal or biological activity, as well as peptide synthesis reagents. Agent for UCB-Bioproducts, Belgium.

Agricultural College of Athens

Laboratory of Agricultural Structures

1era Odos Botanikos 75, Athens.

Tel: 346 0025

Studying the production of methane by anaerobic digestion of farm wastes.

Ange M Calliphronas

4 Evripidou Street, GR-10559 Athens. Tel: 01 3218871 Telex: 219492

Supplies reagents and diagnostic kits for immunological purposes; products of Dakopatts AS, Denmark.

Antiviotiki SA

Coumoundburov Street 37, Athens.

Tel: 523 5042

Supplies pharmaceuticals and veterinary products.

BioHellas SA

10 Parnithos St, Palaio Psychiko, GR-154 52 Athens. *Tel*: 1 647 47 70 4

Produce healthcare products.

Biomedica Ltd

Michalakopoulou 64, GR-11528 Athens. Tel: 1 6726440 Telex: 226052

Supplies immunological and biological reagents. Distributor for Kent Laboratories.

Biotex SA

Fragon 3, Thessaloniki.

Telex: 418639 Tel: 524 277

Installs water treatment equipment and plant.

Boehringer Ingelheim Produktion SA

Evanglistrias Street 5, Callithea, Athens. Tel: 951-1311

Distributes pharmaceuticals, diagnostics and organic chemicals (see Boehringer Ingelheim AG, Germany).

Bristol Hellas Ltd

Athinon-Lamais National Road, Metamorfossi, Attiki. Tel: 281 3490 Telex: 216469

Manufactures and distributes antibiotics (kanamycin), other pharmaceuticals and cosmetics. Subsidiary of Bristol Myers Inc, US.

Chropi SA

Athinon-Pireos Street 62, Neon Phaliron.

Tel: 481 2551 Telex: 212366

Manufactures pharmaceuticals, food additives veterinary products and animal dietary supplements.

Diagnostic Ltd

64 Soutsou Street, GR-12462 Athens. Tel: 01 581 12421 Telex: 219807

Supplies immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories, US.

Ecotech Ltd

PO Box 886, Syngros Avenue 245, Athens.

Tel: 942 3034 Telex: 219180

Supplies equipment for treatment of sewage effluents and wastewater, including aerators, filters and screens.

Elkepa

Greek Productivity Centre

Kapodistriou Street 28, Athinai 147. Tel: (01) 360 0411 Telex: 219416

Collects, processes and disseminates information concerned with technology, economics and management as related to the introduction of new technologies (including biotechnology) to Greek industry. A non-profit organization under the supervision of the Ministry of Economy.

Evglo SA

Pireos Street 5, Moshato, Athens.

Manufactures glycerol, fatty acids, stearine and related products.

GA GAP Pharmaceuticals SA

Aghissilaou 46, Agia Demitrious, Brachami Athens.

Tel: 933 1692

Supplies pharmaceuticals, veterinary products and cosmetics.

Gerolymetos

Michalakopoulo Street 35, Athens 612.

Tel: 74 8193 Telex: 216625

Supplies diagnostic reagents for routine clinical use in chemical, immunological, bacteriological and virological applications, including radioimmunoassays.

Glaxo SA

Ionias Avenue 226, Agia Eleftherious, Acharnon Athens.

Supplies pharmaceutical products including antibiotics, vaccines, vitamins, steroids and other hormones (see Glaxo Laboratories UK).

Hadiilucas SA

1 Pireosstrasse, GR-10552 Athens. Tel: 1 3240531 Telex: 219283

Manufacture citric acid.

Hellenic Biotechnology Co/Biohellas

10 Parnithos Street i, GR-15452 Psychiko, Athens.

Tel: 647 4770-3 Telex: 225056

Offers services in custom synthesis of peptides and organic chemicals. Products include bioreactive peptides, restriction endonucleases and reagents for peptide synthesis and enzyme immunoassay including enzyme substrates and isoenzymes.

Part III **GREECE**

Hellenic Institut Pasteur

Vassilissis Sofias 127, Athens 11521. Telex: 221188 lphgr Tel: 646 5905

Has research programmes on virology, parasitology and immunology, including work on leishmaniasis.

Hoechst Hellas AG

PO Box 62, Tatoiou Road, North Erythrea Attiki.

Telex: 215890

Manufactures and supplies a wide range of chemicals, pharmaceutical products and agrochemicals (see Hoechst AG, Germany).

Institute of Biological Research

National Hellenic Research Foundation, Vassileos Constinou 48, Athens. Carrying out research on the structure and function of hormonally regulated genes in relation to the activity of carcinogens.

Institute of Molecular Biology and Biotechnology

Research Centre of Crete, Iraclion, Crete.

Carrying out research in areas of mammalian molecular biology and genetics as well as plant molecular biology from both a basic standpoint and for development of new products of commercial interest.

Montedison Hellas SA

46 El Venizelou Ave, GR-176 76 Kallithea, Athens.

Tel: 952 2091 Telex: 215212

Supplies agrochemicals and other products of Montedison SpA, Italy.

National University of Athens

Department of Microbiology

109 Leoforos Kifissias, GR-11524 Athens.

Hold culture collection of bacteria for medical microbiology research and teaching. Offer identification service.

Novo Hellas

Enzymes Division

2 Messoghion Street, Athens GR-11527.

Tel: 01 775 4551/52 Telex: 21 8847

Supplies industrial enzymes; products of Novo Industri AS, Denmark.

Organon Teknika Hellas Ltd

PO Box 3586, GR-10210 Athens. Tel: 01 8818326 Telex: 219964

Supplies immunological and biological reagents. Member of the Organon Teknika Group

P Bacacos SA

Omonia Square, Athens GR-10431.

Tel: 522 77 43

Supplies a wide range of materials for chromatography and separation technology as well as reagents for molecular biology; products of Pharmacia Biotechnology, Sweden.

Pfizer Hellas AE AS

Alketou Street 5, Pagrati, Athinai.

Tel: 751 7981

Supplies pharmaceuticals, veterinary products and animal feed additives (see Pfizer Inc, US).

Pharmacia LKB Produkter AB

Fax: 1 894 37 16

Supplies equipment and reagents for use in chromatography, electrophoresis, fermentation, microtomy and calorimetry; products of Pharmacia LKB-Produkter AB, Sweden.

Philips SA Hellenique

PO Box 3153, Syngrou Avenue 54, GR-10210 Athens.

Tel: 921 153 11 Telex: 215502

Supplies a wide range of analytical equipment, including spectrophotometers, electron microscopes, apparatus for chromatography, etc (see Philips NV, Netherlands).

Rhone-Poulenc Cooper SA

Thisseos Street 46, Callithea, Athens.

Tel: 951 4368

Manufactures antibiotics and supplies pharmaceutical products of Rhone Poulenc, France.

Sandoz Hellas SA

Delighiorghi 55-59, Athens.

Tel: 524 2511

Distributes pharmaceutical products (see Sandoz AG, Switzerland).

Stavropulu 27, GR-11252 Athens.

Supplies immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories, US

Sophia D Ghicas Co

Agiou Tryfonos 6, Kifissia, GR-14562 Athens.

Tel: 01 8080042 Telex: 225340

Supplies immunological and biological reagents. Distributor for Serotec,

Squibb Aebe Pharmaceutical Co

Messoghion & 67 Tzavela K, Halandri.

Tel: 671 0611 Telex: 215521

Manufactures and distributes products of E R Squibb & Sons, US.

Sterling Products International

32 Kfissias Avenue, Atrina Centre Building, Amaroussion Athens. Supplies pharmaceutical products of Sterling Drug, US.

Tousimis

Bas Georgiou B14, GR-10674 Athens.

Telex: 222139 Tel: 7226931

Distributor for Janssen Biochimica, Belgium.

UCB Hellas SA

14 Veikou Ave g, Galatsi, GR-11147 Athens. Telex: 222487

Tel: 1 2929000

Supply immunodiagnostics, pharmaceuticals and other products of UCB-Bioproducts SA, Belgium.

Upjohn Aebe Pharmaceutical Industry

1 Pallini 16 Km, Athens-Rafina Road, Attiki.

Tel: 666 5081 Telex: 215628

Supplies pharmaceuticals (see Upjohn Co, US).

Zootechniki SA

Aristotelous Street 38 o, Athens.

Tel: 883 1814

Manufactures animal health-care products and feed supplements.

IRELAND

Aalto Bioreagents Ltd

195 South Circular Road, Dublin 8.

Fax: 01 543800 Tel: 01 53673576 Telex: 93931

Supplies blood serum, human isoenzymes, monoclonal antibodies and other proteins, antigens and controls.

Accuscience

Kildare Enterprise Centre, Melitta Road, Kildare. Telex: 60710 accu Distributor for Janssen Biochimica, Belgium.

Agricultural Institute

Soils Division

Johnstown Castle, Wexford.

Tel: 053 228 88

Studying plant physiology and nutrition, including plant growth regulants and biochemistry of symbiotic nitrogen fixation.

Agricultural Institute

Tissue Culture Unit

Kinsealy, Malahide Road, Dublin 5. Tel: 010 460 644 Telex: 31479

Developing tissue culture methods for micro-propagation, protoplast culture and mutagenesis of a number of plant types; including tree species suitable for short rotation forestry. Also carrying out research in plant pathology and mycology.

Agricultural Institute

Animal Reproduction Research Unit

Western Research Centre, Belclare Tuam, County Galway.

Tel: 093 55455 Telex: 28962

Carries out contract work and research in the development and application of embryo transfer technology in large animals, as well as studying reproductive control mechanisms and reproductive wastage.

Agricultural Institute

19 Sandymount Avenue, Ballsbridge, Dublin 4. Tel: 01 68 81 88

Undertakes, coordinates and promotes agricultural research in Ireland. Subjects covered include methane from anaerobic digestion of wastes, alcohol fermentation for fuel use and short rotation forestry as a biomass energy crop. Disseminates results of such research and advises the Ministry.

Agricultural Institute

Dairy Bacteriology Department

Moorepark Research Centre, Fermoy, County Cork. *Tel:* 025 314 22 *Telex:* 75020

Carries out research on the physiology and biochemistry of lactic acid bacteria, especially those used in fermentations.

Alltech Ireland

Angsley House, Crofton Road, Dun Laoghaire, Dublin. Tel: 01 809 239

Producing biotechnology-based products including silage inoculants and mouldinhibitors.

Anderson & Martin Ltd

Anglesey House, Crofton Road Dun Laoghaire, County Dublin. Telex: 24488

Designs and constructs effluent and wastewater treatment plants for food, agricultural, chemical and pharmaceutical industries as well as for treating municipal wastes and sewage. Also supplies sludge dewatering equipment, filters, aerators etc.

Antigen Ltd

Roscrea, County Tipperary Telex: 26698 Tel: 502 68

Manufactures diagnostics and antibiotics as well as other pharmaceuticals and veterinary preparations.

Armour Pharmaceuticals Ltd

Kilbarrack Road, Dublin 5.

Telex: 5579 Tel: 01 32 26 21

Produces pharmaceutical raw materials.

Arthur Guinness Son & Co Ltd

St James' Gate, Dublin 8.

Tel: 01 75 67 01 Telex: 202 75138

Manufacturer and worldwide distributor of beer and other alcoholic beverages. Carrying out research on brewing technology including genetic manipulation of brewers yeast.

Avondale Chemical Co Ltd

Copse House, Rathdrum, County Wicklow.

Telex: 30960 Tel: 0404 62 09

Produces fine organic chemicals, pharmaceutical raw materials and intermediates for organic synthesis.

Avondale (Brinny) Chemical Co

Brinny, County Cork.

Carrying out production and quality control of interferon from genetically altered bacteria. Subsidiary of Schering Plough (see Schering AG, Germany).

Avonmore Creameries Ltd

Ballyragget, County Kilkenny.

Manufactures cheese and casein. Developing application of biotechnology to process development in dairy products.

Bailieboro Co-op Group Ltd

Bailieboro, County Cayan,

Manufactures dairy products. Developing microbial applications in fermentation and food technology.

Ballyclough Co-op Ltd

Mallow, County Cork.

Dairy products manufacturer. Developing related microbial technologies.

Bayer (Ireland) Ltd

Industrial Estate, Kill o'The Grange, Dun Laoghaire.

Tel: 01 85 31 11 Telex: 5272

Supplies fine chemicals and pharmaceuticals including antibiotics (penicillin), organic acids, antiseptics, alkaloids and vaccines (see Bayer AG, Germany).

Biocel

Rockgrove, Little Island, Cork.

Tel: 021 353516

Carrying out research in biodetergents, and fermentation for the brewing industry. Produces enzymes for stabilization of beer, fungal enzymes for use in alcohol production and baking as well as antioxidant for orange drinks.

Part III **IRELAND**

Biocon Ltd

Kilnagleary, Carrigaline, County Cork. Tel: 21 372541 Telex: 75071

Supplies bulk industrial enzymes for the brewing, baking, confectionery, textile, detergent, fruit juice, wine, and fermentation industries. Enzymes include proteases (fungal, bacterial and plant), invertases, amylases (bacterial, fungal, bacterial and plant - barley malt and soyabean), cellulases (from Aspergillus or Trichoderma) and pectinases. Also supplies mixed enzyme preparations for protein hydrolysis, hydrolysis of starch for alcoholic fermentations and mixed proteases and amylases for the brewing industry. Using recombinant DNA technology to produce new microbial strains.

Biomass Ltd

c/o Anaerobic Digestion Unit, University College, Galway.

Tel: 91 24411 Telex: 28823 ucg

Carry out consultancy and design of anaerobic digestion systems for waste treatment and energy production

Bioprep Ltd

Unit 1C, Stillorgan Industrial Park, Co Dublin. Tel: 01 952683/33329

Developing immunofluorescence technology for diagnostics including Staph and arthritis assays.

Bioquest Ltd

Sandyford Industrial Estate, Foxrock, Dublin 18. *Tel:* 01 95 24 16 *Telex:* 25844

Supplies chemicals and reagents for biotechnology and genetic engineering, including genetic manipulation kits, which provide all the components for integration of DNA into the EcoRI restriction target of plasmid pBR322 or pAT153. Developing diagnostics.

BioResearch Ireland

EOLAS, Glasnevin, Dublin 9.

Tel: 1 370177 Telex: 32051 Fax: 1 370176

Contract research organization formed to commercialize biotechnology research in Irish Universities and research institutes. Have formed research centres in universities for technology transfer. Division of the Irish Science and Technology Agency (EOLAS)

Boehringer Corporation Ltd

Valentine House, Temple Road Blackrock, County Dublin. Tel: 01 88 26 13

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Cara Partners

Little Island Industrial Estate, Cork, County Cork.

Manufactures speciality drugs. Developing plant tissue culture methods for propagation of horticultural species.

Carberry Milk Products

Balineen, Cork.

Tel: 021 47 22

Supplies milk products. Also produces potable ethanol by fermentation of

Ceimici Teo

Fitzwilton House, Wilton Place, Dublin 2.

Tel: 01 764341

Supplies alcohols and other biochemicals. Developing relevant fermentation technology.

Cerestar Ireland Ltd

Goldenbridge, Inchicore, Dublin 12. Tel: 01 557 638 Telex: 93830

Supply glucose syrups and other starch products. Subsidiary of CPC Europe, Belgium.

Chem Labs Ltd

Avonbeg Industrial Estate, Long Mile Road, Dublin 12.

Tel: 01 50 01 33 Telex: 31059

Supplies diagnostic products of Serono Diagnostics, Switzerland.

Ciba-Geigy Agro Ltd

Industrial Estate, Waterford, Waterford County.

Tel: 51 58 27 Telex: 8546

Distributes agrochemicals (herbicides, fungicides and insecticides); products of Ciba-Geigy AG, Switzerland.

Clonmel Chemicals Co Ltd

Waterford Road, Clonmel, County Tipperary.

Telex: 8635 Tel: 052 22 22 33

Manufactures pharmaceuticals on a contract basis to customers' specifications.

Cophag Ltd

Pottery Road, Dun Laoghaire, County Dublin. Tel: 01 85 32 77 Telex: 31636

Supplies clinical diagnostic reagents.

Corcoran Chemicals Ltd

17-22 Parkgate Street, Dublin 8.

Tel: 01 77 81 63

Supplies fine chemicals, starches, ion exchange resins, pharmaceuticals and catalysts.

Cork University College

Department of Botany

Tel: 021 268 71 Telex: 26050

Studying plant cell culture and micropropagation.

Cork University College

Department of Microbiology

Cork.

Tel: 021 268 71 Telex: 26050

Researching into microbiology and microbial genetics.

Cork University College

Department of Biochemistry

Lee Maltings, Prospect Row, Cork. Tel: 021 268 71 Telex: 26050

Studying enzymes and subcellular fractionation, enzyme kinetics and nucleotide metabolism.

Cork University College

Cork, County Cork.

Tel: 021 26871 Telex: 26050

Carrying out research into the functional properties of food proteins as well as the manufacture, processing and chemistry of dairy products, and the nutritional significance of trace elements and other aspects of food technology. Also carrying out research on the molecular biology of a novel adenylate cyclase gene from Rhizobium.

Cork University College

Dairy and Food Microbiology Department

Cork, County Cork.

Tel: 021 26871 Telex: 26050

Carrying out basic and applied research on cheese starter cultures with an emphasis on genetic manipulation of cultures to optimise industrial performance.

Denis Coakley Ltd

Clonee, County Meath.

Tel. 044 38 40 11

Distributes pharmaceutical chemicals (see BASF AG, Germany).

Dublin University College

Department of Zoology

Belfield, Stillorgan Road, Dublin 4.

Tel: 01 693244 Telex: 32693

Research interests include the isolation, identification and bulk production of antigens. Also carrying out studies on control strategies for insect pests.

IRELAND Part III

Dublin University College

Department of Botany

Belfield, Stillorgan Road, Dublin 4.

Tel: 01 69 32 44

Carrying out research on plant tissue culture.

Dublin University College

Biotechnology and Fermentation Science Research Centre

Department of Industrial Microbiology, Stillorgan Road, Dublin 4. Tel: 01 691185/693244 Telex: 32693

Carrying out research into biological treatment of effluents as well as microbiology of silage inoculants and microbial insecticides.

Dublin University College

Department of Chemistry

Belfield, Stillorgan Road, Dublin 4. Tel: 01 693244 Telex: 32693

Carrying out basic research on fungal parasites and insects that damage pine trees, including investigation of the tree defence mechanisms, as well as mechanistic and reactivity studies on metabolic reactions involved in

Dublin University College

Faculty of Veterinary Science

Ballycodin Road, Dublin 11.

Tel: 01 35 34 11

fungal parasitism.

Carrying out studies on blood genetics and the use of immunological methods in blood typing.

Dublin University College

Department of Industrial Microbiology

Belfield, Stillorgan Road, Dublin 4.

Tel: 01 69 11 85

Carrying out research on techniques for isolation of microbial enzymes and fermentation technology as well as developing feedstocks for fermentation processes.

Elan Corporation

Monksland, Athlone, County Westmeath.

Provides pharmaceutical services. Developing methods of controlled drug release and applications of monoclonal antibody technology.

Flemming GmbH

Tuamgreney, County Clare.

Supplies biochemical diagnostics. Developing applications of new immunological techniques including the use of monoclonal antibodies.

Foss Electric (Ireland) Ltd

Sandyford Industrial Estate, Leopardstown Road Foxrock, Dublin 18. Telex: 24316 Tel: 01 95 33 01

Supplies equipment and reagents for gas, liquid and high performance liquid chromatography including columns, pumps, detectors and data systems. Also supplies combined GC/mass spectrometer systems.

Galway University College

HRS Unit

University College, Galway.

Telex: 28823 EI Tel: 091 21500

Offers contract services to industry. Areas of interest include enzymic transformation of raw materials especially recovery from fermentation broths, animal glands and plants; beverage production technology and microbial based bioassays; diagnostic enzymes; animal feed compounds and educational kits.

Galway University College

Department of Microbiology and Hydrology

Galway.

Tel: 91 7611

Developing high-rate anaerobic filter systems for production of biogas (methane) from agricultural wastes and sewage sludge

Galway University College

Genetic Engineering Group

Department of Microbiology, Galway. *Tel*: 091 2411 *Telex*: 28823

Research interests include the cloning, expression and analysis of eukaryotic genes and the introduction of growth stimulating genes into the germ line of domestic animals.

General Diagnostics Ltd

Pottery Road, Dun Laoghaire, County Dublin.

Tel: 01 85 32 77 Telex: 8426

Distributes food additives, pharmaceuticals, health products, veterinary pharmaceuticals and crop-protection chemicals.

Glaxo (Ireland) Ltd

PO Box 700, Grange Road, Rath Farnham Dublin 14.

Tel: 01 98 47 33 Telex: 25195

Manufactures and distributes pharmaceutical products of the Glaxo Group, UK.

Guinness (Dublin) Culture Collection

A Guinness Son & Co (Dublin) Ltd

St James Gate, Dublin 8.

Hold culture collection of bacteria and yeasts for industrial microbiology research.

Harper & Fay

Beechhill, Clonskeagh, Dublin 14.

Tel: 01 69 43 00

Designs and installs plant for effluent and water treatment including activated sludge process plant, biotowers, filtration plant, mechanical screens and surface aerators, etc.

Hoechst Ireland Ltd

Cookstown Estate, Tallaght, County Dublin.

Tel: 01 51 15 44 Telex: 25158

Distributes agrochemicals and pharmaceutical products of Hoechst AG, Germany.

Hygeia Ltd

Carrowmonensh, Oranmoore, Galway.

Supplies herbicides, insecticides and silage additives. Developing bacterial cultures for agricultural use.

ICI Ireland Ltd

5-8 South Frederick Street, Dublin 2.

Tel: 01 76 58 01 Telex: 25140

Supplies pharmaceutical raw materials, dyes, pigments and surfactants.

Industrial Instruments Ltd

6 Herbert Place, Dublin 2.

Telex: 24789 Tel: 01 76 16 91

Supplies and maintains instruments for water and waste analysis.

Industrial Microbiology Dublin

Department of Industrial Microbiology, University College

Stillorgan Road, Dublin 4.

Holds culture collection of bacteria, fungi and yeasts for general microbiology research and teaching.

Institute of Biopharmaceuticals

Monksland, Athlone, County Westmeath.

Tel: 0902 2850

Developing new methods of drug assay as well as methods for evaluation of established and potential pharmaceuticals.

Institute of Clinical Pharmacology

PO Box 469, Dublin 8.

Tel: 01 758932 Telex: 24524

Specializes in providing a service to the pharmaceutical industry offering a programme for the safety evaluation of drugs in humans.

Part III **IRELAND**

Irish Equine Centre

Johnstown, Naas, Co Kildare. Tel: 045 66266

Carrying out research on equine disease including immunological studies on viral diseases such as equine herpes.

Irish Oil & Cake Mills Ltd

Marsh Road, Drogheda, County Louth. Telex: 25360 Tel: 041 87 36

Produces refined oils and fats as well as animal feed.

Irish Sugar Co Ltd

St Stephen's Green House, Dublin 2. Tel: 01 76 75 01 Telex: 5352

Manufactures sugar and animal feeds. Supplies peat and agrochemicals.

Jacobs Engineering Inc

Merrion House, Merrion Rd, Dublin 4.

Tel: 1 695666

Offer engineering and regulatory services in biotechnology plant design, start up and maintenance

Kerry Co-op Society Ltd

Princess Street, Tralee, County Kerry.

Supplies dairy products, including easein and calf milk replacer.

Killeshandra Co-op Agricultural Society Ltd

Killeshandra, County Cavan.

Supplies milk products including casein. Developing biotechnical applications for the production of speciality milk products.

Lancer Laboratory Products International Inc

Athy Industrial Estate, Athay, County Kildare.

Telex: 25418 Tel: 0507 311 11

Produces clinical diagnostics and laboratory equipment for handling liquids

Leo Laboratories

PO Box 81, 285 Cashel Road, Crumlin Dublin 12.

Tel: 01 90 89 24 Telex: 25251

Produces antibiotics, vitamins, pharmaceutical specialities and veterinary products. Subsidiary of Leo Pharmaceutical Products AS, Denmark.

Linson Ltd

Swords, County Dublin.

Tel: 01 40 14 71 Telex: 5258

Produces pharmaceutical raw materials and finished pharmaceuticals (see E R Squibb & Sons, US).

Macaudit Diagnostic Services

4 Spencer Villas, Glenageary, County Dublin.

Tel: 01 829 339 Telex: 30327

Provide management training for the diagnostic industry, assignment of values to quality control materials, laboratory audits and staff appointments advice.

Mahon & McPhillips Ltd

Larchfield, Kilkenny.

Telex: 80049

Contracting engineers. Design wastewater treatment and effluent plants for industrial and municipal sectors.

Mandons Ltd

Courtstouin Industrial Park, Little Island, Cork.

Supplies agricultural chemicals and plant growth regulators.

Mason & Sons Ltd

29 Parliament Street, Dublin 2.

Tel: 01 71 19 22

Supplies a range of detection and analytical equipment, including bacterial samplers, water analysis equipment, cooled incubators, pH meters, ion electrodes etc, as well as ultra-violet and visible spectrophotometers.

Maynooth College

Department of Biotechnology

Maynooth, County Kildare.

Tel: 01 285 432

Studying genetic manipulation of filamentous fungi and yeasts as well as carrying out research on plant tissue culture control of plant pathogens, anti-mycotics, silage microbiology and preparation of monoclonal antibodies. Also investigating production of peroxidase by plant tissue cultures for use in diagnostics as well as the use of mites in the control of pests of commercial mushroom production.

Medical Supply Co Ltd

Unit 9 Santry Industrial Estate, Santry, Dublin 9.

Tel: 01 42 66 44

Supplies laboratory reagents, diagnostic assay kits, stains and fine organic chemicals.

Mediabs Ltd

Unit 1C Stillorgan Industrial Park, Stillorgan, County Dublin. Fax: 01 952165 Tel: 01 952101 Telex: 33329

Supplies diagnostic reagents. Carries out contract research and development on use of monoclonal antibodies for diagnostics. Products include recombinant Protein A and Protein A agarose.

Mycofarm (Ireland) Ltd

1 Ballyboggan Industrial Estate, Ballyboggan Road Finglas, Dublin 11. Tel: 01 30 94 46 Telex: 31213

Supplies clinical diagnostics and reagents. Subsidiary of Gist-brocades, Netherlands.

National Cell & Tissue Culture Centre

National Institute for Higher Education (NIHE)

Glasnevin, Dublin 9.

Telex: 30690 nihe Tel: 1 370077 Fax: 1 360830

Established by BioResearch Ireland to develop existing research at NIHE in all aspects related to growth in animal cell culture and monoclonal antibody production. Offer in vitro toxicity testing, bio-assay and large scale cell culture technology for production of pharmaceuticals. Current projects include isolation and identification of cell growth factors, development of alternatives to foetal calf serum and serum-free media, as well as development of in vitro hormone bio-assays. Carrying out contract research work for a range of Irish and European industries.

National Diagnostics Centre

University College

Galway.

Tel: 91 24411 Telex: 50023 ucg Fax: 91 25700

Established by BioResearch Ireland to develop existing research and resources at the University in diagnostic and related technology including enzyme linked immunoassay and DNA probes. Products now marketed include veterinary assay for progesterone. Developing further assays for human and veterinary diagnosis in areas of fertility, bone and lipid metabolism, DNA probes for infectious diseases including diseases of farmed fish, diagnostic kits and related bio-instrumentation.

National Food Biotechnology Centre

University College

Cork.

Tel: 21 276871 Fax: 21 275948 Telex: 76050 unic

Established by BioResearch Ireland to promote existing research at the University in biotechnology and technology transfer including: genetic engineering of organisms for enhancement of bioprocesses; production of natural flavours; cheese biotechnology; microbial inoculants for food production; modification of functional food proteins; phage-resistant microrganisms for cheese starter cultures and fermented meat products; food crops research and enhancement with nitrogen fixing organisms and other beneficial soil microorganisms; biological control of pathogens.

National Institute for Higher Education

School of Biological Sciences

Glasnevin, Dublin 9

Tel: 01 370077 Telex: 30690

Offers contract services in microbial screening for over producers; microbial nutritional characterization; optimization of fermentation processes and development of microbial storage methods; mammalian cell culture and hybridoma technology; biochemical engineering and fermentation scale up.

IRELAND Part III

Noctech Ltd

Unit 3 Cookstown Industrial Estate, Tallaght, County Dublin. Tel: 01 511 755 Telex: 32862

Unit 7 Incubator Units, University College, Galway.

Tel: 91 24194

Manufactures clinical diagnostics including solid-phase enzyme-linked immunosorbent assays for reproductive hormones such as progesterone.

Nourypharma Ireland Ltd

PO Box 937 Farnham Drive, Finglas Road, Dublin 11.

Offers contract freeze drying. Developing diagnostic systems including pregnancy test kits and monoclonal antibodies.

Organon (Ireland) Ltd

Farnham Drive, Finglas Road, Dublin 11. *Tel*: 01 34 44 44 *Telex*: 25782

Produces clinical diagnostics and immunoassays (see Organon NV, Netherlands).

Oxford Laboratories International Corp

Ringaskiddy, County Cork. Tel: 021 84 10 05 Telex: 26198 Produces clinical diagnostic reagents.

P J Brennan & Co Ltd

61 Stillorgan Industrial Park, Stillorgan, Dublin. Tel: 01 95 25 01

Supplies fermentation equipment (see LH Fermentation UK).

Pennwalt of Ireland Ltd

57 Merrion Square, Dublin 2. *Tel*: 01 76 78 46 *Telex*: 24443

Distributes pharmaceuticals and other products of Pennwalt Corp, US.

Pfizer Chemical Corp

Ringaskiddy, County Cork. Tel: 021 84 10 05 Telex: 26198

Manufactures and distributes bulk pharmaceuticals and food additives (see Pfizer Inc, US).

Philips Electrical Ireland Ltd

Newstead, Clonskeagh, Dublin 14. *Tel*: 01 69 33 55 *Telex*: 25200

Supplies a wide range of analytical equipment including spectrophotometers, chromatographs, electron microscopes etc (see Philips NV, Netherlands).

Plant Biotechnology (UCC) Ltd

University College, Cork, County Cork. *Tel*: 021 26871 *Telex*: 26050

Offers services to agricultural, horticultural and related industries in areas of diagnostics, micropropagation and new variety production, including genetic engineering, mutation breeding, germplasm storage and disease indexing.

R M Browne Ltd

Sandyford Industrial Estate, Foxrock, Dublin 18. *Tel*: 01 953 401 *Telex*: 90275

Supplies reagents and diagnostic kits for immunological purposes. Distributor for Dakopatts AS, Denmark.

Reheis Chemicals (Ireland) Ltd

Kilbarrack Road, Dublin 5. Tel: 0132 26 21 Telex: 25579

Produces pharmaceuticals and other chemicals (see Armour Pharmaceutical Co, US).

Rice Steel & Co Ltd

Cookstown Industrial Estate, Tallaught, County Dublin. *Tel*: 01-51-01-44 *Telex*: 31665

Manufactures pharmaceuticals for human and veterinary applications.

Royal College of Surgeons

123 St Stephen's Green, Dublin 2. *Tel*: 01 75 38 16

Developing methods in immunology.

St James Hospital

Biology & Medical Research Unit

Dublin 8.

Tel: 01 75 89 32 Telex: 4524

Undertaking studies on neuroendocrinology, clinical biochemistry and steroid chemistry. Developing radioimmunoassays.

Sterling-Winthrop Ireland Ltd

Mount Street, Bridge, Dublin 2. Tel: 01 76 06 63 Telex: 25375

Distributes pharmaceutical products (see Sterling- Winthrop Group Ltd, UK).

Swefarm Ireland Ltd

Gore & Grimes, 6 Cavendish Row, Dublin 1.

Supplies anticoagulants and related agents. Developing proteolytic enzymes.

T H Mason & Son Ltd

29 Parliament Street, Dublin 2. *Tel:* 711922 *Telex:* 25860

Supplies a wide range of laboratory equipment. Distributors for Gallenkamp, UK.

Technicon (Ireland) Ltd

Church Lane, Swords, County Dublin.

Manufacturers of automated analytical equipment for colorimetric, enzymic and other similar assays, as well as dedicated analyzers for nitrogen, chemical oxygen demand (COD), amino acids, protein etc. Also produce infra-red reflectance analyzers and other instrumentation.

The International Biochemicals Group Ltd

Sandyford Industrial Estate, Foxrock, Dublin 18.

Tel: 01 95 24 16 Telex: 93958

Supplies enzymes and bacterial preparations for waste treatment, silage inoculants, soil inoculants, etc. A member of the Royal Dutch Shell Group, Netherlands.

The Irish Chemical Co

Fitzwilton House, Wilton Place, Dublin 2.

Tel: 01 76 43 41 Telex: 5464

Produces glucose syrups and potato starch as well as ethanol by fermentation.

Tipperary Co-op Society Ltd

Tipperary, County Tipperary.

Manufactures milk products including cheese and skim milk. Developing microbial processes for speciality cheeses.

Town of Monaghan Co-Op Society Ltd

Monaghan, County Monoghan.

Manufactures dairy products including yoghurt and cultured milk. Working on microbial strain improvement.

Travenol Laboratories Ltd

Breaffy Road, Castlebar, County Mayo.

Tel: 94 72 Telex: 32282

Manufactures health-care products (see Baxter Travenol Laboratories Inc, US).

Trinity College Dublin

Department of Microbiology

College Green, Trinity College, Dublin 2.

Tel: 76 62 10 Telex: 31166 tcd

Studying production of antigens and vaccines.

Part III **IRELAND**

Trinity College Dublin

Department of Biochemistry

Dublin 2.
Tel: 01 77 29 71 Telex: 25442

Studying the mechanism of action of psychotropic and anti-depressant drugs at the molecular and cellular levels as well as large scale purification. Also studying radiation-induced tissue damage and detoxification of industrial pollutants and carcinogens as well as development of antiprotozoan drugs.

Trinity College Dublin

Department of Genetics

Undertaking studies in molecular genetics.

Unichem Ltd

The Ward, County Dublin. Tel: 01 34 14 99 Telex Telex: 32282

Manufactures and distributes veterinary products.

Waterford Co-op Society Ltd

Dungarvan, County Waterford.

Supplies dairy products including caesin and yoghurt. Developing improved microbial processes for production of cheese and yoghurt.

Wellcome Ireland Ltd

Supplies pharmaceuticals and diagnostics (see Wellcome Foundation, UK)

Wexford Creamery Ltd

Rocklands, Wexford.

Supplies dairy products. Investigating microbial aspects of maturing times for cheese.

Wheat Industries Ltd

Carrigaline, County Cork.

Manufacture wheat gluten, starch, glucose syrups, fermentable syrups and malted dextrins.

Whelehan Son & Co Ltd

North Road, Finglas, Dublin 11. Tel: 01 34 22 33 Telex: 31250

Manufactures and distributes pharmaceutical and veterinary products, as well as agrochemicals.

Yeast Products Ltd

Griffith Avenue, Finglas, Dublin 11.

Tel: 1 347133

Using recombinant DNA technology to produce new yeast strains.

ISRAEL

Assia Chemical Industries Ltd

PO Box 1423, Tel Aviv.

Tel: 03 925 021 Telex: 341836

Manufactures fine chemicals, veterinary products and feed additives. Subsidiary of Teva Pharmaceutical Industries Ltd, Israel.

B Genuth Inc

PO Box 10559, Ramat-Gan 52005. Tel: 03 799854 Fax: 03 798269

Supplies diagnostics and immunoreagents; products of Gamon Labor-Service GmbH, Germany and Serotec, UK.

Ben Gurion University of the Negev

Department of Biology

PO Box 653, Beer-Sheva.

Tel: 057 661 1365

Investigating fermentation processes for the production of styrene from 2-3 but and iol. Also investigating the use of bacterial biopesticides for the control of mosquitoes.

Bio-Instrument Ltd

P 0 Box 9519, 6 Mishmar Ha Gual Street, Jerusalem 91094. Tel: 02 81 73 80 Telex: 26144

Supplies equipment for microbiology, biotechnology and life sciences for use in research, laboratories and industry. Agent for New Brunswick Scientific Inc, US.

Bio-Lab Ltd

Givat Shaulb, Mercaz Shatner 3, Box 16071, Jerusalem 91160. Tel: 02 524447/536885 Telex: 25346/26569

Supplies enzymes, growth factors, diagnostics, biochemicals, reagents for molecular biology and other products of Collaborative Research Inc, US and Janssen Life Sciences Products, Belgium.

Bio-Technology General (Israel) Ltd

Kiryat Weizmann, Rehovat 76326. Tel: 84 75150 Telex: 333 84

Supplies a wide range of biochemicals and enzymes for research, clinical and industrial use.

Bio-Yeda Ltd

Kiryat Weizman, Rehovot 76326.

Tel: 08 47 04 25 Telex: 361930 miyed

Supplies a wide range of biochemicals and enzymes for research, clinical and industrial use; products of Miles Laboratories Inc, US.

Biodex Ltd

PO Box 5577, Jerusalem 91054. *Tel:* 02 81 80 41

Engaged in the research, development and manufacture of diagnostic kits based on radioimmunoassay, enzyme assays and immunofluorescence.

BioHYTech (Israel) Ltd

PO Box 1343, Ramat Hasharon. *Tel*: 972 2 633184

Research and development company specializing in production of immunodiagnostic kits for the research and clinical markets. Products include enzyme immunoassays for detection of autoantibodies, tumour antigens, etc as well as immunofluorescence kits and latex kits for Streptococcus protein Δ .

Biokoor

PO Box 3163, Jerusalem 91031. Tel: 2 532482 Telex: 361579

Developing enzyme based biocatalysis for the production of various chemicals

Biological Industries

Kibbutz Bet Haemek 25115.

Tel: 972 4 960595 Telex: 471723 biol Fax: 972 4 960596

Produce stable liquid control serums, serum-free media and supplements.

BioMakor Ltd

Kiryat Weizmann, Rehovot.

Tel: 08 470425 Telex: 361930/381330 miyed

Supply biotin/avidin reagents, monoclonal and polyclonal antibodies and conjugates, lectins and peptides. Developing immunologicals, synthetic peptides and immunohistochemical diagnostics.

Botanicare Natural Products

PO Box 1428, Haifa 31013.

Tel: 04 468111 Telex: 45143 ferha Fax: 04 457511

Carrying out research and development of a number of plant extracts with applications in healthcare and medicine, including Stevia rebaudiana. Division of Fertilizers & Chemicals Ltd.

Carmira Ltd

PO Box 18080, Jerusalem.

Tel: 02 81 10 51 Telex: 32470

Supplies clinical diagnostic instrumentation.

Central Laboratories

Ministry of Health Jerusalem

Jaffa Street 86, Jerusalem.

Hold culture collection of bacteria and bacterioviruses for medical microbiology research. Offer identification services.

Chemineer Ltd

28 Shderot Yehudit, Montefiore Quarter, Tel Aviv 67016.

Tel: 03 33986/331371 Telex: 361382

Supplies immunological and biological reagents. Distributor for Kirkgaard & Perry Laboratories, US.

Dexmor Ltd

Box 13141 3 Ahuzat Bayit St, Tel Aviv 61131. Tel: 03 498503/724335 Telex: 341486/35771

Supplies diagnostic products of Cederlane Laboratories, Canada and Zymed Laboratories, US.

Eisenberg Bros Ltd

Asia House, PO Box 33638, Tel Aviv.

Tel: 03 430876 Telex: 92233511

Supplies immunological and biological reagents. Distributor for Promega,

Eldan Electronic Instrument Co Ltd

PO Box 1270, 16 Oholiav Street, Jerusalem 91012. Tel: 02 52 82 11 Telex: 25231 Fax: 2 53 42 89

Supplies laboratory and clinical instrumentation reagents, chemicals and diagnostics. Agent for Cambridge Medical Diagnostics Inc, US, Bioengineering AG, Switzerland and Biopool AB, Sweden.

Part III ISRAEL

Eldan Technologies Ltd

Produce equipment, media and supports for cell culture, bacterial detection systems and microbiological diagnostics.

Enco Scientific Services

PO Box 7411, Jerusalem 91072.

Tel: 02 353470

Supply immunological and biological reagents. Distributor for Jackson Immunoresearch Laboratories, US.

Frutarom Ltd

PO Box 10067, Haifa 26110. Tel: 04 72 51 23 Telex: 45125

Manufactures essential oils, food flavours and perfumes.

Galam Ltd

Kibbutz Maanit, Mobile Post Menashe 37855.

Tel: 06 37 02 42 Telex: 46319

Produces starch products, including industrial and edible starches, glucose syrups, caramel colourants, maize proteins and gluten feeds.

Hackmey Ltd

103 Allenby St, Tel Aviv 65176. Tel: 03 294939 Telex: 361254

Supplies immunological and biological reagents. Distributor for Organon

Teknika.

Haifa Chemicals Ltd

PO Box 1809, Haifa 31018. Tel: 04 726051 Telex: 45118

Major supplier of potassium nitrate and other fertilizers, moving into the area of biotechnology with interests in agricultural applications. Subsidiary of Trans Pacific Resources Inc.

Hebrew University of Jerusalem

Institute of Life Sciences

Jerusalem 91904.

Carrying out research into biochemistry and molecular biology of proteins and nucleic acids.

IBT Ltd

International Bio-Techniologies

PO Box 151490, Jerusalem 93469.

Tel: 02 722959 Telex: 26464 ibt

Offer a laboratory ware coating service based on technology developed from ECM (extracellular matrix), a biologically derived material.

ICI (Israel) Ltd

PO Box 1703 America House, 35 Sderot Shaul Hamelach, Tel Aviv 64927. Tel: 03 25 21 16 Telex: 33548

Markets agrochemicals, pharmaceuticals, fine chemicals etc; products of Imperial Chemical Industries plc, UK.

IDL Ltd

International Diagnostic Laboratories Ltd

PO Box 5577, Jerusalem 91054.

Tel: 02 818041 Telex: 25312 bames

Supply dry ascending chromatography tubes, thyroid function testing kits and column tests for neonatal monitoring and fetal well-being.

Institute of Field and Garden Crops

PO Box 6, Bet Dagan 50250.

Tel: 03 098 0458 Telex: 341118

Carrying out research on the technical and economic feasibility of producing fuel alcohol from agricultural crops including sugar cane, sugar beet, maize and sorghum.

Inter-Yeda Ltd

Science-Based Industrial Park, Kiryat Weizmann, Ness Ziona 76110. Member of Ares-Serono Group.

International Genetic Sciences Partnership

Research and Development

PO Box 4330, Jerusalem, Israel 91042.

Tel: 2 716282 Telex: 26321

Carry out research and development for International Genetic Sciences Partnership, US.

Interpharm Laboratories Ltd

Science Based Industrial Park, Kiryat Weizmann, Ness Ziona 76110. Tel: 08 475786 Telex: 361953 ipl Fax: 08 465566

Produce interferons, human growth hormone and monoclonal antibodies. Member of Ares-Serono Group.

Israel Institute for Biological Research

PO Box 19, Ness-Ziona 70450.

Tel: 08 481656 Telex: 381333 iibr Fax: 08 475594

Carries out contract research in the areas of biology, chemistry, public health and ecology. Developing synthetic viral vaccines and adjuvants andlymphoma treatment. Also developing immunodiagnostics for pesticides and herbicides. Products include bovine recombinant interferon, human IL-2, alpha-hCG, monoclonal antibodies and antigens.

Israel Institute of Technology

Environment Engineering Research Centre

Technion, Haifa 3200.

Tel: 292 111 Telex: 46406 telcon

Studies include use of large-scale algal cultures for purification of wastewater.

Isramex Co Ltd

PO Box 6014, 22 Arlozorov Street, Tel Aviv 60488.

Tel: 24 82 13 Telex: 342266

Supplies diagnostic kits, immunological reagents, biochemicals and other biological products.

Kibbutz Industries Association

Research and Development Institute

27 Hayarden Street, Ramat Gan 1282.

Tel: 03 74 64 59

Investigating the use of agricultural wastes for the production of biogas (methane) by anaerobic digestion, as well as studies on the use of the residual slurry as fertilizer.

Koffolk (1949) ltd

PO Box 1098, Tel Aviv.

Manufactures vitamins of animal feed grade, feed additives and related chemicals.

M Jacobsohn Ltd

PO Box 29096, 3 Montefiore Street, Tel Aviv.

Tel: 03 585 08 Telex: 341118

Supplies fine chemicals and reagents for laboratory and diagnostic use. Agent for Fluka AG, Switzerland.

Maagar Scientific Services Ltd

Kiryat Weizmann, Rehovot 76110.

Tel: 054 75151/474537 Telex: 341390

Supplies clinical diagnostics, serums, antiserums and monoclonal antibodies as well as dyes and stains, and reagents for elelctron microscopy. Agent for Sera-Lab Ltd, UK and Polysciences, US.

Makhteshim Chemical Works Ltd

PO Box 60, Beer-Sheva 84100.

Tel: 057 666611 Telex: 52765312

Carrying out research on the use of fungi such as Trichoderma viride as a fungal control agent. Investigating the production of fungi in semi-solid and submerged culture as well as developing methods for application against diseases caused by fungal pests including Fusarium, Sclerotium and Rhizoctonia.

ISRAEL Part III

Medipharm Ltd

Diagnostics Division

20 Lewin Epstein Street, Rehovat. Tel: 54 580 61 Telex: 31963

Science-Based Industrial Park, Kiryat Weizmann, Ness-Ziona 76110

Supplies reagents and radioimmunoassay kits for hormone assays as well as other clinical diagnostics. Member of the Ares-Serono Group.

Oranit Chemicals

PO Box 5414, 20 Krinizi Street, Ramat-Gan 52153. Tel: 03 71 95 11 Telex: 341118

Supplies chemical and reagents for chemistry, research and molecular biology. Products include agglutinins, lectins, antibodies and antiserums, affinity chromatography supports etc, as well as enzymes and reagents for polypeptide sequence analysis.

Orgenics Ltd

PO Box 360, Yavne 70650.

Tel: 08 438752 Telex: 381539 orgen Fax: 08 439901

Supplies an economical, non-radioactive labelling system for DNA (DNA chemiprobe) and colorimetric toxicity test kit. Developing solid-phase immunoassay technology.

Rafa Laboratories Ltd

PO Box 405, Industrial Zone, Romena Jerusalem. *Tel:* 02 52 61 06 *Telex:* 25409

Produces diagnostic pharmaceuticals and vaccines.

Shevach Laboratories Ltd

Industrial Zone, Tel Mond 40600. Tel: 05 26 15 66 Telex: 61566

Produces plant growth regulators.

Tamar Ltd

PO Box 9293, 5 Harlap Street, Jerusalem. Tel: 02 53 70 52 Telex: 922 254 45

Supplies speciality products, including nitrocellulose DEAE and diazotized media for separating or transfer of nucleic acids and proteins as well as glass-fibre filters, ultra and micro filtration apparatus and membranes products for chromatography, etc. Agents for Schleicher & Schull GmbH, Germany.

Tayco Diagnostics Ltd

Science Based Industries Campus, Har Hotzvim PO Box 5365, Jerusalem

Tel: 02 81 80 41 Telex: 25312

Produces reagents for clinical diagnosis, including radioimmunoassays, supplying both kits and component reagents as well as reagents for radiometric or enzyme linked immunoassay evaluation of viral immune status.

Technion-Israel Institute of Technology

Department of Biology

Kyriat Hatechnion, Haifa.

Tel: 972 4 292111

Carrying out research on Leishmaniasis. Have isolated an enzyme which may form the basis of treatment to control the disease.

Teva Pharmaceutical Industries Ltd

Science-Based Industries Campus, PO Box 1142 har Hotzvim, Jerusalem 91010.

Tel: 02 810790 Telex: 25359 teva

PO Box 1423. Tel Aviv 61013.

Tel: 03 925021 Tx: 341836 asla

Produce diagnostics including tests for breast cancer and diabetes, as well as veterinary vaccines.

Unikoor Industrial Biotechnology

PO Box 3163, Jerusalem 91031.

Tel: 02 413232/428750 Telex: 361579

Carrying out contract research in fermentation and enzymology and development of industrial processes for the production of amino acids and related compounds. Joint venture between Biokoor Industrial Biotechnology and Yissum, Israel.

Vineland Laboratories Ltd

PO Box 561, Kfar Vitkin 40200.

Tel: 05 32 43 37

Supplies vaccines, antibiotics and pharmaceuticals for veterinary use.

Volcani Centre Rhizobium Collection

Department of Legume Inoculation, Agriculture Research Organization PO Box 6, Bet Dagan 50250.

Hold culture collection of bacteria for agricultural microbiology research.

Weizmann Institute of Science

PO Box 2, Rehovat 76326.

Tel: 054 76100

Carries out a wide range of research in the life sciences: biology, biochemistry, biphysics and chemistry including studies on the production of plasminogen activator in cultures of human fibroblasts.

Zotal Ltd

PO Box 21042, Tel Aviv.

Tel: 03 79 60 41 Telex: 35771

Supplies research and diagnostic reagents and fine chemicals, including growth factors and hormones for growth of mammalian cells under defined conditions. Markets enzymes, defined sequence oligo- nucleotides, linkers and other materials for recombinant DNA research. Also supplies radioimmunoassay kits for detecting cyclic nucleotides and drugs of abuse, as well as other radioactive materials and reference sources. Agents for Collaborative Research, FMC Corporation Bioproducts, Hemagen Diagnostics and Advanced Magnetics, US.

ITALY

A Biotec

Via G Matteotti 105, I-47100 Forli. *Tel:* 0543 32203

Consortium researching in areas of agrobiotechnology including plant genetics to develop new crops, ethanol production from sweet sorghum, utilisation of marginal land for energy crops and production of citric acid, in collaboration with the Ministry of Industry, Agriculture and Scientific Research and the Department of Agriculture for the Emilia-Romagna Region as well as private industry.

A Constantino EC SpA

Via F Romana 11, I-10083 Favria Canavese. Tel: (0124) 420 02 Telex: 210554

Manufactures proteases (pepsin, papain and pancreatin extracts or powders from organs or glands), peptones, casein hydrolyzates, yeast extracts and autolyzates, ox bile powder and other similar products.

Addital

Via Monte di Pieta 1/A, I-20121 Milano. Tel: (02) 87 20 06 Telex: 332501

Supplies proteins and peptides with hormonal or biological activity as well as peptide synthesis reagents. Agent for UCB-Bioproducts, Belgium.

Aerimpianti SpA

Via Bergamo 21, 1-20135 Milano. Tel: (02) 549 71 Telex: 312211

Undertakes engineering and plant design for anaerobic digestion (biogas) installations, as well as treatment of urban and industrial solid wastes and sludges by other means.

Agipgiza Spa

Via Schwerin 4, I-42100 Reggio Emilia. Tel: (0522) 458 41 Telex: 531668

Developing methods for the anaerobic digestion of municipal solid wastes and other similar biodegradable materials.

Akzo Chemie Italia SpA

Via E Vismara 80, I-20020 Arese Milano. Tel: (02) 938 11 51 Telex: 332526

Produces esters, amines and other derivatives of fatty acids as well as a range of other intermediates for textiles, cosmetics, plastics and fine chemical industries (see Akzo NV Netherlands).

AL Srl

Supply laboratory equipment including a microprocessor laboratory meter for analysing moisture content and comparative weights of sample batches.

Alessandrini snc

Supplies a wide range of analytical, optical and electrochemical laboratory equipment for atomic absorption, microscopy etc. Distributor for Carl Zeiss, Germany.

Alfa Chemicals Italiana

Supplies raw materials and intermediates to the pharmaceutical industry.

Alfa Laval SpA

Via Pusiano 2, Monza.

Supplies a wide range of industrial separation and processing plant (see Alfa Laval AB, Sweden).

Alfatech Srl

Pza Soziglia 1/11, I-16123 Genova. Tel: 010 281 811 Telex: 222607 baco

Supply gas chromatographs with fluid delivery system interfaces for supercritical fluid pumping systems. Distributor for Brownlee Labs, Division of Applied Biosystems, US.

Alpha Color SpA

Via Valtellina 48, I-20159 Milano.

Produces bacterial amylases for use in the textile industry.

Amato & Figli Srl

Supply immunoreagents and biologicals for the healthcare, agricultural and chemical industries; products of Collaborative Research Inc, US. Also distributor for Kent Laboratories, US.

Ambiental SpA

Fontana, Perugia.

Manufacture anaerobic digesters for the treatment of agricultural wastes with the generation of electricity and gas.

Anic SpA

Pharmaceutical Division

I-20097 San Donato Milanese Milano. *Tel:* (02) 52 01 *Telex:* 310246

Manufactures pharmaceuticals as well as other speciality chemicals, fertilizers, plastics, synthetic fibres etc. Subsidiary of Ente Nazionale Idrocarbutri, Italy.

Applic Digital Nucleari Srl

Via del Camino 31, I-10122 Torino.

Manufactures a variety of radioactive analyzers (Geiger Muller counters, flow counters, portable monitors etc), reference radiation sources, protective clothing, protective shielding and transport containers for radioactive material.

Applied Biosystems

Via C Darwin 22, I-20143 Milano. Tel: 02 835 4920/1349 Fax: 02 832 1655

Supplies instruments for DNA synthesis and gas-phase protein sequencing as well as supplying reagents for manual DNA synthesis and providing custom synthesis service. Part of Applied Biosystems Group.

Aromatici Riccardo Subinaghi Srl

Via Bovisasca 18, I-20026 Novate Milanese. Tel: (02) 354 44 51 Telex: 810202

Produces essences, essential oils and plant extracts for the confectionery, beverage and pharmaceutical industries.

ARS Chimica SAS

Via Capruzzi 34, I-70126 Bari. Telex: 810202

Supplies immunological and biological reagents. Distributor for Southern Biotechnology Associates Inc.

Assoreni SpA

Via Fabiana 1, I-20097 San Donato Milanese, Milano. Tel: 02 5201

Developing processes in areas of anaerobic digestion of agro-industrial wastes, bioprocess engineering, nutrition and food technology, genetic engineering and medical diagnostics as well as polymer carriers for bioactive groups.

Astran

Via A Diaz 22, I-20090 Opera Milano. Tel: 02 5244313

Via Bignami 55, I-00054 Fiumicino Roma.

Tel: 06 6454394

Distributes spectrophotometers and spectrofluorometers etc; products of Shimadzu Corp, Japan.

Azienda Generale Italiana dei Petroli SpA

AGIP

Piazza Enrocho Mattei 1, I-00144 Roma.

Tel: (06) 59 00

National oil company with interests in biotechnology.

B Braun Milano SpA

Via Vincenzo da Seregno 14, I-20161 Milano.

Tel: 02 6450761

Distributes fermentation equipment, homogenisers, thermostats, pumps and Warburg apparatus; products of B Braun Melsungen AG, Germany.

Bari University

Department of Clinical Medicine

Policlinico, Viale Ennio, I-70124 Bari.

Tel: (080)36 97 28

Involved in clinical and cellular immunology, haemotology and blood diseases, blood coagulation and blood grouping.

Bayer Italia SpA

CP 1243, Viale Certosa 126-130, I-20156 Milano.

Tel: (02) 397 81 Telex: 330518

Produces pharmaceuticals including antibiotics (penicillin), agrochemicals and other chemicals.

BDH Italia Srl

Via Ernesto Breda 142, I-20126 Milano. Tel: (02) 2579541/2/3 Telex: 3342 Telex: 334272

Supplies a wide range of fine chemicals and reagents for techniques such as electrophoresis, chromatography and amino acid analysis (see BDH Chemicals, UK).

Beckman Analytical SpA

Via Lario 12, I-20159 Milano.

Tel: 02 69911

Supplies electronic analytical equipment; products of Beckman Instruments Inc, US.

Becton Dickinson Italia SpA

Via Caldera 21, I-20153 Milano. Telex: 330473 Tel: (02) 452 47 51

Supplies pharmaceuticals, antibiotics and diagnostic reagents including monoclonal antibodies (see Becton Dickinson & Co, US).

Biacor SpA

Passeggiata del Carmine 2, I-35100 Padova. Telex: 430639 Tel: (049) 84 11 11

Produces citric acid and sodium citrate.

Bichima Dr Binda

Via C Salutati 18, I-20144 Milano. Telex: 333089 bicma Tel: (02) 46 25 95

Supplies pharmaceutical specialities and clinical diagnostics. Agent for Rohm GmbH, Germany.

Bio-Rad Laboratories Srl

Aalytical Instruments Group

Via Morandi 66, I-20090 Segrate Milano.

Tel: 02 213 8751 Telex: 320410 biorad Fax: 02 213 9032

Via G Pallavicini 4, I-00144 Roma.

Tel: 06 598 5892

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Biochim Srl

Via Sarfatti 3, I-20136 Milano.

Tel: (02) 825108617

Produces plant pigments (chlorophylls, carotenes, xanthophylls etc) and sucrose monolaurate as food additives.

Biodata SpA

Via Tiburtina Valeria Km 19.600, I-00012 Guidonia Montecelio.

Supplies reagents and radioimmunoassay kits for hormone assays and other clinical diagnostics. Part of the Ares-Serono Group.

Biolab

Via Olgia 20, I-20090 Segrate Milano.

Tel: 02 21 33 278

Analytical, test and research laboratory offering services to industry in microbiology, physical chemistry and toxicology.

Bioprobes Unit Research Srl

Corse Sicilia 51, I-10133 Torino. Tel: 011 678 225 Telex: 671

Telex: 6712698

Developing ELISA kits based on monoclonal antibodies.

Biotech Italia

Via della Marcigliana 532, I-00139 Roma. Tel: 06 6120305 Telex: 626272 biot

Market an indirect immmunocytological test system for the detection of human antibody to AIDS virus; product of Cellular Products Inc, US.

Biotest Srl

Via Leonardo da Vinci 43, I-20090 Trezzano sul Naviglio Milano. Telex: 315453 Tel: (02) 445 68 51

Supplies blood-grouping and tissue-typing reagents, immunological reagents and bacterial growth media. Subsidiary of Biotest- Serum-Institut GmbH, Germany.

Boehringer Biochemica Robin SpA

Diagnostic Division

CP 3772, Via S Uguzzone 5, I-20126 Milano.

Tel: (02) 252 83 59 Telex: 321339

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Bracco Industria Chimica SpA

Via E Folli 50, I-20134 Milano.

Telex: 311185 Tel: (02) 217 71

Manufactures clinical diagnostics, pharmaceuticals and medical specialities as well as general chemicals, reagents and scientific apparatus.

Brocades SpA

Viale Spagna 45, I-20093 Cologno Monzese.

Telex: 332009 Tel: (02) 254 03 51

Supplies clinical diagnostic kits and reagents for autoanalyzers and immunoanalysis as well as a wide range of industrial enzymes and related products through DELVO, the Industrial Products Division at the same address. Subsidiary of Gist-brocades NV, Netherlands.

BYK Gulden Italia SpA

Via Giotto 1, PO Box 10370, I-20110 Cormano/ Milano.

Tel: 02 619 5131 Telex: 330539

Supplies immunological and biological reagents. Distributor for Milab, Sweden.

Part III **ITALY**

Carl Zeiss SpA

Instrument Division

Via Caldera 21/C3, I-20153 Milano. *Tel*: 02 452761

Supplies light microscopes and related optical equipment. Subsidiary of Carl Zeiss, Germany. Distributor for electronic balances of Sartorius GmbH, Germany.

Carlo Erba Strumentazione SpA

Strada Rivoltana, I-20090 Rodano Milan.

Tel: 02 950 591 Telex: 340449 cest Fax: 02 950 59 276

Manufacture gas chromatography equipment, flow analyzers, automatic amino acid analysis systems, autosamplers for carbon sulphur and nitrogen analysis etc. Subsidiary of the Montedison Group.

Castagnetti Technologie dell Acqua

Via Fabbrichetta 65, I-10095 Grugliasco Torino. Tel: (011) 959 11 91 Telex: 210547

Provides a wide range of equipment and services for treatment of surface water and municipal water supply including biological treatment of industrial effluents as well as filtration and reverse osmosis plant.

Ceccata & Co SpA

I-36041 Alte Ceccato Vicenza. Tel: (0444) 76 500 Telex: 48093

Manufactures air-cooled compressors suitable for use with biogas systems.

Centre of Molecular Pathology Foundation

Via Pace 15, I-20122 Milano

Carrying out studies on repeated nucleotide sequence of the genome in human leukaemic cells to establish correlations between anomalies of repeated sequences and chromosomal abnormalities.

Centro di Studio dei Microorganismi

Instituto di Microbiologia Agraria e Tecnica Universita degli Studi: Firenze

Pzale Cascine 27, I-50144 Firenze.

Hold culture collection of algae, bacteria, fungi and yeasts including special collections of phototrophic microorganisms and cyanobacteria for general, agricultural, industrial and forest microbiology research and teaching. Offer identification services.

Centro di Virologia

Circonvallazione Gianicolense 85, Roma.

Hold culture collection of tissue cultures for medical microbiology research.

Cereal Research Institute

Istituto Sperimentale Cerealicoltura

Via Stezzano 24, I-24100 Bergamo.

Tel: (035) 24 88 23

Investigating molecular structure of transposable elements in Zea mays (corn).

Cerestar

formerly Fabbriche Riunite Amido Glucosia Destrina SpA

Piazza Erculea 9, I-20122 Milano. Tel: (02) 856 81 Telex: 310699

Produces glucose, dextrins, amides, vegetable adhesives and related products. Associated with CPC International, US.

CFM Co Farmaceutica Milanese SpA

Via Gallarate 37, I-20151 Milano.

Telex: 331204 Tel: (02) 308 54 41 Fax: 02 3012028

Distributes chemical products for pharmaceutical use and vitamins (K3 and D3).

Chemetron

Via G Modena 24, I-20129 Milano.

Tel: (02) 7380728 Telex: 322233 chemtr

Supplies preformed diagnostic electrophoretic strips for clinical assay of proteins, lipoproteins, haemoglobins, isoenzymes etc, as well as for use in immunofixation, rocket and immunoelectrophoresis tests.

Chemi SpA

Via Gallarate 184, I-20151 Milano. Tel: (02) 30 57 61 Telex: 331151

Produces antibiotics and antibacterials as well as a range of other chemical pharmaceuticals.

Chimica Industriale Brescia SpA

SCIB-Soc

Via Chiappa 18, I-25080 S Eufemia Brescia.

Supplies reagent-grade laboratory chemicals, fine chemicals and enzymes. Agent for Rohm GmbH, Germany.

Chrompack Italia Srl

Viale Assunta 101, I-20063 Cernusco sul Naviglio Milano.

Tel: 02 9231926 Telex: 326112 chrom

Supplies columns and accessories for liquid, gas and high performance liquid chromatography; products of Chrompack International BV, Netherlands.

Ciba-Geigy SpA

Strada Statale 233, I-21040 Origgio. Tel: (02) 965 41 Telex: 332407

Supplies chemical products of Ciba-Geigy AG Switzerland.

CISE SpA

CP 12081, I-20134 Milan.

Telex: 311643 Tel: 02 21671

Market a laser particle sizer.

Claudio Savini & Figli Srl

Via Vincenzo Monti 44, I-20123 Milano. Tel: 02 4696441/2/3 Telex: 332194 clasa

Supplies alginate, chitosan and laminarin suitable for immobilization and encapsulation processes; products of Protan AS Norway.

Collezione Instituto di Microbiologia

Spedali Civili

P le Spedali Civili 1, I-25100 Brescia.

Hold culture collection of bacteria, animal viruses and tissue cultures including a special collection of Pseudomonas and Staphylococcus for general and medical microbiology research. Offers identification services.

Comitato Nazionale Energia Nucleare (CNEN)

CSN Casaccia

Via Anguillarese Km 1300, I-00060 Roma.

Tel: (06) 694 81 Telex: 613296

Investigating anaerobic digestion of both aquatic and land plants under mesophilic or thermophilic conditions in contact digesters. Investigating pretreatments of cellulose to improve hydrolysis by enzymes from Trichoderma and Aspergillus as well as continuous fermentation using immobilized yeast cells packed in a column reactor. Studying methods of immobilization in alginate gels in particular. Developing a continuous process for conversion of cellulose to ethanol.

Consiglio Nazionale delle Richerche

Centro di Studio dei Microorganisimi Autotrofi

Piazzale delle Cascine 27, I-50144 Firenze.

Tel: (055) 36 05 06

Studying culture of algae in open ponds of the raceway-type in seawater supplemented with fertilizer and carbon dioxide. Extensive experiments have been carried out with Tetraselmis and Aphanothece. Use of sludge from anaerobic digestion as a source of nutrients has been investigated. Use of the algae as raw material for the production of biogas (methane) is also being studied.

Contraves SpA

Via Giovanni Bovio 6, I-20159 Milano.

Tel: 02 6886231 Telex: 333259 cimil Fax: 02 6886945

Supplies a wide range of viscometers as well as computer controlled laboratory reactors; products of Contraves AG Switzerland.

Cosma SpA

Via Colleoni 15/17, I-24040 Ciserano (BG). Telex: 331204 cofami Fax: 02 301 2028

Manufacturers of bulk pharmaceuticals.

Costruzioni Industriali Frilli SpA

PO Box 290, 1-53036 Poggibonsi (Siena). Tel: 0577 950039 Telex: 572488

Specializes in the design and construction of industrial plant for the transformation and utilization of biomass.

Centro Studi Applicazioni Risorse Energetiche

Corse del Popolo 261, I-45100 Rovigo.

Carrying out studies on possibilities of harvesting macroalgae from Venice Lagoon waters, methods of harvesting such algae and anaerobic digestion using a one-stage mesophilic process. Also studying use of sludge as fertilizer and production of gaseous and liquid fuels by thermal catalytic methods.

Culligan Italiana SpA

Via Gandolfi 6, I-40057 Cadriano di Granarolo Emilia, Bologna. Tel: 051 76 66 14

Supplies reverse osmosis equipment; products of Culligan International

Cyanamid Italia SpA

Via XV Strada, Zona Industriale, I-95030 Catania. Tel: 095 598 111 Telex: 970058 cyct Fax: Fax: 095 598 254 Produce bulk pharmaceuticals.

Dasit SpA

Supply laboratory equipment and reagents for biotechnology and cell

De Martini SpA

Via Per Oropa 118, I-13051 Biella. Tel: 015 57 13 41/42 Telex: 211402 demar

Manufactures reverse osmosis systems.

Department of Plant Defence Culture Collection

Cattedra di Micologia

Ple M Kolbe 4, Udine.

Hold culture collection of bacteria for general microbiology research with particular reference to actinomycetes and related organisms. Offer identification services.

Derivati Biologici International Spa

Cassina de'Pecchi (MI), SSN 11 Padana Superiore Km 160, Milano. Tel: (02) 9519249 Telex: 330074

Supplies enzymes (including ribonuclease, lysozyme and dehydrogenase) and related biochemicals. Distributor for Biozyme Laboratories, UK.

Dionex Srl

Vicolo del Casale di S Nicola 2, I-00123 Roma. Fax: 06 379 2632 Tel: 06 379 2632/2984 Telex: 621521

Via Grigna 9, I-20155 Milano.

Tel: 02 392 891/633

Supplies analytical equipment, including amino acid analyzers, ion chromatographs and rapid kinetic systems.

Dow Corning SpA

CP 7113, Palazzo Canova Centro Direzionale, I-20090 Milano 2. Tel: 02 214 1041/2/3/4/5 Telex: 330279 dowsii

Manufacture chemicals including plastics for industrial, agricultural and domestic use. Developing industrial enzymes and related processes.

Dr Zambeletti SpA

Via Privata Zambeletti, I-20021 Barauzate Milano. Tel: (02) 350 05

Produces pharmaceuticals and cosmetics.

Du Pont de Nemours Italiana SpA

Via A Volta 16, I-20093 Cologne Monzese MI. Tel: (02) 253 01 Telex: 314671 Tel: (02) 253 01

Distributes instruments for thermal analysis and process applications, high performance liquid chromatographs etc, as well as centrifuges and microtomes. Subsidiary of E I Du Pont de Nemours & Co, US.

El-Car Paterson Candy Italiana Srl

Via G Di Vittorio 307/6, I-20099 Sesto S Giovanni, Milano. Tel: 2 242 4841 Telex: 326166

Supply water treatment plant and industrial membranes and equipment for reverse osmosis applications. Part of Paterson Candy International, UK.

Emme Medical Srl

Via Iacopo Nardi 30, I-50132 Firenze. Tel: 055 234 0517 Telex: 843573 Telex: 843573130

Supply immunological and biological reagents. Distributor for Promega,

Enichem SpA

Piazza Boldrini 1, I-20097 San Donato Milanese Tel: 02 5201 Telex: 310246 eni Fax: 02 520 23854 Manufacture pharmaceuticals, agrochemicals and fine chemicals.

Ente Nazionale Cellulose e Carte

Via Casalotti 300, Roma. Tel: (06) 696 02 41

Produces paper, pulp and related products.

Ente Nazionale Idrocarbutri

Tel: (06) 696 02 41

Holding company for state-owned manufacturing subsidiaries. The group's chemical interests are managed by ANIC SpA, Italy.

Esperis SpA

Via Binda 29, I-20143 Milano.

Tel: 02 479053/4/5 Telex: 310485 esperi

Manufacture essential oils and aromatic ingredients including plant extracts.

Eurogenetics Italia Srl

52 Corso Vittorio Emanuele II, I-10123 Torino. Tel: 011 561 20 60 Fax: 011 54 12 48

Develop and market diagnostic products and computer software packages. Products include microreaders and microtitre plates as well as programs for analysis of ELISA tests which may be networked through RS232C using IBM systems. Markets ELISA assays and microtitre strips for quantitative determination of CNV, TOXO, CRF, RF, ASLO, ferritin, IgE, LH, FSH, HCG, prolactin and TSH.

Eurotherm SpA

Via XXIV Maggio, I-22070 Guanzate (Como). Tel: 031 977 103 Telex: 380893 Fax: 3 031 977512

Supply a range of thermal detectors, recorders and controllers for industrial plant use; products of Eurotherm Regler GmbH, Germany.

Fabbrica Italiana Sintetici SpA

CP 762 Via Milano 26, Alte Montecchio Maggiore, I-36100 Vicenza. Tel: (0444) 79 83 00 Telex: 480307

Manufactures pharmaceutical chemicals.

Farmades SpA

Via Tor Cervara 282, I-00155 Roma. Tel: (06) 22 17 41 Telex: 611568

Manufactures and distributes pharmaceutical products of its principals Degussa AG, Germany and Schering AG, Germany.

Farmitalia Carlo Erba SpA

Chemical Research

Via Dei Gracchi 35, I-20146 Milano,

Undertaking research on peptide chemistry, antibiotics, biochemistry and drug metabolism.

Farmitalia Carlo Erba SpA

Industrial Division

Viale E Bezzi 24, I-20146 Milano. Telex: 310679 Tel: (02) 4 38 31

Analytical and Diagnostic Division:, Via Carlo Imbonati 24, I-20159 Milano.

Tel: 02 6995 Tx: 334288

Supplies pharmaceuticals and diagnostic reagents as well as raw materials for industrial pharmaceutical production.

Part III **ITALY**

Ferrara University

Department of Pharmaceutical Chemistry

Scandiana 21, I-44100 Ferrara.

Tel: 361 53

Investigating peptide and protein synthesis as well as protein chemistry.

Fiat Centro Richerche SpA

Corso Matteotti, I-10121 Torino.

Studying production of biogas (methane) by anaerobic digestion and use for generation of electricity using a Fiat Totem engine system.

Fiat Engineering SpA

Via Belfiore 23, I-10125 Torino. Telex: 221544 Tel: (011) 639 61

Offers consultancy and engineering services related to waste treatment and disposal, including treatment of industrial effluents and municipal sewage.

Florence University

Department of Molecular Pharmacology Viale G B Morgagni 65, I-50134 Firenze. *Tel*: (055) 41 11 33

Studying the isolation of enzymes.

Florence University

Institute of Microbiology

Piazzale delle Cascine 27, I-50144 Firenze.

Tel: (055) 36 05 06

Researching into microbial production of biomass using photosynthetic organisms, photosynthetic reactors with immobilized cells and the role of photosynthetic bacteria and algae in wastewater treatment.

Flow Laboratories Srl

Via A Murri 1, I-20019 Settimo Milano. Tel: (02) 3285 151 Telex: 320267

Supplies a wide range of chemicals, reagents and equipment for cell culture, research and clinical diagnostics etc as well as fibroblast interferon for research purposes (see Flow Laboratories Inc US).

Genoa University

Faculty of Engineering

Via Balbi 5, I-16126 Genova.

Studying production of fuel ethanol from agricultural crops, such as sugar beet, with economic and feasibility studies.

Glaxo Spa

Via Fleming 2, I-37100 Verona.

Telex: 400418 Tel: (045) 58 91 11

Manufactures pharmaceuticals and carries out related research. Subsidiary of Glaxo Group Ltd, UK.

Gruppo Ferruzzi

Via Massimo D'Azeglio 12, I-48100 Ravenna.

Tel: 0544 39998 Telex: 551372

Major international agricultural group with investment interests in areas of fermentation, sugar production, starch processing and chemical production through Montedison SpA, Italy; CPC Europe, Belgium; Beghin-Say,

Gruppo Flow SpA

Via Lambro 23/25, I-20090 Opera Milan. Tel: 02 5241041 Telex: 320267 flow

Supplies serum and antiserum reagents. Distributor for Cedarlane Laboratories Ltd, Canada, which in turn distributes products of Australian Monoclonal Development Pty Ltd, Australia, and Kirkgaard & Perry Laboratories, US.

Gruppo Lepetit Spa

Via Roberto Lepetit 8, I-20124 Milano. Tel: (02) 277 71 Telex: 311054

Supplies chemicals for pharmaceuticals, perfumery and cosmetics as well as for textile and leather industries; products of Dow Chemical Co, US.

Hanna Instruments

Via Risorgimento 18, I-35010 Limena (Padova). Tel: (049) 769111 Fax: 049 769515 Telex: 431615

Manufactures portable analytical instruments for determination of pH, dissolved oxygen, conductivity, temperature etc.

Henkel Chimica SnA

CP 1726, Via Giambologna 18, I-40138 Bologna. Tel: 051 53 40 95 Telex: 510402 henkbo Fax: 051 534510 Supplies bulk enzymes, detergents etc; products of Henkel KG, Germany.

Heraeus SpA

Via dei Chiosi 1/3, I-20040 Cavenago Brianza Milano. Fax: 02 950 199 67 Telex: 351061 herait Tel: 02 95 019 615 Supplies a range of laboratory equipment including incubators and ovens; products of W C Heraeus GmbH, Germany.

Hewlett Packard Italiana SpA

Via G di Vittorio 9, I-20063 Cernusco sul Naviglio, Milano. Tel: 02 92 369 364 Telex: 334632

Supplies analytical equipment for both industrial and laboratory use, including chromatographs, radioactivity detection and measurement, conductivity determination etc.

Histochem

Via degli Arcimboldi 2, I-20123 Milano. Tel: 02 8058823

Supply biological raw materials to cosmetic industry.

Hoechst Italia SpA

Marketing Division

Via M U Traiano 18, I-20149 Milano Telex: 320165/331181 Tel: (02) 310 71

Supplies chemicals, pharmaceutical enzymes and diagnostic products including enzyme-linked immunoabsorbent assay, immunodiffusion and radioimmunoassay kits (see Hoechst AG, Germany).

Hyperion SpA

Via Tasso 7, Milano.

Tel: (02) 498 20 20 Telex: 39434

Produces liquorice extract, glycyrrhetic acid and other pharmaceutical raw materials.

ICGEB Component

Research Area, Padricaino 99, I-34012 Trieste. Tel: 022 6382

Carrying out research in areas of plant, chemical and biomass biotechnology with applications in developing countries. Funded by UNIDO and governments of Italy and India.

ICI (Italia) SpA

Viale Isonzo 26, I-20135 Milano.

Tel: (02) 549 21

Manufactures and distributes medical specialities chemicals, pigments and other products of Imperial Chemical Industries plc, UK.

IL Gas Integrale SpA

Viale Monte Grappa 6, I-20124 Milano. Tel: (02) 666423 Telex: 33497

Contracting engineering company (see Woodhall-Duckham Ltd, UK).

Immuno SpA

CP 321, Via A Vespucci 119, I-56100 Pisa. Tel: (050) 50 20 01 Telex: 500258

Supplies blood products and diagnostic kits (see Immuno Ltd, UK). Also distributor for Nycomed AS Diagnostics, Norway.

Impianti Technologici Ercole Marelli SpA

Viale Lancetti 43, 1-20158 Milano. Tel: (02) 69 98 Telex: 330358

Provides full consultancy, design and engineering services (on a turnkey basis) for municipal and industrial sewage treatment and pollution control in respect of air, water, sewage and solid waste.

Inalco

Via Calabiana 18, I-20139 Milano.

Tel: 02 5693741 Telex: 324101 inal Fax: 02 569741

Supplies diagnostics and other reagents; products of Janssen Biochimica, Belgium.

Indena SpA

Via Ripamonti 99, I-20141 Milano. Tel: (02) 53 63 12 Telex: 312535

Produces vegetable-based raw materials for pharmaceutical, cosmetic and flavour industries

Industria Chimica Prodotti Francis SpA

Via Origgio 23, I-21042 Caronno Pertusella, Varese.

Tel: 02 965 0751/2/3 Telex: 320876 francs Fax: 02 965 7465

Manufacturers of bulk pharmaceuticals. Member of Sanofi Group.

Institute of Biological Chemistry

Istituto Chimica Biologica

Via Amendola 165A, I-70126 Bari.

Tel: (080) 33 99 07

Investigating cloning of mitochondrial genes from plants and animals in E coli

Institute of Biological Genetics

Istituto di Genetica Biochimica ed Evoluzionistica del CNR

Via S Epifanio 14, I-27100 Pavia.

Tel: (0382) 30 38 52

Undertaking studies on structure and function of plant and animal genes including development of cloning vectors using E coli and Bacillus subtilis, cloning of genes controlling spore germination, development of virus vectors, use of liposomes for gene transfer in plants, transfer of genes cloned in E coli to carrot cell cultures and cloning and expression of cDNAs from human thymus in RNAs.

Institute of Cellular Biology

Istituto di Biologia Cellulars

Via Romagnosi 18A, I-00196 Roma.

Tel: (06) 361 09 91

Undertaking studies of gene transfer from bacteria to oocytes of Xenopus, developing new eukaryotic vectors, investigating mechanisms in gene expression and inducting mutants by introduction of synthetic DNA sequences.

Institute of Health

Department of Chemistry

Viale Regina Elena 299, I-00161 Roma.

Tel: (06) 49 90

Working on separation and analysis of proteins and nucleic acids.

Institute of Health

Department of Physics

Viale Regina Elena 299, I-00161 Roma.

Tel: (06) 49 90

Studying nucleic acids of ribosomes, viruses and viral proteins, cell membranes and energetics.

Institute of Health

Department of Parasitology

Viale Regina Elena 299, I-00161 Roma.

Tel: (06) 49 90

Carrying out research on arthropod hormones and venoms.

Institute of Health

Department of Pathology

Viale Regina Elena 299, I-00161 Roma.

Tel: (06) 49 90

Researching into chemical and molecular pathology and haematology.

Institute of Mutagenesis

Istituto di Mutagensi e Differenzimento del CNR

Via Svezia 10, I-56100 Pisa.

Tel: (050) 57 41 61

Carrying out studies on somatic hybridization and chromosome uptake in plant species.

Institute of Plant Biochemistry

Istituto di Biosintesi Vegetale

Via Bassini 15, I-20100 Milano.

Tel: (02) 29 21 70

Studying regulatory genes of storage protein synthesis in Zea mays (corn).

Instrumentation Laboratory SpA

Via Socrate 41, I-20128 Milano.

Tel: (02) 252 21 Telex: 330112

Supplies process control instrumentation for redox, pH, conductivity, dissolved oxygen, dissolved carbon dioxide, temperature pressure etc.

International Institute of Genetics & Biophysics

Istituto Internazionale di Genetica e Biofisica

Via G Marconi 10, I-80125 Napoli.

Tel: (081) 61 51 22

Undertaking the following studies: immobilized thermophilic bacteria and their coenzyme-dependent enzymes; cloning of human genes for enzymes such as glucose-6-phosphate dehydrogenase and urokinase; regulating genes in Drosophila; development of new cloning systems and vectors; and genetic engineering of Rhizobium in relation to nitrogen fixation and symbiosis.

Ireos Srl

Corso Europa 183/1A, I-16131 Genova.

Tel: 010 36 07 75

Manufactures equipment for ultrafiltration.

Ismunit

Istituto Immunologico Italiano

Via Castagnetta, I-00040 Pomezzia, Roma.

Supplies immunological reagents and tests for diagnosis of viral infections. Distributor for Biosoft, France.

ISS Srl

via Lagoscura, I-19020 Ceparana, La Spezia.

Tel: 187 933 484 Fax: 187 934 469

Supply equipment for fluorometry.

Istituto Behring SpA

SS17 Km22, I-67019 Scoppito AQ.

Tel: 0862 71 70 21 Telex: 600065 albfa

Distributes laboratory reagents and materials for analysis and chromatography; products of Riedel-de Haen AG, Germany.

Istituto delle Vitamine SpA

Via G di Vittorio, I-20090 Segrate Milano.

Tel: (02) 21 64 Telex: 35399

Supplies pre-mixed animal feed supplements (vitamins antibiotics and minerals) as well as chemical products for pharmaceutical and veterinary use.

Istituto Farmacologico Serona SpA

Research Laboratories

Casilina 125, I-00176 Roma.

Tel: (06) 77 34 20 Telex: 61368

Undertaking research on development of radioimmunoassays, glycoprotein subunits and immmunological reactions and purification of hormone proteins. Also studying urokinase.

Istituto Farmacologico Serono SpA

Via Ludovisi 35, I-00187 Roma.

Tel: (06) 773 41 Telex: 61368

Produces diagnostics and other pharmaceutical and medical preparations. Part of the Ares-Serono Group.

Part III **ITALY**

Istituto Guido Donegani

Via G Fauser 4, I-28100 Novara.

Telex: 310679 Fax: 0321 447378 Tel: 0321 4471

Research company involved in research and development for the expanding interests of Montedison Group in biotechnology including: isolation and study of natural products active against agricultural parasites; genetic manipulation of microorganisms for biological control of cultures which interact with plant root systems; application of biocatalysis in the synthesis of speciality chemicals particularly drugs and crop protection agents. Part of Montedison SpA.

Istituto Ricerche Applicate

Via Del Ronco 17, I-20043 Arcore Milano. Tel: 039 613083

Research laboratory offering services in analysis and microbiology to the cosmetic, pharmaceutical and food industries and corrosion and toxicology investigations.

ISVT Sclavo

Research Centre

Via Fiorentina 1, I-53100 Siena. Telex: 58329

Produces proteins and hormones. Studying bacterial antigens and immunochemistry, production of enzymes and growth of viruses.

Italenergie SpA

Viale Republica 39, I-67039 Sulmona.

Tel: 0864 32941/2/3

Manufacture sludge recovery processes for use in waste treatment plant based on a fluidized bed combustion system.

Italfarmaco SpA

Viale Fulvio Testi 330, I-20126 Milano. Tel: 02 64431 Telex: 334480

Supplies monoclonal and polyclonal antibodies, serums, antiserums and animal tissue; products of Serotec Ltd, UK.

Italo Britannica L Manetti H Roberts & Co SpA

Via A da Noli 4, Firenze.

Tel: (055) 47 97 Telex: 570684

Manfactures chemicals for pharmaceutical industry and perfumery products.

Itraco Srl

Via Plinio N 16, I-20129 Milano.

Tel: (02) 20 68 61

Produces hormones as well as antibodies for use in fluorescence and radioimmunochemistry.

Kartell SpA

PO Box 18, Via delle Industrie, I-20082 Binasco, Milano. Tel: 02 900 121

Telex: 311015 kartel

Manufacture portable digital colorimeters and plastic laboratory equipment.

Kontron Instruments SpA

Via G Fantoli 16/15, I-20138 Milano. Tel: 02 50721 Telex: 312288/330466 Fax: 02 506 0918

Supplies spectrofluorometers and spectrophotometers, centrifuges, HPLC systems, preparative ultracentrifuges, gamma and beta counters and integrator datasystems.

Kontron SpA

Analytical Division

Via Medici del Vascello 26, I-20138 Milano.

Tel: (02) 507 210 Telex: 315438

Supplies immunoassay test kits for clinical and research use for diagnosis of tumours, thyroid disease, heart attacks etc. Agent for Nuclear Medical Systems Corp Inc, US.

La Gitre Srl

Via Luciano 18, I-20156 Milano. Tel: 02 3011286 Telex: 351114

Supplies immunodiagnostic reagents (see One Lambda Inc, US).

Labometrics Srl

Via Varanni 8, I-20127 Milano. Telex: 322233. Tel: 02 284 0956

Supplies immunodiagnostics and related products; distributor for Dakopatts, Denmark

Laboratori Vevy SpA

Via P Semeria 18, I-16131 Genova Tel: 010 314193 Telex: 571257 vevy

Supplies biological products to the cosmetic industry including emulsifiers, colourants, antimicrobials and fragrances.

Laboratorio Farmaceutico Lofarma

Via Cassala 40, I-20143 Milano.

Tel: 02 8377551

Supply diagnostic in vivo tests for allergy.

LabService Srl

Via Jacopo di Paolo 44, I-40128 Bologna.

Tel: 051 358107

Supplies high performance liquid chromatography columns.

Labtek Srl

Viale Italia 12, I-20094 Corsico Milano.

Telex: 333465/316633 traduci Tel: (02) 440 46 25

Supplies immunological research reagents and diagnostic test kits. Agents for Litton Bionetics, Vector Laboratories and Collaborative Research, US.

Leitz Italiana Srl

Via Bronzino 8, I-20133 Milano.

Tel: (027) 155 46 Telex: 320371

Supplies microscopes, fibre optics, illuminators and other optical devices.

Liquichimica Biosintesi SpA

Saline di Montebello Reggio Calabria Via Nazionale, I-89060 Saline

Ioniche. Telex: 890028

Manufactures amino acids, fatty acids, citric acid an synthetic proteins.

Logos SpA

Via Mestre 19 D, I-20132 Milano.

Tel: (02) 214 13 21 Telex: 341906

Manufactures industrial and biomedical analytical equipment, including gas chromatographs, fluorimeters, spectrophotometers and electrophoresis and clinical control apparatus.

LP SpA

Via Carlo Reale 15/4, I-20157 Milano.

Telex: 330896 lp Tel: (02) 376 4646

Manufactures pipettes, test tube containers etc as well as a wide range of disposables including erythrocyte sedimentation rate determination sets.

Lurgi Italiana SpA

Via de Amicis 49, I-20213 Milano.

Tel: (02) 837 70 51 Telex: 311701

Constructs plant for wastewater and industrial effluent treatment.

Mascia Brunelli SpA

Viale Monza 272, I-20218 Milano.

Tel: (02) 255 16 41 Telex: 330838

Supplies laboratory instruments and reagents. Agents for Gibco Laboratories Life Technologies Inc, US cell culture reagents.

Mascia Brunelli SpA

Viale Monza 272, I-20128 Milano.

Telex: 330838 mabios Tel: 02 2551641

Supplies a wide range of laboratory equipment and materials for immunology and distributes products of: Gibco Europe Ltd, UK; Nunc AS, Denmark; Northumbria Biologicals Ltd, UK etc.

Medical Systems Srl

Via Rio Torbido, I-16165 Genoa.

Tel: 010 808051 Telex: 213832

Supplies antiserums, histochemical antibodies, radioimmunoassay kits and other reagents and diagnostics for endocrinology and neurobiology. Agent for Immuno Nuclear Corp, Hemagen Diagnostics, Centocor, Advanced Magnetics and Wien Laboratories, US.

Menarini

Chemical and Pharmaceutical Laboratories

Via Sette Santi 3, I-50131 Firenze. Telex: 572404 Tel: (055) 5 39 49

Manufactures pharmaceuticals. Has initiated an advanced research programme in cell culture and genetic engineering.

Microcolumn Srl

Piazzale Istria 1, I-20159 Milano.

Tel: 02 6072768

Supplies microsyringes and vials for gas chromatography and HPLC.

Milan University

Institute of Organic Chemistry

Via Celoria 2, I-20133 Milano.

Tel: (02) 29 21 73

Carrying out research on enzymology and chemistry of proteins and peptides.

Milan University

Department of Biochemistry

Via Celoria 2, I-20133 Milano.

Tel: (02) 29 36 62

Interests include isolation, purification and chemistry of enzymes.

Milan University

Institute of Agricultural Engineering

Via G Celoria 2, I-20133 Milano.

Telex: 320484 Tel: (02) 29 21 81

Developing a stirred contact anaerobic digester with sedimentation and recycling of sludge treatment effluent from pig fattening. Also carrying out studies on economics and energy balance of gas production.

Milan University

Department of Vegetable Pathology

Via Celoria 2, I-20133 Milano.

Tel: (02) 29 60 81

Studying mycology and plant virology, physiology and pathology.

Milan University

Department of Pathology

Via Pace 15, I-20122 Milano.

Studying cellular and lipid immunology.

Miles Italiana SpA

Supplies a wide range of biochemicals and enzymes for research, clinical and industrial use (see Miles Laboratories Inc, US). Also distributor for FMC Corp Bioproducts, US.

Millipore SpA

Via Cassanese 218/220, I-20090 Segrate Milano.

Tel: (02) 213 08 41 Telex: 312284

Supplies membranes and filters, water treatment and chromatographic apparatus, enzymes and diagnostic kits (see Millipore UK Ltd, UK). Subsidiary of Millipore Corp, US.

Monsanto Italiana SpA

Via Melchiore Gioia 8, I-20124 Milano.

Tel: (02) 62 73 Telex: 320659

Supplies products of Monsanto Chemical Co, US.

Montedison SpA

CP 3777, Foro Buonaparte 31, I-20124 Milano.

Tel: (02) 63 33 Telex: 31679

Manufactures a wide range of chemical products including pharmaceuticals, fertilizers, plastics, dyes, man-made fibres and paints. Developing interests in use of agricultural raw materials for production of chemicals and fuels.

Naples University

Institute of Molecular Biology

Via Torano, I-80100 Napoli.

Investigating the use of biocatalysts in industrial processes and immobilisation of cells of thermophilic bacteria. Also studying enzyme extraction, purification, characterization and immobilization.

Naples University

Institute of Chemical Engineering

Piazzale Tecchio, I-80125 Napoli.

Tel: (081) 61 09 66/61 18 00

Investigating mechanism of hydrolysis of cellulose by enzymes from Trichoderma and by beta-glucosidase, using a two-stage ultrafiltration membrane reactor to reduce inhibitory effects of cellobiose on cellulose hydrolysis by cellulase.

NEN Ufficio Italiano

Via G B Nicollini 3/E, I-50121 Firenze.

Tel: (055) 247 80 44

Distributes radiochemicals, enzymes and other products for molecular biology (see Du Pont-NEN Research Products, US).

New Scientific Co SpA

Via Bezzecca 5, I-20135 Milano. Tel: 039 259 3550 Telex: 843325614

Supplies immunological and biological reagents. Distributor for Atlantic Antibodies, US.

Niro Atomizer Italia SpA

164 Via Giacomo Matteotti, I-20041 Agrate Brianza Milano.

Tel: (039) 65 26 01 Telex: 334832

Studiceram SpA, 164 Via Giacomo Matteotti, I-20041 Agrate Brianza

Tel: 039 651475 Tlx: 332442

Supplies equipment for dewatering and separation. Subsidiary of Niro Atomizer, Denmark.

Novo Enzimi Italia Srl

Via Francesco Ferruccio 2, I-20145 Milano.

Tel: (02) 3495 100 Telex: 315360

Supplies industrial enzymes etc; products of Novo Industri AS, Denmark.

Nuclepore Italia Srl

Supplies membranes and apparatus for filtration, ultrafiltration and microfiltration.

OFI Officina Farmaceutica Italiana Srl

Via Galimberti 1, I-24100 Bergamo.

Fax: 035 350 243 Tel: 035 247 279 Telex: 300353

Supply sterile materials for use in the food, pharmaceutical, diagnostics and cosmetic industries.

Omnia Research Srl

Via A Martini 17, I-20092 Cinisello Balsamo, Milano.

Tel: 02 612 7621 Telex: 313686 omres

Supply reagents for HPLC, fine chemicals, biochemicals and biotechnological reagents and solvents for histology and scintillation counting. Distributor for Genzyme, US.

Organon Teknika

Via Ostillia 15, I-00184 Roma. Tel: 06-733813/734 384

Telex: 626013

Supply microbial enzymes. Member of Organon-Teknika Group.

Ortho Diagnostic Systems SpA

Via Palmanova 67, I-20123 Milano.

Tel: 02 2828141 Telex: 320150

Supplies immunological and biological reagents. Distributor for Janssen Life Science Products, Belgium.

Part III ITALY

Oxoid Italiana SpA

Via Montenero 180, I-20024 Garbagnate Milanese Milano. Tel: (02) 995 82 69 Telex: 331069

Supplies microbiological growth media and antibiotic susceptability test discs (see Oxoid Ltd, UK).

Oxytek SAS

Via Telesio 2, I-30145 Milano.

Tel: 02 46 96 879 Telex: 332089 oxytek Fax: 02 48 19 018

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

Padua University

Institute for Organic Chemistry

Via Marzola, I-35100 Padova

Studying isolation and characterization of enzymes of thermophilic microorganisms, with immobilization of enzymes in hollow fibre tubes.

Pall Italia Srl

Via G Bruzzesi 38/40, I-20146 Milano.

Tel: 02 4296 1 Telex: 333075 Fax: 02 4122985

Supplies a wide range of laboratory and industrial filtration equipment (see Pall Process Filtration, UK and US).

Parke Davis SpA

Via C Columbo 1, I-20020 Lainate Milano. Tel: (02) 937 03 31 Telex: 332534

Manufactures pharmaceutical products of Warner Lambert Co, US.

Pavia University

Department of Clinical Analysis

Piazzale Galgi 1, I-27100 Pavia.

Tel: 25621

Studying clinical chemistry and development of analytical techniques.

Pavia University

Department of Anatomy

Forlanin 16, I-27100 Pavia.

Tel: 24768

Carrying out histochemical studies of endocrine glands and related metabolic diseases.

PBI International

Via Novara 89, I-20153 Milano.

Manufactures scientific and laboratory apparatus including systems for agar media preparation and sterilization.

Perkin-Elmer Italiana SpA

Via Tiepolo 24, I-20052 Monza Milano.

Tel: 039 839211

Supplies laboratory instruments for chromatography and spectroscopy (see Perkin Elmer Corp, US).

Pharmacia LKB SpA

Biotechnology Division

Via A Volta 16, I-20093 Cologno Monzese, Milano. Tel: 02 253 2844

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectric focusing, amino acid analysis, DNA and peptide synthesis and cell studies as well as restriction enzymes and cloning vectors (see Pharmacia LKB, Sweden).

Pharmacia LKB Strumenti SpA

Via della Farnesina 21, I-00194 Rome.

Supply instruments and reagents for liquid chromatography, electrophoresis, electrofocusing, isotachophoresis fermentation, microtomy and calorimetry etc (see Pharmacia LKB-Produkter AB, Sweden).

Philips SpA

Medical and Analytical Systems Division

Via Chiese 74, I-20126 Milano.

Telex: 330262 Tel: (02) 644912

Via Emilia 292 I-40068 S Lazzaro di Savena Bologna. Tel: 051 457575 Tx: 510555, Via Flaminia Nuova Km 8 I-00191 Roma.

Tel: 06 365921 Tx: 610042

Supplies analytical instruments including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK). Subsidiary of Philips Nederland NV, Netherlands.

Pierrel SpA

Via Comelico 39-41, I-20135 Milano.

Tel: (02) 57 90 Telex: 310015

Manufactures antibiotics and steroids as well as other chemicals for pharmaceutical and veterinary applications.

Poli Industria Chimica SpA

Diagnostics Division

Piazza Agrippa 1, I-20141 Milano.

Tel: (02) 84 48

Supplies clinical diagnostic products including bacterial identification and immunochemical and sensitivity testing reagents. Agent for Rosco AS, Denmark.

Pool Bioanalysis Italiana Srl

Via Novara 89, I-20153 Milano.

Telex: 84333 4883 Tel: (02) 404 79 41

Supplies clinical diagnostic test kits and viral diagnostic reagents as well as nutrient media and serums for cell and tissue culture.

Prodotti Gianni Srl

Via Mecenate 38/14, I-20138 Milano.

Tel: (02) 50 97 Telex: 311130

Supplies fine biochemicals for industrial and laboratory use and products for chromatography, electrophoresis and dialysis. Agent for Serva Feinbiochemica GmbH, Germany.

Prodotti Roche SpA

Piazza Durante 11, I-20131 Milano.

Tel: 02 2884

Supplies diagnostics, pharmaceuticals and fine chemicals (see Hoffmann-La Roche & Co AG, Switzerland).

RBM SnA

PO Box 226, I-10015 Ivrea, Torino

Tel: 0125 53746 Telex: 215430 rbm

Fax: 0125 53585 Via Vittore Carpaccio 8, I-20133 Milano.

Contract laboratory offering R&D services to pharmaceutical and chemical companies including: general toxicology; reproductive toxicology; genetic toxicology; carcinogenesis; histopathology; immunotoxicology; pharmacokinetics and metabolism; receptor pharmacology; biochemistry; microbiology.

RES Pharma Srl

Strada Padana Superiore 317, I-20090 Vimodrone.

Tel: 02 2504031 Telex: 315362 respha Fax: 02 200174

Supplies raw materials, plant extracts and vitamins for the pharmaceutical industry.

Rhone Poulenc SpA

Via G G Winckelmann 2, I-20146 Milano.

Tel: 02 42461 Telex: 332330

Supply raw materials and intermediates for synthetic processes.

Risorse srl

via Roma 163, I-33048 San Giovanni Nat, Udine.

Tel: 0432 757012 Telex: 450233 ris ts

Engineering consultants offering comprehensive services in the design, construction, start up and project management of the technical and economical aspects of plant operation in areas of waste treatment, composting, combustion, energy conservation and recovery.

Rohm and Haas Italia SpA

Via Vittor Pisani 26, 1-20124 Milano. Tel: 02 62561 Telex: 310510

Manufactures plant protection chemicals as well as industrial chemicals for leather, textile, paper, paints, plastics and other industries including bulk enzymes and reagents; products of Rohm & Haas Co, US.

ROL

Via de Notaris 50, 1-20128 Milano. Tel: 02 25 851 Telex: 312093 rolmil

Manufacture detergents derived from natural products. Part of Gruppo Montedison, Italy.

Rol Raffineria Olii Lubrificanti SpA

Via De Notaris 50, Milano.

Tel: (02) 258 51 Telex: 312093

Produces emulsifiers, surfactants and dispersing agents for food and industrial applications.

Roma Toxicology Centre SpA

Via Tito Speri 14, I-00040 Pomezia, Roma.

Specializes in safety assessment of drugs and chemicals.

Rome University

Faculty of Medicine

Piazzale delle Scienze 5, I-00100 Roma.

Studying respiratory proteins and electron carriers immobilized on solid matrices. Also studying immobilized proteases and enzyme activities in two phase systems.

Rome University

Institute of Microbiology

Piazzale delle Scienze 5, I-00100 Roma.

Studying hydrolysis of cellulose from municipal solid wastes, using cellulases, and production of ethanol by yeast cells immobilized in alginate gels.

Rome University

Institute of Biological Chemistry

I-00185 Roma.

Investigating the structure and function of proteins.

Rudipont Idustria Chimica SpA

Via Borromei 5, I-20213 Milano.

Tel: (02) 988 03 95 Telex: 312888

Produces laboratory, pharmaceutical and industrial chemicals.

Safe Srl

Via Crevalcore 5, I-40017 San Giovanni in Persiceto Bologna.

Manufactures water-cooled compressors suitable for use with biogas systems.

Saitron SpA

39 Via del Crocifisso, Ponte a Ema, I-50126 Firenze.

Supply biochemical/biomedical equipment including spectrophotometers.

Sandoz SpA

Via Carconate 1, 1-20135 Milano. Tel: (02) 57 95 Telex: 32156

Produces pharmaceuticals, dyes and agricultural chemicals (see Sandoz AG, Switzerland).

Sartorius Italia Srl

Via Masaccio 203A, 1-50132 Firenze. Tel: (055) 57 75 41 Telex: 572431

Supplies a wide range of membranes for microfiltration as well as electronic balances; products of Sartorius GmbH, Germany.

SAZ Pontesuero SAS

Valleversa 99/100, I-14100 Asti. Tel: 141 271 712 Telex: 226654

Engineering company offering industrial sludge treatment and recovery plants based on a new acration system.

Schering SpA

Via Mancinelli 7-11, 1-20121 Milano. Tel: (02) 282 86 89 Telex: 33295

Produces pharmaceuticals. Subsidiary of Schering AG Germany.

Schrepfer SpA

Via Arimondi 1, I-20155 Milano. Tel: (02) 32 23 69 Telex: 313346

Supplies fine chemicals and reagents for laboratory and diagnostic use.

Schulke & Mayr Italia

Via G Colombo 40, I-20133 Milano. Tel: 02 74831 Telex: 314542 farmag

Supply antifoams, disinfectants, antibacterials and microbiological identification systems.

Sclavo SpA

Via Fiorentina 1, I-53100 Siena.

Manufactures vaccines, immune serums, diagnostic reagents and blood derivatives. Developing monoclonal antibodies and human interferon from fibroblasts grown on microcarriers.

Semenitala SpA

Via Grimaldi 8, I-40122 Bologne.

Tel: 051 52 27 88 Telex: 531134 smi

Produce and market seed of new varieties of sugar beet and maize.

Seronia Symposia

Via Ravenna 8, I-00161 Roma.

Independent foundation. Promotes scientific research in all disciplines that contribute towards improving human health. Aims are pursued by means of congresses, courses, seminars and special studies.

Sipcam SpA

Viale Gian Galeazzo 3, I-20136 Milano. Tel: (02) 837 48 41 Telex: 312323

Produces agrochemicals, herbicides, fungicides and growth regulators.

SmithKline French SpA

Viale Ortles 12, I-20139 Milano. Tel: (02) 52 57 21 Telex: 25622

Produces clinical diagnostics, vaccines, drugs and other medical products (see SmithKline Beckman, US).

Societa Applicazioni Elettroniche Srl

Via Lario 16, I-20159 Milano.

Supplies a wide range of industrial monitoring equipment for pH, conductivity, redox, dissolved oxygen etc, as well as instrumentation and accessories for measurement and control of temperature flow, pressure, level etc.

Societa Italiana Chimici

Via Luigi Pulci 25-27, I-00162 Roma. Tel: 06 425078/428527 Telex: 612142

Supplies biochemicals for microbiology, enzymology and molecular biology. Agent for United States Biochemical Corp, US and Sanbio, Netherlands.

Societa Italiana di Microfiltrazione Srl

Via Chioda 90, I-37136 Verona.

Tel: 045 8620011 Telex: 223613 simvr Fax: 045 955352

Manufacture microfiltration membrane systems.

Sorin Biomedica SpA

Strada per Crescentino, I-13040 Saluggia VC. *Tel:* (0161) 481 55 *Telex:* 200064

Manufactures a wide range of radio and enzyme immunoassay reagents. Developing monoclonal antibodies for diagnostic use. Has licence cooperation with Centocor Inc, US for two monoclonal antibody-based cancer tests. Also distributor for Immunotech, US.

Part III **ITALY**

Spectra-Physics Srl

Via Derna 1, 1-20139 Milano.

Tel: 02 2841568

Supplies a range of equipment and accessories for gas and liquid chromatography, detection and data processing; products of Spectra

Stauffer Chemical Italia Spa

Strada Comunale per Campagna, I-20078 San Colombane al Lambro Milano

Tel: (0371) 894 18 Telex: 320608

Produces agrochemicals.

Studio Emmepi Srl

Arbizzano di Valpolicella, Verona.

Manufactures and distributes standardized commercial biogas systems based on continually fed, fully stirred contact digesters.

Sudeca SpA

Via Gramsci 48, I-00197 Roma.

Tel: (06) 316 1513 Telex: 616379

Supply kits and components for radioimmunoassays and reagents for enzyme, biochemical and histochemical research; products of Cambridge Medical Diagnostics Inc, US.

SVPT Srl

Uffici Largo Bacone 16/D, I-00137 Roma.

Tel: o6 827 8951 Telex: 622147 svpt Fax: 06 889 4508

Supply laboratory concentration and evaporation systems; products of Savant, US.

Sybron Corp

Via Santa Valeria 3, I-20123 Milano.

Supplies a wide range of laboratory products (see Sybron Corp, US).

Technogenetics SpA

Corso Lombardia 16, I-10099 San Mauro Torinese, Torino.

Tel: 011 2734244 Telex: 213277 Via Lamarmora 3, I-20122 Milano.

Tel: 02 588504 Fax: 02 5466615

Major producer of monoclonal antibodies. Also distributor for Biomakor, Israel and Jackson Immunoresearch Laboratories, US.

Torchiani R Srl

Via Milano 87, I-25126 Brescia.

Telex: 305321 torkim Tel: 030 320381

Produce industrial chemicals and enzymes.

Trimetal SpA

Via Rutila 23, I-20141 Milano.

Tel: (02) 569 62 46 Telex: 321559

Supplies fine and laboratory chemicals as well as raw materials and intermediates for industrial use.

Turin Polytechnic

Corsa Duca degli Abruzzi 24, I-10124 Torino.

Tel: (011) 55 36 36 Telex: 220646

Has compiled and analyzed data on biomass resources in relation to rural energy potential and developed an analytical model for biogas digesters.

Turin University

Department of Anatomy

Cso Massimo d'Azeglio 52, I-10126 Torino.

Tel: (011) 65 71 15

Studying biochemistry and properties of plasma membranes.

Unilio SpA

Via Durini 28, I-20122 Milano.

Tel: (02) 77 57 Telex: 311068

Produces molecular sieves.

Upjohn SpA

CP N4, Via G E Upjohn 2, I-20040 Caponago Milano.

Tel: (02) 950 42 91 Telex: 34341

Supplies pharmaceutical products of Upjohn Co, US.

Venice University

Department of Environmental Science

Calle Larga S Marta 2137, I-30123 Venezia.

Tel: 041 5226026

Carrying out research on anaerobic digestion of agricultural and municipal

VG Instruments Group Ltd

Viale Dell'Assunta 101, I-20063 Cernusco Sul Naviglio, Milano.

Tel: 02 924 8808 Telex: 340647 Fax: 2 923 1870

Supplies analytical instruments including combined gas chromatography/mass spectrometry systems for process monitoring; products of VG Instruments Inc, US.

Vinal

Via Milano 42, I-27045 Casteggio Pavia.

Tel: (0383) 831 44 Telex: 321116

Produces potable distilled spirits, bakers' yeast, tartaric acid and carbon dioxide.

VIOS Instruments Srl

Via A Panizzi 10, I-20146 Milano.

Telex: 351417 elchi

Distributor for a wide range of equipment and accessories for electrophoresis, immunodiffusion, electro-transfection of cells, gel electrophoresis, electroblotting, affinity chromatography, gas chromatography and HPLC; products of Broadley James Corp, US, Phase Separations Ltd, UK and Kem En Tec, Denmark etc.

Vismara Associates SpA

Via Boccaccio 27, I-20090 Trezzano sul Naviglio Milano.

Tel: (02) 445 46 41 Telex: 320544

Supplies fermentation equipment (see LH Fermentation UK).

Vittadini Sas

Via Cesare Balbo 6, I-20136 Milano.

Tel: (02) 546 46 41 Telex: 314164

Produces scientific instruments for laboratory research as well as industrial applications. Products include specific ion electrodes, chemical and biological oxygen demand analysis equipment, controlled temperature baths and thermostats, peristaltic and centrifugal pumps, ovens and furnaces.

W Parbisch SpA

Via Fratelli Bandiera 13, I-20016 Pero Milano.

Tel: (02) 54 911 Telex: 321219

Supplies speciality products, including nitrocellulose, DEAE and diazotized media for separation or transfer of nucleic acids and proteins as well as glass fibre filters, ultra- and microfiltration apparatus and membranes, products for chromatography, etc. Distributor for Schleicher & Schuell GmbH, Germany and Damon/IEC, US.

Waters

Division of Millipore

Via Cassanese 218/220, I-20090 Segrate Milano.

Tel: 02 2130841 Telex: 312284 milspa

Viale del Caravaggio 107, I-00147 Roma.

Tel: 06 5132452

Supplies modular instruments for chromatography; products of Waters Division of Millipore Corp, US.

Wellcome Italia SpA, Diagnostic Division

I-00100 Roma. Cables: 611009 wellc

Supplies laboratory and medical diagnostis reagents (see Wellcome Diagnostics, UK).

Wine Yeast Collection

Dipartimento di Biologia Vegetale University of Perugia

Via 20 Giugno 74, Perugia.

Hold culture collection of bacteria, fungi and yeasts for industrial microbiology research and teaching. Offer identification services.

JAPAN

A & D Company Ltd

Shintaiso Building 5-1052, 10-7 Dogenzaka 2-Chome, Shibuya-ku, Tokyo 150.

Tel: 03 476 4741 Telex: 02422816

Manufacture a wide range of laboratory balances including analytical and semi-micro balances.

ABE Trading Co Ltd

PO Box 262, Central Osaka, Osaka. *Tel:* (443) 8801-8 *Telex:* 2222195

Tokyo Sales Office: Tel: (502) 4101-6.

Supply apparatus and reagents for the synthesis of oligonucleotides (see Systec Inc, US). Also supply reagents of ABN, US, oxygen and carbon dioxide analyzers of Ametek Inc, US, cell fusion equipment of DEP Systems Inc, US and electrophoresis and photo equipment of Fotodyne Inc, US. In addition the engineeering group offers consultancy in instrument use as well as the supply of custom-synthesis and sequencing for DNA and peptide.

AHS Japan Corporation

9-1-3 Akasaka-chome, Minato-ku, Tokyo 107. *Tel*: (03) 585 3537 *Telex*: 26564

Supplies clinical diagnostic instruments, including aggregometers for study of blood platelet function.

Ajinomoto Co Ltd

5-8 Kyobashi 1-chome, Chuo-ku, Tokyo 104.

Tel: 03 272 1111 Telex: 22690/24711/24808 Fax: 03 271 4185

Research Laboratories, 1-1 Suzuki-cho, Kawasaki-ku Kawasaki 210. Tel: 044 244 7131

Manufactures pharmaceuticals, fine chemicals and bulk industrial chemicals, including amino acids (glutamate and aspartate). R & D activities include use of recombinant DNA technology in improving fermentation processes for synthesis of antibiotics, amino acids, anticancer drugs, etc including interferon and interleukin-2. Also involved in cosmetics, surfactants, plastic additives, cooking oils, soy-protein and alcohols as well as the development of new bioreactors and biosensors based on immobilized organisms. Developing an immuno-therapeutic agent which enhances the activation of lymphokine activator killer cells in combination with interleukin-11. Have isolated and cloned two tuberculosis protein genes to be used to develop an improved BCG vaccine and diagnostic test.

Akita Prefectural College of Agriculture

Biotechnology Institute Akita 010-04. Tel: 0185 45 2026

Carrying out research in plant molecular and cellular biology for the improvement of crop plants by genetic engineering and hybridization, including stress resistance and increased quality and productivity.

Aldrich Japan

c/o Kyodo Building Shinkanda, 10 Kanda-Mikuracho, Chiyoda-ku Tokyo. Tel: (03) 258 0155 Telex: 2222518

Supplies fine chemicals for industry and research (see Aldrich Chemical Co, US).

Amano Pharmaceutical Co

Zaiso Building, 1-1-2 Nishiki Naka-ku, Nagoya. Tel: (052) 211 3031 Telex: 59805

Manufactures bulk industrial enzymes, including amylases, amyloglucosidases, cellulases, lipases, esterases and proteases.

AMCO Inc

Supplies fine research chemicals, including calibration standards and custom synthesis.

Amersham Japan Ltd

Tokyo Toyama Kaikan, 1-3 Hakusan 5-chome, Bunkyo-Ku, Tokyo 112 Tel: 03 816 6161 Telex: 32507 Amsham J Fax: 03 816 6034 Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Amicon KK

Haratetsu Building 7th Floor, 4-1-11 Kudan-Kita, Chiyoda-ku Tokyo 102. Tel: (03) 264 2491 Telex: 232 4381

Supplies ultrafiltration, microfiltration and membrane separation equipment, chromatography columns and media for affinity chromatography (see Amicon Corp, US).

Analytica Corporation

3rd Matsuda Building, 2-2-6 Ohkuba, Shinjuku-ku Tokyo 160. Tel: (03) 204 1211 Telex: 26471

Supplies laboratory instruments, accessories and operating media, reagents, etc. Agents for Varian Associates Inc, US.

Applied Biosystems

5-13-9 Nakakasai, Edowaga-ku, Tokyo 134. *Tel*: 03 877 0071

Distributor for Applied Biosystems, US.

Asahi Breweries Ltd

7-1 Kyobashi 3-chome, Chuo-ku, Tokyo 104. *Tel:* 03 567 5111 *Telex:* 2523591

Central Research Laboratories, 13-1 Omori-Kita 2-chome, Ota-ku Tokyo 143.

Tel: 03 763 6393

Manufacture beer, beverages, food products and pharmaceuticals. Developing biosensors as well as using recombinant DNA technology for development of industrial microorganisms and cell fusion for hybridoma production with an emphasis on the genetic engineering of yeasts and bacillus. Interested in licensing and research cooperation. Have joint venture with Merck & Co, US.

Asahi Chemical Industry Co

Shin Osaka Building, 1-25- Dojima-Hamodori, Kita-ku Osaka

Manufactures pharmaceuticals, fermentation-derived amino acids and nucleosides as well as synthetic fibres, plastics and bulk chemicals. Research work includes cell culture, genetic engineering of interferon and development of monoclonal antibodies. In joint venture with Kowa & Co have reached phase III in development of their tissue plasminogen activator.

Part III **JAPAN**

Asahi Glass Co Ltd

1-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100. Tel: 03 218 5555 Telex: 24616

Research and Development Division, 1150 Matsubara Hazawa-cho, Kanagawa-ku Yokohama 221.

Manufacture glass, ceramics and electronics as well as speciality products including opthalmic and healthcare equipment. Developing fluorine containing bioreactive compounds as well as various enzymes and monoclonal antibodies. Interested in international joint ventures.

Asahi Medical Co Ltd

Hibiya Mitsui Building, 1-2 Yuraka-cho-1-chome, Chiyoda-ku Tokyo 100. Tel: (03) 507 2592 Telex: 222 3518

Supplies clinical diagnostics and other medical products. Subsidiary of Asahi Chemical Industry, Japan.

Asano Chemicals Co Ltd

Sumitomo Tsukiji Building 4-14, 5-chome Tsukiji, Chuo-ku Tokyo. Tel: (03) 541 4171 Telex: 23643

Manufactures chemicals, including intermediates for pharmaceutical and agricultural products, as well as antioxidants, alcohols and petrochemicals.

Ashizawa-Niro Atomizer Ltd

12-4 Minami-suna, 7-chome Koto-ku, Tokyo 136. Tel: 03 640 8111-5 Telex: 2622609

Supplies a wide range of separation, drying and dewatering equipment (see Niro Atomizer, Denmark).

ATTO Corporation

2-3 Hongo-7-chome, Bunkyo-ku, Tokyo 113.

Manufactures a wide range of laboratory equipment; including electrophoresis apparatus, fraction collectors, peristaltic pumps, ultra-violet monitors and chart recorders.

Banpoh Trading Co

PO Box 286 Chiyoda Hamacho Bldg, 62-5-2 Nihonbashi Hamacho, Chuo-ku Tokyo 103.

Tel: 03 667 0200 Telex: 2524670

Supplies immunological and biological reagents. Distributor for Australian Monoclonal Development Pty Ltd.

Banyu Pharmaceutical Co

7-8 Nihonbashi Honcho 2-chome, Chuo-ku, Tokyo 103.

Tel: (03) 270 7551 Telex: 24705

Manufactures antibiotics, hormones, vitamins and other pharmaceuticals using both chemical synthesis and fermentation techniques. Carrying out basic development studies on the biology of cell culture, cell fusion and recombinant DNA technology for production of bioreactive compounds.

BASF Japan Ltd

3-3 Kioi-cho, Chiyoda-ku, Tokyo 102. Tel: (03) 238 2211 Telex: 2324264

Subsidiary of BASF AG, Germany.

Baxter Travenol Ltd

4 Rokubancho, Chiyoda-ku, Tokyo 102. Telex: 2323260

Supplies immunological and biological reagents. Distributor for Wien Laboratories, US.

Bayer Japan Ltd

Seiwa Building 12-15 PO Box 105-91, Shiba Daimon 1-chome, Minato-ku Tokyo 105.

Tel: (03) 432 4251 Telex: 2422156 Subsidiary of Bayer AG, Germany.

Bayer Yakuhin Ltd

Honmachi Building, 10-1 Honmachi 2-chome, Higashi-ku Osaka 541. Tel: (06) 261 8771 Telex: 522 5319

Supplies pharmaceuticals. Joint venture of Bayer AG Germany, Takeda Chemical Industries Ltd, Japan and Yoshitomi Pharmaceutical Industries Ltd, Japan.

Beckman Instruments (Japan) Ltd

SKB Building, 6 Sanban-cho, Chiyoda-ku Tokyo 102. Tel: 03 221 5831 Telex: 23479 Fax: 03 221 Fax: 03 221 5888

Import and sell analytical instruments for use in chemistry, biochemistry and physics, products of SmithKline Beckman, US

Bio-Rad Laboratories Nippon

Fax: 03 431 5270

Supplies fast affinity chromatography support for HPLC and bulk separations, systems for electrophoretic DNA transfer and sequencing, acid analyzers and other filtration and separation equipment and reagents as well as antibodies (see Bio-Rad Laboratories, US).

Bio Techno Systems Inc

Shyuwa 2nd Toranomon Building, 21-19-1 chome Toranomon, Minato-ku Tokyo.

Tel: (03) 595 0969

Offers consultancy in biotechnology in relation to use of biological raw materials for chemicals and fuels.

Biocon Japan Ltd

Biocon Building No 44 1-chome, Matsubara-cho, Nakamura-ku Nagoya 453.

Tel: 482 1072 Telex: 443 74 72

Supplies enzymes, natural colours and related products for the following industries: brewing, food, baking/milling, animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Boehringer Mannheim Yamanouchi KK

Biochemicals Division

PO Box 168, Kanda, Tokyo.

Tel: (03) 252 6521 Telex: 222 6244 alcalo

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Braun Biotech Co Ltd

Hasebe No 5 Bldg, 3-19-2 Nihonbashi-Hamacho, Tokyo 103. Tel: 03 662 3241 Fax: 03 639 9355

Distribute laboratory, industrial and domestic equipment and appliances including fermenters and accessories; products of B Braun Biotech, Germany.

Bruker Japan Co Ltd

Supplies infrared fourier transform spectrometers of Brucker AG, Germany.

Calpis KK

20-3 Ebisu-nishi 2-chome, Shibuya-ku, Tokyo 150.

Tel: 03 463 2111 Telex: 27380

R & D Center, 4-1 2-chome Ebisu-minami, Shibuya-ku Tokyo 150

Manufactures beverages, dairy products and processed meats. Carrying out research on diagnostics based on monoclonal antibodies as well as food product research including aspects of basic and applied fermentation studies. Developing a low calorie sweetener produced from soybean whey.

Cambridge Instruments KK

Shuwa Shiba Park Building A2F, 4-1 Shiba Koen 2-chome, Minato-ku

Tokyo 105. Tel: (03) 432 7776

Telex: 26533 Fax: (03) 436 5389

Supplies scanning electronmicroscopes (see Cambridge Instruments, UK).

Charles River Biotechnical Services Inc

4-6-3 Nihonbashi-Honcho, Chuo-ku, Tokyo 103.

Distributor for CRBS, US.

Chemisciences Inc

Tokei Building 13-16, Kami-Ohsaki 2-chome, Shinagawa-ku Tokyo 141. Tel: 03 442 3125 Fax: 03 442 3145

Supplies high-purity chemicals for research and industry, including reagents for immunochemistry and products for electrophoresis and affinity chromatography. Distributes products of Polysciences, US.

Chiba University

Research Institute for Chemobiodymnamics

1-8-1 Inohana, Chiba-shi, Chiba-ken 280.

Holds culture collection as part of Japanese Federation of Culture Collections containing bacterial and fungal cultures for medical microbiological research.

Chiyoda Chemical Engineering & Construction Co

Engineering and construction company involved in the areas of fermentation, pharmaceuticals, environmental control, energy and chemicals as well as containment facilities, laboratories and other scientific facilities. Developing relevant catalysts, equipment and processes with R & D activities in biomass energy, bioreactor design, biological waste treatment, scale up of separation techniques and the screening of microorganisms. Carry out contract work in engineering and construction.

Chugai Boyeki Co Ltd

Ehime Bldg 2-5 Kawaramachi, Higashi-ku, Osaka.

Telex: 63834 Tel: 06 206 5010

Supplied immunological and biological reagents. Distributor for Biozyme Laboratories, UK.

Chugai Brocades

1-9 Kyobashi-2-chome, Chuo-Ku, Tokyo 104. Tel: (03) 281 6611 Telex: 28681

Supplies antibiotics including penicillin and its derivatives, spectinomycin, amoxicillin, kanamycin sulphate, natamycin etc as well as steroids and enzymes. Also supplies diagnostics and other kits and reagents for clinical chemistry, radioimmunoassay, seroimmunology, blood group serology, haemotology, bacteriology, virology and immunochemistry. The representative of the pharmaceutical division of Gist-brocades NV, Netherlands.

Chugai Pharmaceutical Co Ltd

1-10-6 Iwamoto-cho, Chiyoda-ku, Tokyo. Tel: (03) 862 8251

Manufactures pharmaceuticals, biological pesticides, vitamins and agrochemicals.

Ciba Corning Diagnostics KK

Unosawa Tokyu Bldg 3F, 1-19-15 Ebisu Shibuya-Ku, Tokyo 150. Tel: 03 440 2411 Telex: 33754

Supply a range of radioimmunoassay kits including: chorionic gonadotropin beta-subunit; cortisol; digoxin; follicle stimulating hormone; human ferritin; parathyroid hormone; placental lactogen; thyroid stimulating hormone; T3 and T4. Distributor for Ciba Corning Diagnostics, US.

CIBA-Geigy (Japan) Ltd

PO Box 1, 10-66 Miyuki-cho, Takarazuka-shi 665.

Tel: (0797) 71 1171 Telex: 564 5684 Fax: (0797) 72 1934

Supplies pharmaceuticals, agrochemicals and related products of Ciba-Geigy AG, Switzerland. Established new research facilities in Japan in 1987.

Codix KK

2nd Floor Takeshiba Bldg, 1-9-15 Kaigan, Minato-ku Tokyo. Tel: (03) 436 6141

Supplies a range of micro-processor controlled viscometers, products of Contraves AG, Switzerland.

Cosmo Bio Co

20th Chuo Bldg 4-10, Nihonbashi-Honcho, Chuo-ku Tokyo 103. Tel: 03 663 0721 Telex: 2523541

Supply pharmaceuticals, fine chemicals, biological reagents and immunological products including polyclonal antibodies. Distributor for UCB Bioproducts SA, Belgium, Australian Monoclonal Development Pty Ltd, Cedarlane Laboratories, Canada, Collaborative Research, Genzyme, Bethyl Laboratories, Zymed laboratories and Organon Teknika, US.

Cosmo Ventures Inc

Fax: 03 798 3237/3238

Development subsidiary of major oil refiner developing new business activities in areas of applied biotechnology as well as oil and petrochemical technology. Interests include the growth of microalgae as a source of fine chemicals, development of monoclonal antibodies, the use of microorganisms in the production of biologically based fertilizers and the production of anticancer agents. Distributor for Cyanotech, US.

CPC Japan Ltd

Kashu Fudosan Building 4, Niban-cho, Chiyoda-ku Tokyo 102. Tel: 03 264 8311 Telex: 26417j

Manufacture food products based on starch and related areas; developing industrial enzymes for starch and glucose processing including the manufacture of high fructose syrup (amylase glucoamylase and glucose-isomerase) as well as more basic studies using recombinant DNA technology. Subsidiary of CPC International Inc, US

Dai Nippon Ink & Chemicals Inc

Original interests in printing inks now extend to other petrochemical and synthetic products as well as the development of systems for the production of algal-cell biomass, alternative sweeteners and synthetic resins as well as food additives.

Dai Nippon Pharmaceutical Co Ltd

25 Doschomachi-3-chome, Higashi-ku, Osaka 541. Tel: 03 203 5321 Telex: 5227453

Manufactures cyanocobalamin, as well as veterinary drugs, antibodies and other food additives. Distributeds products of Serotec, UK. Have formed a joint company with Abbott Laboratories, US, Dainabot Co Ltd, to market two enzyme immunoassay diagnostic tests for detection of anti-HIV antibodies and HIV antigen.

Daicel Chemical Industries Ltd

8-1 Kasumigaseki-3-chome, Chiyoda-ku, Tokyo 100. Tel: (03) 507 3146 Telex: 222 4632

Manufactures wide range of organic chemicals derived from acetic acid, glycol, butanol, propionic acid, etc and carrying out research on aspects of recombinant DNA technology and the development of bioreactors.

Daiichi Kogyo Seiyaku Co Ltd

55 Nishi-schichijo Higashi, Kubo-cho Shimokyo-ku, Kyoto 600. Tel: (075) 313 3146 Telex: 222 4632

Manufactures speciality chemicals, which include sucrose esters, fructose, surfacants and flocculants.

Daiichi Pure Chemicals Ltd

Radioisotope Division

13-5-3-Chome Nihonbashi, Chuo-ku, Tokyo 103.
Tel: 03 272 0681 Telex: 25495 Fax: 03 281 0510

Distributes radiochemicals, radioactive standards, materials for liquid scintillation counting and genetic engineering, radiopharmaceuticals, products for radioassay, electrophoretic gels, immunodiagnostics and kits and monoclonal antibodies (see Dupont, US). Also distributor for Biomakor, Israel and Nycomed, Norway.

Daiichi Radioisotope Laboratories Ltd

Tokuriki Building, 10-5 Nihonbashi 3-chome, Chuo-ku Tokyo 103. Tel: (03) 272 1081 Telex: 28747

Supplies radiodiagnostics. Joint venture of Daiichi Seiyaku Co Ltd, Japan and Mallinckrodt Inc. US.

Daiichi Seivaku Co Ltd

14-10 Nihonbashi-3-chome, Chuo-ku, Tokyo 103.

Tel: (03) 272 0611 Telex: 22729

Supplies pharmaceuticals and other medical products.

Daiki Engineering Co Ltd

211 Shintoyofuta Kashiwa, Ciba Prefecture, Chiba 277.

Developing contact anaerobic digesters for production of methane from agricultural wastes, including systems heated by means of a solar collector Working in collaboration with Hitachi Shipbuilding & engineering Co Ltd, Japan.

Part III **JAPAN**

Daiwa Kasai Co Ltd

Kintetsu Kitu Building, 3-11 Uehon Machi Tennoji-ku, Osaka 54. Tel: (06) 768 5001

Manufactures bulk industrial enzymes.

Dako Japan Co Ltd

Hiraoka Bldg 9th floor, Kakukyoyama-cho 18 Higashiiru, Nishinotovin Shijou-dori Kyoto.

Supplies immunological and biological reagents. Distributor for Dako, US.

Denki Kagaku Kogyo KK

Sanshin Building, 1 -2 Yaraku-cho 1-chome, Chiyoda-ku Tokyo 100. Tel: (03) 507 5060 Telex: 22647

Manufacturer of chemicals, including acetic acid and alcohol derivatives. Carrying out research on cell fusion for the production of lymphokines, genetics of amino acid production as well as bioreactor design and the use of immobilized enymes. Has three subsidiary companies engaged in the biotechnical industries. These include Denka Seiken Co (vaccines and diagnostics), Denka Pharmaceuticals (veterinary products) and Juzen Chemical Co Ltd (pharmaceutical intermediates).

DIC-Degremont Co Ltd

631 Sakato Sakura-shi, Sakura-shi, Chiba 285. Tel: 0434 98 2364

Design and construct waste water and effluent treatment plant. Member of the Aquarenaissance Research Association, Japan. Subsidiary of Degremont, France.

DIC Hercules Chemicals Inc

DIC Building, 7-20 Nihonbashi 3-chome, Chuo-ku Tokyo 103. Tel: (03) 274 0731 Telex: 2222 977

Joint venture of Dai Nippon Ink and Chemicals Inc, Japan and Hercules

Diosynth International BV Japan

Chuo Daiwa Building, 13-13 1-chome Ginza, Chuo-ku Tokyo 104. Tel: (03) 567 4701 Telex: 24714

Supplies bulk pharmaceutical raw materials including peptides and steroids, such as testosterone, pancreatin, insulin, gonadotrophin and hydrocortisone. Subsidiary of Diosynth BV, Netherlands.

Dowa Mining Co Ltd

8-2 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 201 1061 Telex: 26298j

Mining company carrying out research and development programme on aspects of bacterial leaching as well as the biological treatment of leachates, waste waters and metal refining gases.

Dr Schleussner Group Japan Liaison Group

Takashima Bldg 6a, Nishi-Shimbashi 1-17-6, Minatoku Tokyo 105. Tel: 03 581 4617 Fax: 03 581 4598

Supply monclonal antibodies as well as human interleukin-2 preparations for in vitro culture of T lymphocytes. Subsidiary of Biotest-Serum-Institut GmbH, Germany.

Du Pont Japan Ltd

Kowa Building No.2, 11 - 39 Akasaka 1-chome Minato-ku, Tokyo 107. Tel: (03) 585 5511 Telex: 24568

Supplies agrochemicals, chemical intermediates, medical instruments and other products of E I du pont de Nemours & Co, USA. Carrying out fundamental studies in neurobiology, development of new drugs and new drug delivery systems.

Duskin Institute for Biomedical Research

Naniwa Building, 4-12 Banzai-cho, Kita-ku Osaka 530. Tel: (06) 314 0528

Offers custom service for testing biological material for mutagenicity, carcinogenicity and toxicity.

Ebara Infilco Co Ltd

6-27 Kohnan 1-chome, Minato-ku, Tokyo 108. Tel: 03 458 2211 Telex: 22441j-ebafilco

Fax: 03 458 2198

Manufactures and sells systems for pollution control, water treatment and wastes disposal as well as water treatment chemicals. Developing new bioreactors and biological wastewater treatment technologies including systems for sludge treatment.

Ehime General Service Co Ltd

5-1 Sobirakicho, Niihama 792. Tel: 0897 37 1098

Offer services in waste treatment, tree planting, and environmental hygiene. Affiliated with Sumitomo, Japan.

Eikoh Filter Co Ltd

5-8 Kanda Jimbocho-1-chome, Chiyoda-ku, Tokyo. Tel: (03) 233 0361

Manufactures industrial filters for both air and gas systems.

Eisai Co Ltd

4 - 6 - 10 Koishikawa 4-chome, Bunkyo-ku, Tokyo 112 Tel: (03) 817 3700 Telex: 272 2137 Fax: (03) 811 3305

Research and Development, Eisai Tsukuba Laboratory, 5-1-3 Tokodai Toyosato-machi Tsukuba-gun Ibaraki 300. Tel: (0297) 47 2211

Manufactures vitamins K (menadione) and E (alpha-tocopherol), as well as cosmetic, pharmaceutical, veterinary and food products. Has a research programme on production of monoclonal antibodies and recombinant DNA technology in relation to physiologically active substances related to the production of new drugs.

Electrotechnical Laboratory

1-1-4 Umezono, Sakura-mura Niihari-gun, Ibaraki-ken 300-21.

Carrying out joint research project with Toagosei Chemical Industry Co Ltd to develop a rapid cancer detection biosensor based on a cancer marker-sensitive antibody. Biosensor is also suitable for diagnosing viral diseases including AIDS and hepatitis B.

Erma Optical Works Ltd

Scientific Instruments Division

2-4-5 Kajicho, Chiyoda-ku, Tokyo 101. Tel: (03) 256 0911 Telex: 25301j ermawork

Manufactures HPLC degassers and universal detector systems for liquid chromatographs.

Fermentation Research Institute

1-3 Higashi-1-chome, Yatabe-machi Tsukuba-gun, Ibaraki-ken 305. Tel: 73 0022

Carrying out research into aspects of fermentation and bioreactor design. Acts as a patent depository for fungi, bacteria, yeasts and actinomycetes except those which may be regarded as dangerous or those which need the physical containment of levels of P2, P3 or P4 required for experimentation.

Fuji Electric Co Ltd

12-1 Yurakucho 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 211 7111 Telex: 22331j-fujielec F

Fax: 03 214 2744

Produce industrial and speciality electrical machinery, instrumentation and appliances. Developing clean room systems as well as bioreactors and biosensors.

Fuji Oil Co Ltd

6-1 Hachiman-cho, Minami-ku, Osaka 542.

Tel: 06 213 8151 Telex: 0522 7531

Biochemical Research Laboratory, 1 Sumiyoshi, Izumisano-shi Osaka 598. Tel: 0724 63 1121

Produce edible oils and fats as well as confectionery products and soy protein. Carrying out development work on enzyme based bioreactors as well as cell fusion and monoclonal antibodies. Interests include test kits for microorganisms for use in food industry.

Fuji Photo Film Co Ltd

26-30 Nishiazabu 2-chome, Minato-ku, Tokyo 106.

Fax: 03 486 0523 Tel: 03 406 2111 Telex: 242 4905

Asaka Research Laboratories, 11-46 Senzui 3-chome, Asaka Saitama-ken 351

Tel: 0484 63 3110

Manufacture and sell photographic and magnetic products; developing real-time whole blood clinical testing system using multi-coated dry film layers as well as electrophoresis gel sheets for DNA sequencing.

Fuiirebio Inc

12th floor Shinjuku Daiichi Seimei Bldg, 7-1 Nishi Shinjuku 2-chome, Shinjuku-ku Tokyo 160. Tel: 03 348 0691

Developing blood products, pharmaceuticals and diagnostic test kits using methods of enzyme immunoassay, ELISA etc including fibrinolysis test kit.

Fujisaki Cell Centre

675-1 Fujisaki, Okayama 702.

Carries out basic and applied research related to human cancer including leukemia-lymphoma, cytokines-lymphokines and haematopoietic cell

Fujisawa Pharmaceutical Co Ltd

3 Doshomachi 4-chome, Higashi-ku, Osaka 541. Fax: 06 222 4988 Tel: 06 202 1141 Telex: 05225125

Manufactures organic acids, antibiotics, vitamins and other pharmaceuticals by fermentation. Has collaborative development programme with Biogen SA, Switzerland to carry out trials on a plasminogen activator produced by Biogen SA as well as carrying out own research in areas of recombinant DNA technology and cell fusion aimed at development of pharmaceuticals and monoclonal antibodies related to the corporate activities. Distributes products of Milab, Sweden.

Fuiitsu Ltd

6-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 216 3211 Telex: 22833j

Manufacturing: Facom Building, 21-8 Nishi-Shinbashi 3-chome, Minato-ku Tokyo 105, 03 437 5111

Develop and manufacture computer and data processing systems including pattern recognition systems and micro- electronics with biological applications.

Funakoshi Pharmaceutical Co Ltd

2-3 Surugadai, Kanda Chiyoda-ku, Tokyo. Tel: 03 293 2341/2352/2367 Telex: 128489 funa Fax: 03 295 5545

Supplies fine chemicals, including biologically active peptides, lectins, enzyme substrates and peptide hormones, lectins, lectin conjugates antibodies and other immunodiagnostic reagents as well as ultrafiltration equipment. Distributors for products of Stratagene Cloning Systems, Bethyl Laboratories, Kent Laboratories, Kirkegaard & Perry Laboratories, Lee Biomolecular Research Laboratories, List Biological Laboratories, Research & Diagnostic Systems, RIBI Immunochem Research, Southern Biotechnology Associates, Vector Laboratories and Cistron Biotechnology, US, Biosoft and Immunotech, France, Cambridge Research Biochemicals, UK, UCB Bioproducts and Janssen Biochimica, Belgium, Sanbio, Netherlands and novel basic polysaccharides and research reagents for amino-sugars of Higeta Shoyu Co Ltd, Japan.

Gasukuro Kogyo Co

12-18 Nishishinjuku-6-chome, Shinjuku-ku, Tokyo 160. Tel: (03) 295 3509

Supplies analytical instruments, including gas chromatographs, infra-red spectroscopes and organic vapour analyzers.

Genetics Institute Inc

1-10-13 Higashi Azabu, Minato-ku, Tokyo 106. Tel: 03 589 2471 Fax: 03 589 2778

Developing products of value to the human healthcare, agricultural and biocatalysis industries using recombinant DNA and related technologies.

Givaudan KK

15-23 Seta-1-chome, Setagaya-ku, Tokyo 158. Tel: (03) 709 5411 Telex: 22136

Trades in flavours, perfumes, fragrances, cosmetics and other aromatic compounds

Godo Shusei Co Ltd

Central Research Laboratories, 250 Nakahara Kamihongo, Matsudo

Manufactures fermented beverages and ethanol, as well as bulk industrial enzymes including bacterial amylases, galactosidases, inulases, isomerases and microbial proteases. Carrying out research on recombinant DNA technology as well as the use of biomass (cellulose) and acetone/butanol fermentation. Also developing new bioreactor systems for enzyme (isomerase) and alcohol production.

Green Cross Corporation

1-15-Imabashi 1-chome, Higashi-ku, Osaka 541.

Tel: 06 228 0700 Telex: 63467

Research Division: 1-1-47, Chuoh, Joto-Ku, Osaka 536. Tel: 06 932 1201 Tlx: 5293369, Laboratories: 3-5-44 Miyakojimanakadori, Miyakojima-ku, Osaka 573 Tel: 06 921 5477

Manufactures pharmaceuticals and other medical supplies. Producing alpha interferon from leucocytes and carrying out clinical trials on gamma-interferon from lymphoblasts. Developing alpha, beta and gamma interferon using genetic manipulation techniques. Also producing medical enzymes and monoclonal antibodies.

Hakutsuru Brewing Co

4-5-5 Sumiyoshi Minani-cho, Higashinada-ku, Kobe. Tel: 078 841 4101

Manufacture sake.

Hanamaruki Foods Co

1560 Hirade, Tatsuno-cho, Ina-gun Nagano.

Produce miso, a fermented food based on cereal and soybeans prepared using halophilic yeasts and bacteria.

Hansen & Co Ltd

PO Box 331, Kobe 651.

Tel: (078) 251 3911 Telex: 05623146

Supplies speciality products for biological applications, including nitrocellulose, DEAE membranes and diazotized media for the transfer of nucleic acids and proteins. Agents for Schleicher & Schuell GmbH, Germany.

Hayashibara Co Ltd

2-3 Shimoishii 1-chome, Okayama 700. Tel: 0862 24 4311 Telex: 5922120 hysbr

Produce and sell glucose syrups, maltose, maltitol, pullulan and isoamylase. Carrying out research on the applications of starch related enzymes as well as the production of high intensity low cariogenic sweeteners. Also working on the use of in vitro human cell cultures for the production of lymphokines and the use of cell fusion for production of hormones and monoclonal antibodies.

Hazama-Gumi Ltd

5-8 Kita-aoyama 2-chome, Minato-ku, Tokyo 107. Tel: 03 405 1111 Telex: 25898j Fax: 03 405 1568

Activities include civil engineering, building and design in areas which include waste-water treatment, containment facilities and clean-rooms, as well as construction of artificial reefs and fish farming.

Helm Japan Ltd

Tel: (03) 470 6491

Supplies pharmaceuticals, veterinary drugs, food and animal feed

Henkel Hakusui Corporation

Nissho Iwai Building, 3-30 Imabashi, Higashi-ku Osaka 541. Tel: 06 202 7392 Telex: 523 3455j-hhcosa Fax: 06 223 1576 Tokyo Factory, 9-3 Kitatone Sowa-cho, Sashima-gun Ibaraki-ken 306-02 Manufacture chemicals, cleaners, adhesives and polymers.

Hevl Japan KK

Freund Mita 603, Mika 2-14-5, Minato-ku, Tokyo 108. Tel: 03 769 3650 Fax: 03 769 3651

Produce pharmaceuticals, chemicals and mmonoclonal antibodies. Developing diagnostics (see Heyl, Germany).

Part III **JAPAN**

Higashimaru Shoyu Co

54-1 Ote Tatsuno-cho, Tatsuno-shi, Hyogo. Produce fermented food products and seasonings.

Higuchi Oil Co Ltd

Eiraku Building, 1-4-5 Marunouchi, Tokyo 100. Telex: 2271 183 Higuti Tel: (03) 215 3666

Supplies pharmaceutical specialities and diagnostics. Agents for Rohm Pharma GmbH, Germany.

Hirayama Manufacturing Corp

16-16 Yushima 2-chome, Bunkyo-ku, Tokyo 113. Tel: 03 813 5499 Telex: 2723105 hiraym Fax: 03 813 5480

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

Hitachi Chemical Co Ltd

Shinjuku-Mitsui Building PO Box 233, 1-1 Nishi-shinjuku 2-chome, Shinjuku-ku Tokyo 163.

Tel: 03 346 3111 Telex: 78124379

Manufacture chemical products for life sciences and environmental applications as well as related electronics products. Interests include pharmaceutical products, diagnostic reagents, monoclonal antibodies, waste water treatment systems and plant tissue culture. Distributes products for Mast Immunosystems, US.

Hitachi Ltd

6 Kanda Surugadai-4-chome, Chiyoda-ku, Tokyo 101. Tel: 03 258 1111 Telex: 22395/26375

Manufactures computer controlled fermenter systems for industrial use with regulation of sterilization, growth parameters and final discharge in batch or semi-batch systems as well as a wide range of other power systems, industrial machinery and plant, control systems, scientific and industrial electronics, information and communication systems. Carrying out research on genetic engineering, animal tissue culture, plant growth regulation, protein purification, biosensors, plant biotechnology, fermentation, coenzyme regeneration and measurement and control instruments for life-sciences.

Hitachi Shipbuilding & Engineering Co Ltd

1-1 Hitosu-bashi Chiyoda-Ku, Chiyoda-ku, Tokyo 100.

Developing a contact anaerobic digester for production of methane from agricultural wastes, including systems heated by solar collectors. Working in collaboration with Daiki Engineering Co Ltd, Japan.

Hitachi Software Engineering Co Ltd

6-81 Onoe-machi, Naka-ku, Yokohama 231. Tel: 045 681 2111 Fax: 045 681 4538

Produce a computer package (DNASIS) designed for molecular biologists which includes computer generated graphics and software programmes for use in collection, analysis and presentation of nucleic acid and protein sequences. Adaptable for use with IBM (US) or compatible machines.

Hitachi Zosen Corporation

1-1-1 Hitotsubashi, Chiyoda-ku, Tokyo 100

Manufacturing and engineering services company. Interests include environmental conservation and bioreactors for anaerobic digestion and ethanol production as well as aspects of biomass use. Carrying out research on cell screening and cell fusion in relation to saccharification of cellulosic materials, enzyme technology and single cell protein. Has joint venture with Suntory Ltd and Shin Nihon Chemical Industry Co Ltd to mass produce xylobiose for use in the food and cosmetic industries.

Hoechst Japan Ltd

PO Box 1256 - New Hoechst Building, 8-10-16 Akasaka Minato-ku, Tokyo 107.

Tel: 03 479 5131 Fax: 03 479 5157 Telex: 2422342

Research Laboratories, 1-3-2 Minami-dai Kawagoe-shi, Saitama 350. Tel: 0492 43 6110

Supplies chemicals, pharmaceuticals and diagnostic products of Hoechst AG, Germany. Agents for Vector Laboratories Inc, US. Carrying out research on monoclonal antibodies and recombinant DNA technology in relation to autoimmune disease.

Hokko Chemical Industry Co Ltd

4-2 Nihonbashi, Hongaku-cho Chuo-ku, Tokyo. Tel: (03) 279 5151

Manufactures antibiotics by fermentation, as well as agrochemicals (pesticides, insecticides and herbicides).

Honen Oil Co Ltd

2-3 Otemachi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 211 6511

Manufacture and sell vegetable oils and defatted meal from soybean, rape and corn. Developing methods for the production and use of lectins, including the use of lectin-affinity for HPLC. Carrying out research on monoclonal antibodies against glycoproteins and glycolipids. Also investigating rhizobial nitrogen fixation and researching transfer of rhizobial activity to cereals.

Iatron Laboratories Inc

11-4 Higashi Kanda 1-chome, Chiyoda-ku, Tokyo 101.

Telex: 02656098 Tel: 03 862 1761

Supplies immunological and biological reagents. Distributor for Southern Biotechnology Associates, US.

ICI Japan Ltd

801 Palase Building, 1-1 Marunouchi 1-chome, Chiyoda-ku Tokyo 100-91. Tel: (03) 211 6661 Telex: 2222381

Supplies chemicals, agrochemicals, biocides and catalysts (see Imperial Chemical Industries plc, UK).

ICI-Pharma Ltd

3-28 Koraibashi, Higashi-ku, Osaka 541.

Tel: 06 202 2861

Supplies pharmaceuticals (see ICI, UK). Affiliated with Sumitomo, Japan.

Idemitsu Kosan Co Ltd

1-1 Marunouchi 3-chome, Chiyoda-ku, Tokyo 100. Tel: 03 213 3111 Telex: 22219j

Petroleum company working on bioreactors for production of chemicals as well as use of cell fusion and other strain improvement techniques for use in ethanol production from biomass.

Iguchi Shokuhin KK

Nishi Honjo Minamibegawa-mura, Hidaka, Wakayama Prefecture 64501. Tel: 74 2439

Manufactures citric acid.

Inabata & Co Ltd

2-51 Jukeimachi-dori, Minami-ku, Osaka 542.

Tel: 06 267 6051 Telex: 5222114

Supplies a wide range of chemical products, including agricultural and food chemicals, pharmaceuticals and home medicines as well as refrigeration equipment, etc.

Institute for Microbial Resources

Kudankita 1-9-5-1209, Chiyoda-ku, Tokyo 102.

Holds culture collection of bacteria, yeasts and fungi including Aspergillus, Monascus, Mucor, Rhizopus and Penicillium, as well as special collections of hydrocarbon utilizers, radio-resistants and brewing yeasts for general, agricultural and industrial microbiology research and teaching.

Institute of Physical and Chemical Research

Hirosawa, Wako-shi, Saitama 351-01.

Holds the Japan Collection of Microorganisms including bacteri, fungi and yeasts for general, agricultural and industrial microbiology research.

International Bioscience Inc

2-15-5-402 Shiba-Daimon, Minato-ku, Tokyo 105. Fax: 03 432 4663 Tel: 03 432 4901

Produce monoclonal antibodies and antigens as well as complement components and controls for enzymology.

International Flavours & Fragrances (Japan) Ltd

Green Fantasia Building, 11-11 Jingumae 1-chome, Shibuya-ku Tokyo 105.

Tel: (03) 402 6421 Telex: 24246

Markets flavours and fragrances. Subsidiary of International Flavors and Fragrances Inc, US.

International Reagents Corp

Sannomiya Kokusai Bldg 1-30, Hamabe-Dori 2-chome, Chuo-ku Kobe

Tel: 078 231 4151 Telex: 78178886

Supplies immunological and biological reagents. Distributor for Hemagen Diagnostics, US.

Ishihara Sangyo Kaisha Ltd

3-22 Edobori 1-chome, Nishi-ku, Osaka 550. Tel: 06 444 1451 Telex: 63760j-sekisan osa

Corporate Planning Division, 10-30 Fujima 2-chome, Chiyoda-ku Tokyo

Tel: 03 230 8748 Tlx: 2324306j-isk

Manufactures and sells both inorganic and organic chemicals. Carrying out some research in areas of monoclonal antibodies and recombinant DNA technology.

Ishikawajima-Harima Heavy Industries Co Ltd

Shin-Ohtemachi Building, 2-1 Ohtemachi 2-chome, Chiyoda-ku Tokyo

Tel: 03 244 6496 Telex: 22232j-ihihqt

Engineering, machinery, and process plant company. Interests include aspects of waste water treatment and desalination. Carrying out research projects on design of bioreactors, photosynthetic microorganisms and marine biomass technology.

Iwaki Glass Co Ltd

Supplies immunological and biological reagents. Distributor for Innovative Chemistry, US.

Iwata Chemical Industry Co Ltd

3069 Nakaizumi, Iwata-shi, Shizuoka.

Tel: (05) 388 25108

Manufactures fine organic and inorganic chemicals as well as producing citric and itaconic acids by fermentation.

Japan Ethanol Co Ltd

Toranomon 34 Mori Building, 25-5 Toranomon 1-chome, Minato-ku Tokyo 105.

Tel: 03 591 9411 Fax: 813 580 2410

Manufactures synthetic ethanol on government contract. Initiating research on production of fermentation ethanol.

Japan Ocean Industries Association

15 Mori Building 5F, 8-10 Toranomon 2-chome, Minato-ku. *Tel:* (03) 503 3753

Developing methods for the production of fuel from marine biomass, and undertaking feasibility studies on the culture of brown algae such as Laminaria and sargassum.

Japan Organo Co Ltd

5-16 Hongo 5-chome, Bunkyo-ku, Tokyo 113. *Tel:* 03 812 5151 *Telex:* 272 2876j-organo

Engineering company which designs and produces water deionizing plants, municipal and industrial water treatment plants, and sewage and domestic waste water systems. Interests in ion exchange, reverse osmosis, ultrafiltration and activated sludge processes. Carrying out research on immobilized-enzyme bioreactors as well as techniques for separation and recovery of valuable products.

Japan Spectroscopic Co Ltd

2967-5 Ishaikawa-Cho, Hachioji-City, Tokyo 192.

Tel: 0426 46 4111 Telex: 02862515

Supplies HPLC systems and accessories including loop injectors and optical detectors.

Japan Synthetic Rubber Co Ltd

Produces synthetic rubbers, resins and adhesives. Developing diagnostics and has an interest in cell culture.

Japan Tanner Corp

7-2-26 Kagoike Dori, Chuo-ku, Kobe 651.

Tel: 078 752 6215

Supplies immunological and biological reagents. Distributor for Immunon/Lipshaw, US.

Japan Tobacco Inc

2-2-1 Toranomon, Minato-ku, Tokyo 105.

Tel: 03 582 3111

Central Research Institute, 6-2 Umegaoka Midori-ku, Yokohama 227. Tel: 045 973 5611

Developing cell fusion, plant haploid breeding, and plant tissue culture techniques in relation to tobacco as well as investigating the production of biochemicals by microorganisms.

Japan Upjohn Ltd

Shinjuku Sumitomo Building, 6-1 Nishi Shinjuku 2-chome, Shinjuku-ku Tokyo 160-91.

Tel: (03) 347 8600

Manufactures pharmaceuticals. Joint venture of Sumitomo Chemical Co Ltd, Japan and the Upjohn Co, US.

Jasco International Co Ltd

2-4-21 Sennin-cho, Hachioji City, Tokyo 193.

Tel: (042) 666 1321 Telex: 02862515

Manufactures ultra-violet/visible spectrophotometers with integrated microprocessor control and treatment of data.

Jeol Ltd

1418 Hakagami-cho, Akishima-shi, Tokyo 196.

Tel: 0425 431 111 Telex: 2842135

Supply automated spectrometers offering high speed data processing.

JGC Corporation

New Ohtemachi Building 2-1, Ohtemachi 2-chome, Chiyoda-ku Tokyo 100

Tel: 03 279 5441 Telex: 0222 3096j - jgctok

Engineering and construction company with interests which include food processing plants, medical facilities (clean rooms) and environmental conservation systems. Developing continuous alcohol fermentation as well as biological sewage treatment and investigating scale up procedures for cell culture.

Johnson and Johnson KK

SKF Building, 9-1 Shiba Daimon 1-chome, Minato-ku Tokyo 105. Tel: (03) 438 2911 Telex: 2423769

Supplies pharmceutical products, diagnostics and other health care products. Subsidiary of Johnson & Johnson Inc, US.

Jookoo Co Ltd

19-4 Hongo-3-chome, Bunko-ku, Tokyo 113.

Telex: 02722685 Tel: (03) 815 1717

Supplies laboratory apparatus, including protein dialysis concentrators.

Jujo Paper Co

Shinyurakucho Building, 1-12-1 Yutakucho, Chiyoda-ku Tokyo. Tel: 03 211 7311

Manufacture pulp and paper as well as fodder yeast.

K Sakai & Co Ltd

Nichigin-mae Building 4-3 Chome, Nihonbashi Hongoku-cho, Chuo-ku Tokyo 103. Telex: (03) 222 3789

Supplies a wide range of research chemicals including organics, inorganics, biochemicals and organometallics. Agents for Pfaltz & Bauer Inc, US.

JAPAN Part III

Kajima Corporation

2-7 Motoakasaka 1-chome, Minato-ku, Tokyo 107. Tel: 03 404 3311 Telex: 2422467 kajima

Contracting civil engineering company with interests which include waste water treatment facilities, hydroponics for plant cultivation, fish farming centres and containment facilities for biologically hazardous materials. Build aerobic fixed film biological effluent treatment plants as well as deep shaft processes.

Kaken Chemical Co Ltd

2-28-9 Houkomagome, Bunkyo-ku, Tokyo. *Tel*: (03) 946 2111 *Telex*: 2722395 Tel: (03) 946 2111

Manufactures antibiotics and enzymes. Products include spectinomycin, cycloheximide and protease. Has research interests in interferon.

Kaken Pharmaceutical Co Ltd

6-42 Jujodaj 1-chome, Kita-ku, Tokvo,

Holds culture collection of actinomycetes for research in general, agricultural and industrial microbiology.

Kanebo Ltd

5-90 Tomobuchi-cho 1-chome, Miyakojima-ku, Osaka 534.

Tel: 06 922 8096 Telex: 63327i

Biochemistry Laboratory, 3-28 Kotobuki-cho 5-chome, Odawara-shi

Tel: 0465 34 6111 Tlx: 3892711j-kancos

Manufacture cosmetics, pharmaceuticals and foodstuffs and has a particular interest in anti-cancer technology. Carrying out research on cell culture, cell fusion and immobilized enzymes.

Kanegafuchi Chemical Industry Co Ltd

2-4 3-Chome, Nakanoshima Kita-ku, Osaka 530.

Tel: 06 208 6547 Telex: 63582 Fax: 06 222 5812

Manufactures pharmaceuticals, food products, chemicals, synthetic fibres, etc. Produces antibiotics, amino acids, bakers' yeast and organic chemicals by fermentation. Developing single cell protein systems. Has an active recombinant DNA research programme with particular interests in lymphokines. Carrying out research and development of new monokines for therapeutics in collaboration with Kaneka, Belgium (joint venture with Mitsui & Co, Japan) and Innogenetics, Belgium.

Kanesho Co Ltd

2-4-1 Marunouchi, Chiyoda-ku, Tokyo. Telex: 25206 Tel: (03) 216 5041

Supplies agricultural chemicals (plant growth regulators, wetting agents, herbicides, fungicides and insecticides).

Kansai Paint Co Ltd

5-27 Fushimi-machi, Higashi-ku, Osaka 541. *Tel*: 06 203 5531 *Telex*: 0522 5029j kposa

Central Laboratory, 4-17-1 Higashiyawata, Hiratsuka Kanagawa 254 Manufacture paints; developing speciality coatings based on biotechnical systems as well as immobilized enzyme and cell bioreactors.

Kansai University

Department of Chemical Engineering

Yamatechno Suita, Osaka 564.

Investigating semicontinuous production of ethanol by fermentation and extraction of sugar cane chips using yeast immobilized in alginate gels.

Kao Corp

14-10 Nihonbashi, Kayaba-cho 1-chome, Chuo-ku Tokyo 103. Tel: 03 665 6211 Telex: 24816 kaotyo

Research Laboratories, 2606 Akabane Ichikai-machi, Haga Tochigi 321-34

Tel: 02856 82131

Manufacture soaps, detergents and related products. Developing immobilized cell or enzyme bioreactors for use in hydrolysis or oxidation of fats and oils as well as the bioconversion of aliphatic substances to products such as biopolymers and emulsifiers for cosmetic use. Also has a programme of enzyme production, including cellulases, as well as activities in development of monoclonal antibodies, genetic manipulation of plants and both plant and animal tissue culture.

Kawasaki Heavy Industries Ltd

World Trade Center Building 1-4, Hamamatsu-cho 2-chome, Minato-ku Tokyo 105

Tel: 03 435 2971 Telex: 2424371

Biotechnology Laboratory, Technical Institute, 1-1 Kawasaki-cho, Akashi Hyogo 673

Tel: 078 923 1414

Major engineering and manufacturer of a wide range of products ranging from ships, through industrial plant to aircraft. Activities include the development of bioreactors for cell culture.

Kayaku Antibiotics Research Co Ltd

2-16-23 Mejiro, Toshima-ku, Tokyo. *Tel*: (03) 987 2101

Manufactures antibiotics and other pharmaceuticals.

Kewpie Jozo Co Ltd

5-19-7 Sumiyoshi-cho, Fuchu-shi, Tokyo.

Produces vinegar by fermentation.

Kikkoman Corporation

339 Noda, Noda-shi, Chiba 278.

Fax: (0471) 25 1455 Tel: (0471) 24 1111

4-13 Koamicho Nihonbashi, Tokyo 103

Manufacture soy sauce, fruit juice and wine. Carrying out research on plant cell cultures and development of vectors for gene manipulation.

Kimitsu Chemical Industries Co Ltd

Tsukase Building, 15-4 Uchikanda 2-chome, Chiyoda-ku Tokyo 101. Tel: (03) 252 8708

Produces alginates.

Kinoene Shoyu Co

157 Nakanodai, Noda-shi, Chiba.

Produce fermented food products.

Kirin Brewery Co Ltd

26-1 Jingumae 6-chome, Shibuya-ku, Tokyo 150.

Tel: 03 499 6111 Telex: 242 5401

Produces alcoholic beverages as well as non-alcoholic products and fruit syrups. Developing biomass based ethanol production systems as well as carrying out research on plant breeding (including use of tissue and cell culture), mammalian cell culture, brewing and genetic manipulation in relation to production of pharmaceutical products. Has bred two species of seedless water melon and mass produced them by tissue culture in a joint venture with Mikado Seed Growers Co Ltd.

Kobayashi Perfumery Co Ltd

3 Nihonbashi Honcho-4-chome, Chuo-ku, Tokyo.

Tel: (03) 241 3901 Telex: 25523

Produces a wide range of flavouring oils, fruit essences etc, as well as pharmaceutical raw materials.

Kobe Steel Ltd

8-2 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 218 7111 Fax: 03 284 1746

Biotechnology Research Laboratory, 1-3-18 Wakinohama-cho, Chuo-ku Kobe-shi Hyogo 651.

Tel: 078 251 1551

Manufacture iron, steel and other metals as well as chemical processing equipment and engineering plant including anaerobic bioreactors Developing processes for denitrification and dephosphorization of waste waters as well as for the biological utilization of lignocellulose.

Kodama Chemical Industry Co Ltd

7-3 Sotokanda-6-chome, Chiyoda-ku, Tokyo 101. Telex: 2655275 Tel: (03) 834 0515

Engaged in a wide range of activities which include production of wine and alcoholic beverages, as well as wood, metal and plastic products. Has a joint venture with Novo Industri AS, Denmark to develop and distribute enzymes.

Kohiin Co Ltd

1-1 Simbashi-1-chome, Minato-ku, Tokyo 105. Tel: (03) 504 3111 Telex: 28317 Fax: Kohjin

Produces speciality paper products, packing film, pulp and fibres as well as fermentation and other chemical products. Carrying out research in areas of monoclonal antibodies, animal cell culture and recombinant DNA technology. Products include nucleotides, nucleosides and glutathione.

Kokusai Kinzoku Yakuhin Co Ltd

PO Box 147, 10-3 Tsukasa Bldg 1-chome Shibuya, Shibuya-ku Tokyo 150. Tel: 03 400 1939 Telex: 25332

Supplies clinical diagnostics, reagents and kits for immunochemical assays, antisera to human proteins and conjugated antisera. Distributor for Jackson Immunoresearch Laboratories, US.

Komatsuya Kagaku KK

890 Hagiwara Hidaka-machi, Hidaka-gun, Wakayama Prefecture 64912. Tel: (073) 863 2007

Manufactures citric acid and calcium citrate.

Konishiroku Photo Industry Co Ltd

1-26-2 Nishi Shinjuku, Shinjuku-ku, Tokyo 160. Tel: 03 349 5111

New Materials Laboratory, 1 Sakura-machi, Hino-shi Tokyo 191. Tel: 0425 83 1521

Manufacture photographic materials, magnetic tapes and office machines. Developing dry chemical methods for clinical diagnostics as well as immunological assays based on monoclonal antibodies.

Kowa Co Ltd

3-6-29 Nishiki, Naka-ku, Nagoya 460.

Tel: 052 963 3033 Telex: 59811 kaneka Fax: 052 962 7097

Research Laboratories, 2-17-43 Noguchi-cho, Higashi-murayama Tokyo

Tel: 0423 91 6211

Manufacture pharmaceuticals. Also involved in chemical, food and wood industries. Carrying out research on tissue culture, monoclonal antibodies, genetic engineering and the screening of bioreactive compounds. Developing tissue plasminogen activator in collaboration with Asahi Chemical Industry Co, Japan.

Kubota Ltd

Water & Sewage Treatment Plant Division

3-1-3 Nihonbashi-muromachi, Chuo-ku, Tokyo 103.

Tel: 03 245 3085

Design and construct waste water and effluent treatment plant. Member of the Aquarenaissance Research Association, Japan.

Kubota Ltd

2-47 Sikitsu-Higashi 1-chome, Naniwa-ku, Osaka 556.

Tel: 06 648 2111 Telex: 65251 kubota a Fax: 06 489 7510

R & D Headquarters, 1-1 Hama 1-chome, Amagasaki Hyogo 661. Tel: 06 489 7573

Manufacture farm and industrial machinery and equipment including systems for control of effluents and irrigation systems. Has a biomass energy research programme as well as carrying out studies on lactic bacteria. Has a general interest in developments in agricultural biotechnology.

Kumamoto University

Faculty of Medicine

2-2-1 Honjo, Kumamoto-shi, Kumamoto-ken 860.

Carrying out research on synthetic superoxide dismutase and developing recombinant DNA techniques for large scale production of SOD for clinical testing.

Kuraray Co Ltd

12-39 Umeda 1-chome, Kita-ku, Osaka 530. Telex: 523 3725 Tel: 06 348 2111

Manufactures a wide range of chemical products from fibres and films to terpene derivatives and medical products. Has a research programme in cell fusion and recombinant DNA technologies. Interested in cooperation with universities and new venture companies.

Kureha Chemical Industry Co Ltd

1-8 Horidome-cho, Nihonbashi Chuo-ku, Tokyo 103.

Tel: (813) 662 9611 Telex: 2522736

Supplies serums, antiserums and monoclonal antibodies. Agents for Sera-Lab, UK.

Kurita Water Industries Ltd

4-7 Nishi-Shinjuku 3-chome, Shinjuku-ku, Tokyo 160.

Tel: 03 347 3261 Telex: 232 4694

Manufacture water and effluent treatment plant as well as related chemicals and environmental control systems. Carrying out research on novel biological and physico/chemical processes as well as developing bioreactors for the production of chemicals and analytical procedures based on HPLC.

Kurogane Kasei KK

Hibi Building, 5-1 Nishiki 1-chome, Naga-ku Nagoya 460. Tel: (052) 231 1267

Manufactures esters of organic acids (maleic, fumaric, itaconic, etc.)

Kyoritsu Yuki Co Ltd

7-13-15 Ginza, Chuo-ku, Tokyo. Tel: (03) 543 3581 Telex: 2 Telex: 2524093

Manufactures bacterial soil inoculants - Bioferty. Also active in wastewater treatment (including fluidized bed biological systems) and the production of high molecular weight flocculants and coagulants as well as other chemicals for the pulp and paper industries.

Kyoto University

Faculty of Science

Kitashirakawa-oiwake, Kyoto 606.

Tel: (075) 751 2111

Studying the photoautotrophic culture of plant cells. Also working on lymphokines (interleukin 4).

Kyoto University Genetic Technology Group

Yoshida Hon-Machi, Sakyo-ku, Kyoto.

Carrying out research on the identification and isolation of lymphokines including interleukin 4 for production by recombinant DNA techniques.

Kyowa Hakko Kogyo Co Ltd

6-1 Ohtemachi Building 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 201 7211 Telex: 24543

Manufactures a wide range of pharmaceutical, food, research and diagnostic products as well as bulk industrial enzymes. Products include organic acids, amino acids, nucleosides, antibiotics, ethanol, rennets and cellulases. Technologies include fermentation and the use of immobilized cells and enzymes. Has very extensive research and development programmes covering recombinant DNA technology and protein engineering of biologically active substances, including fish growth hormone as well as cell fusion, monoclonal antibodies, interferon (beta and gamma), plant and animal cell culture, enzymes, diagnostics and antibodies. Developing a novel technique for culturing lymphokine activator killer (LAK) cells for use as a therapeutic in cancer treatment.

Kyowa Medex Co Ltd

Ohtemachi Building 6-1-1-Chome, Ohtemachi, Chiyoda-ku Tokyo 100. Telex: 24543 Tel: (03) 201 7211

Supplies immunochemicals and clinical diagnostic kits. Agent for Dako AS, Denmark.

Kyushu Kako Co

1100 Tazaki-cho, Kaya-shi, Kagoshima Prefecture 893. Tel: (099) 442 4121

Produces citric acid by fermentation as well as animal feed and food

Labsystems (Japan) Ltd

Tohkoh Bldg 2, 1-34-15 Shinjuku, Shinjuku-ku Tokyo 160. Tel: 03 355 5630 Fax: 03 355 5633

Supply immunological diagnostics including kits for detection of anti-chlamydia IgG. Distributor for Labsystems, US.

Part III **JAPAN**

Lederle (Japan) Ltd

Hattori Building, 10-3 Kyobashi 1-chome, Chuo-ku Tokyo 104. Tel: (03) 561 8781 Telex: 252 2556

Manufactures antibiotics, vitamins and other medicinal products. Joint venture of Takeda Chemical Industries Ltd, Japan and American Cyanamid Co, US.

Mallinckrodt International Corp

Supplies pharmaceuticals and other products of Mallinkrodt Inc, US.

Marubin Corporation

8-1 Nihonbashi, Odemmacho, Chuo-ku Tokyo 103. Tel: (03) 662 8151 Telex: 0252 2957

Supplies laboratory instruments for liquid and gel filtration chromatography and light scattering measurements. Also markets chromatography media and accessories.

Marubishi Bioengineering Co Ltd

9-9 Kajicho-1-chome, Chiyoda-ku, Tokyo 101.

Fax: 03 258 0828 Tel: 03 252 7236 Telex: 02225638

Supply culture equipment, oxygen analyzers, fermentation equipment, electrodes and computer control systems. Offer services in plant design, engineering and scale up.

Marukan Su Co

2-10-22 Aoki, Nada-ku, Kobe-shi Hyoto.

Tel: (078) 411 7171

Manufactures acetic acid by fermentation, as well as other food additives.

Marukin Shoyu Co

Naeba, Utsami-cho Shoda-gun, Kagawa.

Tel: 08 7982 1221

Produces fermented food products and flavourings.

Marukome Miso Co

883 Yasumori, Nagano-shi, Nagano.

Tel: 0262 26 0255

Produces fermented food products.

Maruzen Oil Biochemical Co Ltd

Toshiba Building 1-1, Shibaura 1-chome, Minato-Ku Tokyo 105. Tel: 03 796 3882 Telex: 2422511

Supply a range of immunological and biochemical products including: polyclonal antibodies against nerve growth factor, human fibronectin, polynucleotide kinase, prostaglandin, somatostatin, thyroid stimulating hormone, thyrotropin releasing hormone, linkers, cell culture media and growth factors.

Maruzen Oil Co

Kokusai Shin-Akasaka Building West, 6-1-20 Akasaka, Minato-ku Tokyo. Tel: (03) 230 3311 Telex: 781 242251

Supplies purified proteins, immunochemicals and other clinical and research diagnostics. Agents for Cappel Laboratories, US and Collaborative Research Inc, US.

Matsutani Kagaku KK

5-3 Kitaitami, Itami-shi, Hyogo.

Manufactures enzymes for industrial and research purposes. Products include amylases and proteases.

Medical & Biological Laboratories Co Ltd

5F Sumitomo-Shoji Marunouchi Bldg 5-10, Marunouchi 3-chome Naka-ku, Nagoya 460.

Tel: 052 971 2081 Telex: 59556

Supply polyclonal antibodies, some solid-phase absorbed to remove cross reactivity with human proteins, as well as serums, immunoglobulins and indirect fluorescent antibody kits for anti-native DNA and anti-nuclear antibody.

Meiji Milk Products Co Ltd

3-6 Kyobashi 2-chome, Chuo-ku, Tokyo 104. Tel: 03 281 6133 Fax: 03 222 2404

Produce dairy products, beverages and livestock products. Has research programme which includes recombinant DNA and cell fusion techniques in areas of monoclonal antibodies, lactic acid bacteria and vaccine production. Also working on embryo transfer techniques. Market over 70 mouse and rat biotin or fluorescent marker monoclonal antibodies.

Meiji Seika Kaisha Ltd

4-16 Kyobashi 2-chome, Chuo-ku, Tokyo 104. Tel: (03) 272 6511 Telex: 33698

Manufactures pharmaceuticals, including antibiotics, food products and enzymes. Has active research and development programme in applications of recombinant DNA technology to production of antibiotics and biologically active compounds by new fermentation technologies including immobilized systems.

Meito Sangyo Co

2-41 Sasazuka-cho, Nishi-ku, Nagoya 451. Tel: (052) 521 7111 Telex: 2226791

Manufactures food products, confectionery etc. Also produces dextran, enzymes and organic chemicals by fermentation. Developing genetic engineering and cell fusion techniques in relation to production of enzymes, biologically active substances and monoclonal antibodies as well as microbial polysaccharides.

Mercator International BV

No 17 Mori Building, 26-5 Toranomon 1-chome, Minato-ku Tokyo 105. Tel: (03) 591 0421 Telex: 2228116

Representative of companies in the Akzo group, Netherlands.

Merck Japan Ltd

11 Mori Building, 6-4 Toranomon 2-chome, Minato-ku Tokyo. Tel: (03) 591 9331 Telex: 24731

Supplies fine chemicals for the pharmaceutical and food industries (see EM Chemicals, US and E Merck AG, Germany).

Micro Filtration Systems

Far Fast Division

7-3-Chome, Honcho, Nihonbashi Tokyo.

Tel: (03) 270 3141 Telex: (781) 222 8194

Supplies membranes systems for research and industrial use, including micro- and ultra-filtration systems and markets glass fibre filters. Subsidiary of Micro Filtration Systems, US.

Miles Laboratories

Aoyama Building, 2-3 Kita Aoyama 1-chome, Minato-ku Tokyo 107. Tel: (03) 403 9951 Telex: 242 3548

Supplies a wide range of biochemicals and enzymes for research clinical and industrial use (see Miles Laboratories Inc, US).

Milton Roy KK

Takanawa 2-chome, Minato-ku, Tokyo 108. Tel: (03) 473 3181 Telex: 242 4296

Supplies a wide range of equipment and accessories for use in chromatography as well as data recording and processing devices (see Milton Roy Co, US).

Mitsubishi Chemical Industries Ltd

Mitsubishi Kasei Corporation

5-2 Marunouchi-2-chome, Chiyoda-ku, Tokyo 100. Tel: 03 283 6696/6111 Telex: 24901

Manufactures organic chemicals, polymers and steroids. Carries out extensive research, both applied and basic, at the Mitsubishi Kasei Life Science Institute, Japan, in immobilized enzymes, monoclonal antibodies, cell fusion and recombinant DNA technology as well as continuous fermentation for the production of ethanol and the synthesis of aspartic acid in fixed enzyme or fixed cell systems. Also working on the mechanism of virus transformation of lymphocytes and mass cell culture. Distributes products of Hybritech, US. Developing large scale production of nosiheptide, a growth promoting antibiotic, from a genetically engineered strain of Streptomyces actiosus. Has recently changed name to Mitsubishi Kasei Corp to reflect diversification into biotechnological and pharmaceutical fields as well as electronics and new materials.

Mitsubishi Corp

2-6-3 Marunouchi, Chiyoda-ku, Tokyo 100. Tel: 03 210 2121 Telex: 22222

Has formed partnership with Delta Biotechnology, UK to commercially develop their recombinant human serum albumin, obtained from mass culture of Saccharomyces cerevisiae, in Japan.

Mitsubishi Electric Corporation

Mitsubishi Denki Building 2-3, Marunouchi 2-chome, Tokyo 100. Tel: 03 218 2111 Telex: 24532

Produce a wide range of heavy machinery, electronic, industrial and consumer products. Carrying out research on biosensors and bioelectronics.

Mitsubishi Gas Chemical Co Inc

5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 1000. Tel: 03 283 5000 Telex: 2222624 mgcho

Manufacture industrial chemicals and plastics as well as electronic materials. Has extensive research experience in the area of methanol and methane assimilating organisms and is currently researching bioreactor design for chemical production as well as aspects of recombinant DNA technology and cell fusion for monoclonal antibody production. First product will be a monoclonal antibody against thrombomodulin.

Mitsubishi Heavy Industries Ltd

5-1 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100. Tel: 03 212 3111 Telex: 22443j

Engineering company manufacturing a very wide range of industrial, military and consumer products including aspects of food processing and power systems. Developing bioreactors for the production of chemicals and for food processing. Also developing biomass energy systems including aspects of anaerobic digestion and bioethanol fermentation.

Mitsubishi Kakoki Kaisha Ltd

4-28 Mita 1-chome, Minato-ku, Tokyo 108. Tel: 03 454 4811 Telex: 22624j

Fax: 03 454 1584

Research Department, 2-1 Ohkawa-cho, Kawasaki-ku Kawasaki 210.

Manufacture centrifuges, filter systems, driers and mixers; developing air-lift type reactors and carrying out research on plant tissue culture (meristem and callus systems) and cell fusion. Other areas of interest include anaerobic digestion, liquid chromatography, applied membrane technology and super critical fluid extraction.

Mitsubishi Kasei Institute of Life Sciences

11 Minamiooya, Machida-shi, Tokyo 194. Tel: (042) 726 1211

Carries out basic research in microbial chemistry, biocatalysis, biophysics, cell biology, neurophysiology, pharmacology etc. Also working on structure and function of biopolymers, including protein synthesis and nucleic acid metabolism. This work includes aspects of genetic manipulation, the genetic code and the origin of life. Other areas of research includes studies of plant tissue culture. Results of commercial significance are developed through the Mitsubishi group, Japan.

Mitsubishi Petrochemical Co Ltd

5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100. *Tel:* 03 283 5511 *Telex:* 222 3172

Petrochemical company also producing diagnostics, clinical analysis products and pharmaceuticals. Carrying out research on peptides, hybridomas and monoclonal antibodies, fermentation, and cell culture. Have developed a tryptophan-producing bacterial strain by genetic engineering for large scale production as a major feed additive. Have recently amalgamated three divisions specializing in clinical diagnostics to form Mitsubishi Yuka Bioclinical Laboratories Inc.

Mitsubishi Petrochemical Engineering Co Ltd

13-16 Mita 3-chome, Minato-ku, Tokyo 108.

Tel: 03 456 9081 Telex: 2424884 mpect Fax: 03 456 9119

Engineering and construction company with experience which includes pharmaceutical, environmental control and energy related facilities. Developing bioreactors and systems for downstream processing of biological products.

Mitsubishi Rayon Engineering Co Ltd

3-1 Kyobashi 1-chome, Chuo-ku, Tokyo 104. Tel: 03 281 4929 Telex: 222 288:

Activities include the construction of industrial wastewater, municipal waste and sewage treatment plants. Have also developed a method of producing hyaluronic acid.

Mitsui Engineering & Shipbuilding Co Ltd

6-4 Tsukiji 5-chome, Chuo-ku, Tokyo 104. Tel: 03 544 3131 Telex: 22924j

Biotechnology Research Section, Chiba Laboratory, 1 Yawatakaigandori Ichihara Chiba 290.

Tel: 0436 41 1111

Major engineering and construction company carrying out research on cell fusion and bioreactors based on immobilized yeast.

Mitsui Petrochemical Industries Ltd

Kasumigaseki Building 2-5, Kasumigaseki 3-chome, Chiyoda-ku Tokyo

Tel: 03 580 3611 Telex: 22984j - mipeca

Manufacture polyethylene and other plastics. Carrying out research on plant cell culture, recombinant DNA technology, cell fusion and bioreactors.

Mitsui Pharmaceuticals Inc

Manufactures pharmaceuticals and disinfectants.

Mitsui Toatsu Chemicals Inc

2-5 Kasumagaseki-3-chome, Chiyoda-Ku. Tel: Tokyo 1000 Cables: (03) 593 7366 Fax: 22711

Manufactures agricultural chemicals, pharmaceuticals, industrial chemicals and similar products. Importing genetic engineering materials and other biotechnology-related products into Japan. Has an extensive research programme on recombinant DNA technology, cell fusion and monoclonal antibodies, bioreactive substances, bioreactors for amino acid production, plant cell culture in breeding, as well as on plant protection compounds, antitumour agents and cardio vascular drugs. Produes L-tryptophan and L-phenylaline.

Mitsui & Co Ltd

PO Box 822 2-1 Otemachi-1-chome, Chiyoda-ku, Tokyo. Tel: 03 505 1111 Telex: 22253

Supplies bulk industrial enzymes. One of the world's largest general import and export trading companies. Invests in exploration & development of overseas oil and gas. Producing microbial polysaccharides. Formed Kaneka, Belgium with Kanegafuchi Chemical Industry Co to develop and market proprietary therapeutics.

Miyasaka Brewing Co

2-4-5 Nokata, Nakano-ku, Tokyo. Tel: 03 385 2121

Produce fermented food products.

Miyoshi Oil & Fat Co Ltd

8-12 Midori-3-chome, Sumida-ku, Tokyo. Tel: (03) 634 4451

Produces a wide range of edible oils, fats, fatty acids, glycerol and antifoaming agents, as well as soaps and detergents.

Mizuho Medy Laboratories Inc

6-7 Fujinoki Machi, Tosu City, Saga. Tel: 0942 850303 Telex: 742657

Supplies immunological and biological reagents. Distributor for Sera-Lab.

Mochida Pharmaceutical Co Ltd

1-7 Yotsuya, Shinjuku-ku, Tokyo 160. Tel: (03) 358 7211 Telex: 023 24272

Manufactures hormones, enzymes, cosmetics and medical equipment. Diversifying into areas of industrial chemicals, animal feedstuffs, veterinary drugs, fragrances and flavourings.

Part III **JAPAN**

Morinaga Institute of Biological Science

1-1 Shimosueyashi 2-chome, Tsurumi-ku, Yokohama 230. Fax: 045 571 2193 Telex: 2422954 morika Tel: 045 572 8247

Develop and market cell culture media as well as diagnostic kits for cancer and the isolation of antigens related to cancer. Carrying out research on cell hybridization, antigens, antibodies, growth factors and DNA-hybridization kits.

Naarden International Japan Ltd

PO Box 50, Naka, Yocohama 231. Tel: (045) 662 8671 Telex: 382 2096

Supplies fragrances and flavours. Subsidiary of Naarden International NV, Netherlands.

Nagase & Co Ltd

Konishi Building, 2-2 Chome Honcho Nihonbashi, Chuo-ku Tokyo. Tel: (06) 541 1121

1-29 Itachibori, Minami-dori Nishi-ku, Osaka-shi Osaka

Manufactures and supplies a wide range of enzymes for analytical and pharmaceutical work, as well as bulk industrial products including amylases, amyloglucuronidases, cellulases, isomerases, lipases and microbial proteases.

Nagoya University

Central Laboratory for Clinical Investigation Furocho, Chikusa-ku, Nagoya 464. Tel: (052) 781 5111

Developing enzyme immunoassay with human serum.

Nagoya University

Department of Biochemistry Furocho, Chikusa-ku, Nagoya-shi Aichi. Tel: (052) 781 5111

Studying use of liposomes for drug delivery.

Nakano Vinegar Co

1-11-16 Shimomae, Toda-shi, Saitama.

Produces acetic acid by fermentation.

National Institute of Agrobiological Resources

2-1-1 Kannondai Yatabe-machi, Tsukuba-gun, Ibaraki-ken 305. Tel: 029 756 8155

Investigating interactions between photosynthesis and nitrogen fixation in legume-rhizobial associations. Has also developed technique of image analysis for identifying plant chromosomes. Holds culture collection containing bacteria and fungi for agricultural microbiology research.

National Institute of Hygienic Sciences

Division of Microbiology

1-18-1 Kamiyoga, Setagaya-ku, Tokyo.

Holds culture collection containing bacteria, fungi, including mycotoxin-producing fungi, and yeasts for general, medical and microbiological research including food microbiology.

NEC Corporation

Fax: 3 798 1510

Research Laboratories, 1-1 Miyazaki 4-chome, Miyama-ku Kawasaki Kanagawa 213.

Tel: 044 855 111

Manufacture a wide range of electronic equipment; developing biosensors and bioelectronics.

Nichimen & Co

2 Dojimahama 1-chome, Kita-ku 30, Osaka 530.

Supply polyclonal antibodies against human immunoglobulin and C1 inhibitor, as well as enzyme immunoassay kits for anti-rubella, anti-herpes simplex and anti-thyroglobulin antibodies etc; products of Cordis Laboratories Inc. US.

Nichirei Corporation

23-3 Misaki-cho 3-chome, Chiyoda-ku, Tokyo 101. Telex: 22450 nichirei Tel: 03 237 2101/2208

Research Institute Nichirei Corproation, 52-14 Kumegawa 1-chome, Higashi-murayama-shi Tokyo 189.

Tel: 0423 91 1100

Involved in the processing, freezing, canning and storage of foods. Developing monoclonal antibodies for use in diagnostics as well as carrying out plant breeding activities through its subsidiary the Agrogenetic Corporation, Japan. Current interests include stress tolerance in plants, recombinant techniques, DNA probes for human leucocyte antigen and microorganisms, and biotechnology related to food production and processing.

Nichirin Chemical Industries Ltd

4-320 Senzo, Itami, Hyoga Prefecture 664. Tel: (072) 781 0771

Produces carbohydrates including cellulose, dextrins and soluble starches.

Nichiyu Liposome Co

24-11 Yushima 3-chome, Yushima Hokutu Bldg, Bunkyo-ku Tokyo. Tel: 03 837 1273

Supply high purity lipids and liposome production equipment. Developing liposome-based drug delivery systems and products for the cosmetic industry etc.

Nicolet Japan Corporation

Ryokuchi-Eki Bldg 6th Floor, 1-4 2-chome Terauchi, Toyonaka Osaka-Pref 560.

Tel: 6 863 1550 Telex: 5286162 Fax: 6 863 1096

Distribute analytical instruments including x-ray diffraction systems as well as laboratory computers. Subsidiary of Nicolet Instrument Corp, US.

Nihon Dynatech KK

Halifax Trade Centre Building, 25-5 Nishi Gotanda 7-chome, Shinagawa-ku Tokyo 141.

Supplies instruments and diagnostic reagents for medical and research applications, as well as other engineering services (see Dynatech Corporation, US and Dynatech Diagnostics Inc, US).

Nihon Kodo Co Ltd

3-17 Sobirakicho, Niihama 792. Tel: 0897 33 8822

Supply various kinds of fertilizers and arable soil cultivating agents. Affiliated with Sumitomo, Japan.

Nihon Medi-Physics Co Ltd

4-2-1 Takatsukasa, Takarazuka, Hyogo 665. Tel: 0797 71 4771

Supplies radioactive pharmaceuticals. Affiliated with Sumitomo, Japan.

Nihon Philips Corporation

Shuwa Shingawa Building 7th Floor, 26-33 Takanawa 3-chome, Minato-ku Tokyo 108. Tel: (03) 448 5611

Supplies analytical instruments, including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK). Subsidiary of Philips NV, Netherlands.

Nihon Schering KK

6-64 Nishimiyhara, Yodogawa-ku, Osaka 532. Tel: (06) 392 5671 Telex: 63566

Supplies pharmaceuticals. Subsidiary of Schering AG, Germany.

Nihon Shokuhin Kako Co Ltd

4-1 Marunouchi 3-chome, Chiyoda-ku, Tokyo 100.

Telex: 222 6256 Tel: 03 212 2081

Manufacture corn starches, corn gluten, food grade corn oil, animal feed, starch based sweeteners and pharmaceuticals. Carrying out research on modified starches, dietary fibre, enzymes of starch conversion, nutrient products for clinical use and starch-based sweeteners. Also investigating the use of gene-splicing techniques in relation to amylolytic enzymes and the design of bioreactors for production of malto-oligosaccharides.

Nikka Whisky Distilling Co Ltd

4-31 Minami-Aoyama 5-chome, Minato-ku, Tokyo 107. Tel: 03 498 1005 Telex: 0 242 2066 nikka

Production Research and Development, 967 Matsuyama Masuo, Kashiwa Chiba 277.

Tel: 0471 72 3900

Manufacture whisky and brandy. Carrying out research on recombinant DNA technology and alcoholic fermentations as well as on animal and plant cell culture.

Nikken Chemicals Co

5-4-14 Tsukiji, Chuo-ku, Tokyo.

Tel: (03) 544 8701 Telex: 2524376

Manufactures organic chemicals and pharmaceuticals including antibiotics (gramicidin S) produced by fermentation.

Nikko Chemicals Co Ltd

4-8 Nihonbashi Bakuro-cho 1-chome, Chuo-ku, Tokyo 103.

Telex: 025 22744 Tel: (03) 662 0371

Manufactures vitamins and pharmaceutical products, as well as surfactants for cosmetics.

Nippoh Chemicals Co Ltd

CM Building, Nihonbashi-Muromachi 3-chome, Chuo-ku Tokyo 103. Tel: 03 270 5341 Fax: 03 246 0346

Produce halogens, natural gas and intermediates for use in pharmaceuticals and agrochemicals. Carrying out research on the biochemistry of anaerobic

Nippon Abbott Kabushiki Kaisha

Osaka Centre Building, 68 Kitakyutaromachi 4-chome, Higashi-ku Osaka 541

Tel: (06) 245 0211 Telex: 63525

Supplies pharmaceuticals. A joint venture of Dai Nippon Pharmaceutical Co Ltd, Japan and Abbott Laboratories, US.

Nippon Alcohol Trading Co Ltd

Shinjuku NS Building 4-1, Nishi-shinjuku 2-chome, Shinjuku-Ku Tokyo

Tel: 03 346 3581

Produces ethanol.

Nippon Bio-Rad Laboratories KK

Kita Bldg 1-3-6 Shiba-Daimon, Minato-ku, Tokyo 105. Tel: 03 459 6771 Telex: 34221

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Nippon-DPC Corp

Tampei Nihonbashi Bldg, 3-7-10 Nihonbashi, Chuo-ku Tokyo 103. Tel: 03 278 0252 Fax: 03 281 2829

Developing monoclonal and polyclonal antibody diagnostics, radioimmunoassay kits for fertility, thyroidal and adrenal metabolism, diabetes and allergies etc. Joint venture of Dai Nippon Ink & Chemicals and Diagnostic Products, Japan.

Nippon Eurotherm KK

Sakae Building 14-5, Asagaya-Minami 1-chome, Suginami-ku Tokyo 166. Tel: (03) 315 1626 Telex: 02324016

Manufacture a wide range of automated temperature control, monitoring and alarm systems for industrial plant use.

Nippon Fine Chemical Co Ltd

2-45 Bingo-machi, Higashi-ku, Osaka 541. Tel: (06) 231 4781 Telex: 5227496

Produces a range of fatty acid derivatives, including esters, amides and chlorides, etc.

Nippon Hoechst Co Ltd

3-2 Minamidai-1-chome, Kawagoe City, Saitama Prefecture 350. Tel: (049) 243 1234

A joint venture between Hoechst AG, Germany and Mitsui Petrochemical Industries Ltd, Japan, marketing Hoechst products.

Nippon Kayaku Co

Takahashi Research Laboratories

11-2 Fujimi 1-chome, Chiyoda-ku, Tokyo 102. Tel: 03 237 5111 Telex: 26422 kayachem

Manufactures vitamins, antibiotics and other pharmaceuticals. Carrying out research on cell fusion for monoclonal antibodies and recombinant DNA technology in relation to amino acids and polypeptides. Current interests include immobilized organisms, enzymes and alginates.

Nippon Kogaku KK

Fuji Building, 2-3 Maranouchi 3-chome, Chiyoda-ku Tokyo 100.

Manufactures a wide range of optical microscopes and accessories, including inverted systems for work with tissue cultures, under the trademark of Nikon (see Nikon Inc, US).

Nippon Kokan KK

1-2 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 212 7111 Telex: 222 2811j nkk

Engineering and construction company developing bioreactors for municipal waste water treatment and alternative energy sources.

Nippon Mining Co Ltd

10-1 Toranomon 2-chome, Minato-ku, Tokyo 105.

Tel: 03 582 2111 Telex: 24552j - nimico

Smelting and metal refining company, also produces petrochemicals and electronic products. Has a research programme working on fermentation and enzyme reactions as well as tissue culture.

Nippon Monitor KK

16-13 Nishi-Azahu-4-chome, Minato-ku, Tokyo.

Tel: (03) 499 2215 Telex: 27611

Supplies instruments and reagents for diagnostic laboratories.

Nippon Montedison KK

1-3-2 Aobadai, Meguro-ku, Tokyo 153.

Tel: (03) 462 0551 Telex: 242 3851

Supplies fine chemicals, alcoholic beverages, agrochemicals, etc. Subsidiary of Montedison Spa, Italy.

Nippon Oil Co Ltd

3-12 Nishi-Shimbashi 1-chome, Minato-ku, Tokyo 103. Tel: 03 502 1111 Telex: 27237j nipoil

General Technical Research Laboratory, 8 Chidori-cho, Naka-ku Yokohama 231

Petroleum and petrochemicals company with interests in biotechnology related to metabolism of petroleum hydrocarbons. Carrying out research on recombinant DNA technology, cell fusion and development of bioreactors.

Nippon Oil & Fats Co Ltd

Yurakucho Building 10-1, Yaraku-cho 1-chome, Tokyo 100. Tel: 03 283 7070 Telex: 222 2041j nipoil Fax: 03 283 7120

Manufacture vegetable oil and fat products as well as high purity fatty acids and lecithin.

Nippon Roche KK

Supplies pharmaceuticals, clinical diagnostics, fine chemicals, cosmetics, agrochemicals and vitamins. Carrying out research on fermentations, diagnostics and vitamins including aspects of recombinant DNA technology, cell fusion (both mammalian and microbial) and bioconversions.

Nippon Soda Co Ltd

Shin Ohtemachi Building 2-1, Ohtemachi 2-chome, Chiyoda-ku Tokyo 100.

Tel: 03 245 6201 Telex: 0222 2379 Fax: 03 242 6776/2882

Manufacture agrochemicals, pharmaceuticals and feed additives as well as disinfectants and industrial chemicals. Carrying out research in areas of plant cell culture, cell fusion technology, recombinant DNA technology, enzymes (pro-urokinase) and biological pesticides.

Part III **JAPAN**

Nippon Synthetic Chemical Industry Co Ltd

9-6 Nozaki-cho, Kita-ku, Osaka 530.

Has joint venture with Osaka Municipal Research Institute to develop a synthetic process for production of L-carnitine for pharmaceutical use by action of immobilized yeast enzyme bioreactor on chemically produced

Nippon Uclaf KK

5 Nihonbashi, Muromachi 4-chome, Chuo-ku Tokyo 103. Tel: (03) 241 7731 Telex: 24504

Supplies chemical intermediates for use by the pharmaceutical and agrochemical industries. Subsidiary of Roussel Uclaf, France.

Nippon Wellcome KK

24-13 Nishiju-Ku, Minoh 562, Osaka. Tel: 0727 29 1571 Telex: 0532 4 Telex: 0532 4132

Supplies a wide range of medical and veterinary products, fine chemicals, medicines, vaccines, laboratory reagents, etc, for use in agriculture, industry and the home (see Wellcome Foundation, UK). Affiliated with Sumitomo, Japan.

Nippon Zeon Corp

6-1 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100. Tel: 03 216 1771 Telex: 2224001 nipoze

Life Sciences Development Department, Mita 43 Mori Bldg 13-16, Mita 3-chome Minato-ku Tokyo 108. Tel: 03 769 8623 Tlx: 2224002 nipoze

Manufacture synthetic rubbers, plastics, medical products and speciality chemicals. Carrying out research on DNA synthesis, monoclonal antibodies, AIDS, hepatitis B, Japanese encephalitis, Dengue fever and other vaccines, as well as animal vaccines, vitamins, antibiotics, hormones, amino acids and biologically active peptides and proteins. Also developing plant and animal cell cultures. Has joint venture with Transgene, France and Viral Technologies, US.

Nishinomiya Shuzo Co

4-57 Yokai-cho, Nishinomiya-shi, Hyoto. Tel: 0798 33 4321

Produces sake

Nissan Chemical Industries Ltd

7-1 Kanda-Nishiki-cho 3-chome, Chiyoda-ku, Tokyo 101. Tel: 03 296 8047 Telex: 2223071

Manufacture agrochemicals and speciality products including pharmaceuticals. Carrying out research on recombinant DNA technology in relation to production of hormones including fertility hormones.

Nisshin Chemicals Co Ltd

19-12 Nihonbashi, Koami-cho Chuo-ku, Tokyo 103. *Tel:* (03) 660 3507 *Telex:* 2522401

Produces chlorophyll and vitamins.

Nisshin Flour Milling Co Ltd

19-12 Koami-cho, Nihonbashi Chuo-ku, Tokyo 103. Tel: 03 660 3111 Telex: 0252 2401

Research Centre, 5-3-1 Tsurugaoka, Ohi-machi Iruma Saitama 354

Produce wheat flour, animal feeds, grocery products and fine chemicals and construct engineering plant in these areas of industry. Carrying out research on bioconversions related to food cell fusion for production of diagnostics and animal drugs, gene cloning techniques and embryo transfer.

Nisshin Oil Mills Ltd

23-1 Shinkawa 1-chome, Chuo-ku, Tokyo 104. Tel: 03 555 6923/6843 Telex: 2522234

Central Research Laboratory, 3 Chiwaka-cho 1-chome, Kanagawa-ku Yokohama 221.

Produce edible oils and fats as well as soybean proteins and oil meal. Carrying out research on edible oils and fats as well as soy protein, cell fusion and the design of bioreactors for algal culture for end products.

Nissho Iwai Corporation

30 Imabashi-3-chome, Higashi-ku, Osaka 541. Tel: (06) 209 2111 Telex: 63264

International trader in agrochemicals, fertilizers and similar products. Has an investment interest in the Cetus Corporation US.

Nissin Sugar Manufacturing Co Ltd

14-1 Nihonbashi-Koamicho, Chuo-ku, Tokyo 103. Tel: 03 668 1111 Telex: 252 3151j - cupsug

Research and Development Department, 9-11 Toyosu 4-chome, Koto-ku Tokyo 135

Tel: 03 531 9331

Produces sugar. Has a development programme related to production of oligosaccharides.

Nissui Seiyaku Co Ltd

2-5-11 Komagome, Toshima-ku, Tokyo 170. Tel: (03) 918 8166 Telex: 2722341

Supplies culture media for production of cell lines, tissue culture and bacteria as well as clinical reagents. Subsidiary of Nippon Suisan Kaisha Ltd. Japan.

Nitta Gelatin Inc

418 Futamata Vao-shin Osaka 581.

Has joint venture with Taito Co Ltd to develop a new strain of Streptomyces parvaulus for mass culture to obtain an end product from which collagenase with low protease activity suitable for use in drugs may be separated and purified.

Nitto Chemical Industry Co Ltd

New Marunouchi Building 5-1, Marunouchi 1-chome, Chiyoda-ku Tokyo 100.

Tel: 03 271 0251 Telex: 222 2338j - nittoa

Produce industrial chemicals, fertilizers and catalysts. Developing bioreactors for waste water treatment and use in biosynthetic processes.

Nitto Electrical Industrial Co Ltd

1-2 Shimohozumi 1-chome, Ibaraki, Osaka 567.

Fax: 0726 4679 Tel: 0726 22 2981 Telex: 5332727

Biochemical Research Laboratories, 1-2 Shimohozumi 1-chome, Ibaraki Osaka 567.

Tel: 0726 22 2981

Manufactures plastic materials for electronic industries as well as membrane modules and medical tapes. Developing membrane technologies, drugs for skin delivery systems and biosensors. Carrying out research using recombinant DNA technology on plant cell culture for the production of ginseng, sex pheromone devices for insect control and membrane based bioreactors and separation systems for waste treatment.

Novo Industri (Japan) Ltd

Sakura Building 6th Floor, 3-3 Uchikanda 1-chome, Chiyoda-ku Tokyo 101.

Tel: (03) 295 6767 Telex: 0722 5947 Fax: (03) 233 0470

Markets industrial, analytical and pharmaceutical enzymes (see Novo Industri AS, Denmark). Screening and developing microorganisms producing useful enzymes.

Novo Yakuhin KK

Ogawa Building 5th Floor, 2-11-7 Kanda Nishiki-cho, Chiyoda-ku Tokyo. Tel: (03) 295 1828 Telex: 222 6051

Distributes pharmaceutical products of Novo Industri AS, Denmark (see Novo Laboratories Ltd, UK).

Noyaku Biotechnology

1-8-25 Muromachi, Nihonbashi Chuo-ku, Tokyo. Tel: 03 243 0677

Carrying out research on plant tissue culture.

Ohbayashi Corporation

2-3 Kanda Tsukasa-cho, Chiyoda-ku, Tokyo 101. Tel: 03 292 1111

Telex. 222 4091 obgtok Fax: 03 233 0085

3-4 Kanda Surugadai, Chiyoda-ku, Tokyo 101. Tel: 03 257 6015 Fax: 03 257 1295

Engineering design and construction company with interests including aspects of environmental protection. Developing small scale household sewage and garbage digestion systems.

Okura Shuzo Co Ltd

247 Minamihama-cho, Fushimi-ku, Kyoto 612. Tel: 075 611 0111 Telex: 5422798 okura

Produces saki and other fermented beverages. Carrying out research on cell fusion in yeasts and fungi as well as on plant callus culture, mass cell culture for production of flavours, enzymes etc, and the design of bioreactors for ethanolic fermentations.

Olympus Optical Company Ltd

San-Ei Building 22-2, Nishi Shinjuku-1-chome, Shinjuku-Ku,, Nishi Shinjuku 1-chome, Shinjuku-ku Tokyo.

Manufactures a wide range of optical equipment, including laboratory and medical microscopes, photomicrography and cinematography accessories.

Orgenics-Takara Co

Joint venture between Orgenics, Israel and Takara, Japan to develop a number of products, using recombinant DNA technology and chemical synthesis or bioconversion, for the food industry as well as biological reagents and diagnostic kits.

Oriental Yeast Co

10-11 Kodenma-cho, Nihonbashi Chuo-ku, Tokyo 103. Tel: 03 663 8218 Telex: 2655069 orient Fax: 03 663 8226/8238

Enzyme Development Centre, 4-1 Minamisuita 4-chome, Suita, Osaka 564

Manufactures baker's yeast, bakers materials, animal feed and biochemicals including enzymes, coenzymes, substrates, markers and inhibitors. Products under development include monoclonal antibodies to yeast proteins, antigens, antiserums, serums and other blood products, recombinant DNA technology in relation to yeast, food chemistry and the analysis of biological materials.

Osaka City University

Faculty of Science

3-3-138 Sugimoto, Sumiyoshi-ku, Osaka.

Tel: (06) 692 1231

Investigating yeast-based fermentation of uncooked starchy tubers and roots following treatment with pectic enzymes, amylase, cellulases, glucoamylase, etc. Studying anaerobic digestion of crop residues to produce methane for use as a fuel in production of ethanol, as well as th use of anaerobic sludge as a fertilizer for the starch crop, sweet potato.

Osaka Institute for Fermentation

17-85 Juso-Honmachi 2-chome, Yodogawa-ku, Osaka.

Holds culture collection containing bacteria, fungi, bacterial viruses, yeasts and cell lines for research and commercial use in general, agriculture and industrial microbiology.

Osaka Municipal Research Institute

1-8-50 Morinomiya, Joto-ku, Osaka 541.

Carrying out research on immobilized enzyme reactors. Has joint venture with Nippon Synthetic Chemical Industry Co Ltd to produce L-carnitine by fermentation of a chemically synthesized gammachloroacetic acid ester derived from diketine for pharmaceutical use.

Osaka University

Institute for Protein Research

Yamadaue, Suita-shi, Osaka 565.

Tel: (06) 877 5111

Investigating protein synthesis and genetic structure and studying molecular structure of chromatophores from photosynthetic bacteria.

Osaka University

Faculty of Science

Machikaneyama 1-1, Toyonaku, Osaka 560.

Tel: (06) 856 1151

Studying fermentation, gene structure, protein structure and enzyme mechanisms.

Osaka University

Genetic Technology Group

4-3-12 Nakanishima, Kita-ku, Osaka-shi 530.

Tel: 06 877 5111

Carrying out research on B-cell differentiation factor and other lymphokines as well as production using recombinant DNA technology. Have recently isolated Human Herpes Virus-6.

Osaka University

Institute of Science and Industrial Research

8-1 Mihogaoka, Ibaraki-shi, Osaka 567.

Carrying out research on production of viral vaccines by mammalian cell culture include a vaccine for Varicella.

Otsuka Chemical Co Ltd

Produces a wide range of chemical products, including agricultural chemicals, organic chemicals, flavours and pharmaceutical intermediates. Has a joint venture for the production of interferon with Mochida Pharmaceutical Co Ltd, Japan. Otsuka Assay Laboratories have developed a radioimmunoassay diagnostic kit for detection of cancer antigens in serum in collaboration with Oncomembrane Inc and the Biomembrane Institute, US.

Ozeki Sake Brewing Co

4-9 Zaike-cho, Imazu, Nishinomiya-shi Hyogo. Tel: 0798 33 2311

Manufactures sake.

Pfizer KK

6-21 Nishishinbashi 1-chome, Minato-ku, Tokyo. Tel: (03) 503 0411

Tel: (03) 503 0411

Supplies pharmaceuticals, flavours and fragrances, food additives and related products. Subsidiary of Pfizer Inc, US.

Pfizer Taito Co Ltd

Shinjuku Mitui Building, 2-1 Nishi-Shinjuku 1-chome, Shinjuku-ku Tokyo 160.

Supplies animal health products, pharmaceuticals, feed additives, etc. Products include penicillin derivatives, tetracyclines and polymyxin.

Pharmacia KK

Nagai International Building Annex 12-19, Shibuya 2-chome Shibuya-Ku, Tokyo 150.

Tel: (03) 406 6261 Telex: 2422184 Fax: (03) 486 7894

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectricfocusing and cell studies (see Pharmacia, Sweden).

Protein Research Foundation

Peptide Institute

476 Ina, Minoh-shi, Osaka.

Tel: (072) 729 4121

Carrying out studies on protein biosynthesis and supplies reagents as well as biologically active peptides and enzyme inhibitors.

Provesta Corporation

606 Shin Tokyo Building, 3-1 Marunouchi 3-chome, Chiyoda-ku Tokyo 100.

Markets dried yeast products, alcohol oxidase, bioanalyzers and pheromones. License fermentation and expression technology.

Rhone-Poulenc Japan Ltd

No. 16 Kowa building Annex 9-20, Akasaka 1-chome Minato-ku, Tokyo 107

Supplies pharmaceuticals, industrial and agricultural chemicals and other products of Rhone-Poulenc SA, France.

Rikei Corp

Shinjuku Nomura Bldg, 1-26-2 Nishi-Shinjuku, Shinjuku-ku Tokyo 163. Tel: 03 345 1411

Market computer programmes for simulation of chemical and enzyme catalyzed reactions capable of real-time manipulation.

Part III **JAPAN**

Rohm & Haas Japan KK

Kaisei Building 4th Floor, 8-10 Azabudai 1-chome, Minata-ku Japan. Tel: (03) 583 9461 Telex: 22227 Tel: (03) 583 9461

Supplies ion exchange resins, agricultural chemicals etc. Subsidiary of Rohm & Haas Co, US.

Ryoto Co Ltd

Ryoto Building, 1-30 Shiba 2-chome, Minato-ku Tokyo. Tel: (03) 454 7674 Telex: 24901

Manufactures fatty acid esters of sucrose. Joint venture of Mitsubishi Chemical Industries Ltd and Dai-Nippon Sugar Manufacturing Co Ltd,

Sanki Engineering Ltd

Sanshin Building, 1-4 Yuraku-cho 1-chome, Chiyoda-ku Tokyo 100. Telex: 0222 871 Tel: (03) 502 6111

Head Office: 2-16-10 Imazato, Nagaokakyo Kyoto 617. Tel: 075 951 9321 Tx: 05429902, Fax: 075 951 9329

Manufactures industrial separation and dewatering equipment, including filtration, centrifugation and fluidized bed processing.

Sanko Janyaku Co Ltd

10-6 Iwamotocho 1-chome, Chiyoda-ku, Tokyo 101. Tel: (03) 863 3261 Telex: 265 6084

Supplies diagnostic kits and reagents, biochemicals and other biological products. Agents for York Biologicals International Inc, US.

Sankvo Co Ltd

Fermentation Research Laboratories, 2-58 Hiromachi 1-chome, Shinagawa-ku Tokyo 140. Tel: 03 492 3131 Tlx 29330

Manufactures pharmaceuticals, enzymes, cosmetics, vitamins, veterinary products and agrochemicals. Has research programme in recombinant DNA technology related to production of antibiotics, including cephalosporins as well as antiviral products, including interferon. Has a research and development affiliation with Celltech Ltd, UK.

Sanmatsu Industry Co

35 Shinminato, Chiba-shi, Chiba.

Manufactures enzymes; products include amylase and glucose isomerase.

Sanraku Inc

15-1 Kyobashi 1-chome, Chuo-ku, Tokyo 104. Tel: 03 566 5811 Telex: 2522761 srok

Manufactures potable and industrial spirits, alcoholic beverages, amino acids, nucleotides, enzymes, antibiotics for medical and veterinary use, feed additives and feedstuffs using fermentation. Research is carried out on fermentation methods, as well as production of new antiviral or anticancer agents, including interferon. Has isolated a bacterial strain with high tryptophan production using recombinant DNA technology and is developing a method of tryptophan recovery from fermentation culture.

Sanvo Chemical Industries Ltd

11-1 Ikkyo Nomoto-cho, Higashiyama-ku, Kyoto 605. Tel: 075 541 4311 Telex: 05422110 Fax: 075 551 2557

Manufacture a wide range of chemicals including flocculants and water treatment chemicals, super absorbent polymers and diagnostics. Has a research interest in the production of monoclonal antibodies.

Sanyo Kokusaku Pulp Co Ltd

1-4-5 Marunouchi, Chiyoda-ku, Tokyo 100. Telex: 24279 skpulp Tel: 03 211 3411 Fax: 03 284 1371

Trade in forest products and manufacture pulp, paper and chemicals. Carrying out research on applications of biotechnology to the food, food additives and paper/pulp industries with work on phytochemistry, plant tissue culture and yeast nucleic acids.

Sanyo Shuppan Boeki Co Inc

PO Box 5037, Tokyo International 100-31. Tel: 03 699 3761 Telex: 2524435

Supplies Fourier Transfer IR systems of Spectra-Tech Inc, US.

Sapporo Breweries Ltd

Fax: 03 573 2438

Manufacture beers, wines and non-alcoholic beverages. Carrying out research on brewing technology, wine making, plant genetics and breeding of barley and hops, yeast genetics, flavours, biologically active substances pharmaceuticals, biochemicals and plant protection chemicals. Work includes aspects of plant cell fusion, tissue culture, anther culture and micropropagation of hops as well as use of recombinant DNA technology for microbial strain improvement and the design of better fermentation systems and bioreactors.

Scripps Laboratories Japan Co Ltd

5-3-7 Koishikawa, Bunkyo-ku, Tokyo 112.

Tel: 03 818 7631 Telex: 34945 Fax: 03 818 4453

Supply growth factors for culture media, reagents for enzyme immunoassay, antigens and complement components. Affiliated with Scripps Laboratories, US.

Seikagaku Kogyo Co Ltd

Tokyo Yakugyo Bldg, 9-8 Nihonbashi-Honcho 2-chome, Chuo-ku Tokyo 103

Tel: 03 270 0966 Telex: 78127140

Supply monoclonal and polyclonal antibodies, serums, gamma globulins and immunoglobulins as well as a range of other biological reagents including: beta-glucosidase, thermolysin, agarose, encephalin, poly-L-lysine, avidin, protein A, lectins, vectors and immunohistochemical staining kits; products of Miles Laboratories Inc, US, and glycoconjugates produced by Genzyme, US. Also distributor for Jackson Immunoresearch Laboratories, Promega and ICN Immunobiologicals, US, and UCB Bioproducts, Belgium.

Seiko Instruments and Electronics Ltd

31-Kameido 6-chome, Koto-ku, Tokyo 136. Telex. 262 2410 Tel: 03 682 1111

Manufactures precision instruments. Developing an automated DNA

Sekisui Chemical Co Ltd

4-4 Nishitima 2-chome, Kita-ku, Osaka. Telex: 05236943 Tel: 06 365 2286/2271

Developing diagnostics based on monoclonal antibodies.

Serono Japan Co Ltd

2 Kyoei Kogyo Building 8F, 22-2 Shinsen-cho, Shibuya-ku Tokyo. Tel: (03) 419 1281 Telex: 0242 2339

Supplies diagnostic radioimmunoassay kits and reagents for hormone assays, including novel systems based on magnetic separation techniques that eliminate the need for centrifugation.

SGN Japan

Liaison office

West Wing 13F Kokusai Shin Akasa Bldg 1-20, Akasa 6-chome, Minato-ku Tokyo.

Tel: (3) 589 1551 Telex: 2423815 sgntku Fax: 3 589 1551

Offers engineering services in biotechnology, computer integrated manufacturing etc (see SGN, France).

Shibayama Scientific Co Ltd

11-8-3 chome, Minami-Otsuka, Toshima-ku Tokyo.

Supplies antiserums to human proteins, radial immunodiffusion plates, conjugated antiserums and other clinical reagents and diagnostics.

Shimadzu Corporation

Kawaramachi Nijo Minami, Nakagyo-ku, Kyoto 604. Tel: (075) 251 2811 Telex: 5422 166

R & D Management Department, Nishioji Sanjo, Nakagyo-Ku Kyoto 604. Tel: (075) 811 1111

Manufactures scientific and process instrumentation as well as medical systems. Areas of interest include NMR imaging technology, laser-applied instrumentation, automatic DNA synthesizers and a diagnostic system for clinical chemistry based on an immobilized enzyme sensor.

Shimizu Construction Co Ltd

16-1 Kyobashi 2-chome, Chuo-ku, Tokyo 104. Tel: 03 535 4111 Telex: 252 2373

Institute of Technology, 4-17 Etchujima 3-chome, Koto-ku Tokyo 135. Tel: 03 643 4311

Contract engineering company with experience in biological water treatment and biohazard facilities as well as a knowledge of safety in industrial biological processes.

Shin Nihon Chemical Industry Co Ltd

1-1-1 Uchaisaiwa-cho, Chiyoda-ku, Tokyo 101.

Conducting a joint project with Suntory Ltd and Hitachi Zosen Corp, Japan to develop a bioreactor, based on an immobilized enzyme isolated from Trichoderma sp which accelerates xylobiose formation from xylan, to produce xylobiose on a commercial scale for use in food and cosmetics.

Shin Nihon Jitsugyo Co Ltd

Supplies pharmaceuticals and clinical diagnostics including vaccines, antitoxins, blood fractions, insulins and immunochemical reagents.

Shinkamimura Chemical Co

6381 Uchiyamada, Kaseda-shi, Kagoshima. Produces citric acid by fermentation.

Shin-Etsu Chemical Co Ltd

6-1 Ohtemachi-2-chome, Chiyoda-ku, Tokyo. *Tel*: (03) 242 1211 *Telex*: 24790

Manufactures a wide range of organic and inorganic chemicals, including cellulose derivatives and pheromones.

Shionogi & Co Ltd

12 Doshomachi 3-chome, Higashi-ku, Osaka 541. Tel: 06 202 2161 Telex: 63596 Fax: 06 458 0987

Research Laboratories, 12-4 Sagisu 5-chome, Fukushima-ku Osaka 553. Tel: 06 458 5861

Manufactures antibiotics, vitamins, diagnostics, cosmetics, animal health products and agrochemicals. Carries out clinical tests. Research interests include recombinant DNA technology, antibiotics, antiviral compounds such as interferon, and monoclonal antibodies. Has a collaborative agreement with Eli Lilly & Co, US.

Shiseido Co Ltd

7-5-5 Ginza, Chuo-ku, Tokyo 104. Tel: 03 572 5111 Fax: 03 572 2675

Manufacture cosmetics, fragrances, health foods and related products. Research interests include the production of biologically active substances by fermentation, including hyaluronic acid, recombinant DNA technology, enzyme technology and monoclonal antibodies as well as the identification of new vectors for genetic transfers. Have developed a method of producing biotin using recombinant DNA technology in cooperation with Nippon Zeon, Japan and Transgene, France.

Showa Chemical Co Ltd

Produces citric acid, tartaric acid and lactic acid.

Showa Denko KK

10-12 Shiba Daimon-1-chome, Minato-ku, Tokyo 105. *Tel:* 03 432 5111 *Telex:* 26232.

Produces organic acids, as well as amino acids, by fermentation. In addition manufactures petrochemicals and synthetically produced amino acids such as cysteine. Manufactures analytical equipment for chromatography. Applying recombinant DNA technology, cell fusion and plant tissue culture to development of new products. Has joint ventures with Diamond Shamrock Corp, US and Pechiny Ugine Kuhlmann SA, France.

Showa Shell Sekiyu KK

New Opportunity Development Division, 7-3 Marunouchi 2-chome, Chiyoda-ku Tokyo 100, (03) 214 5391

Major activities are related to import of oil and coal, with a small research activity in fermentation. Interested in joint research projects and acts as a liaison office interacting with Japanese companies for collaboration with laboratories of the Shell Group, UK and Netherlands.

Showa Unox KK

Produces molecular sieves, wastewater treatment equipment, etc. Joint venture of Showa Denko KK, Japan and Union Carbide Corp, US.

Snow Brand Milk Products Co Ltd

13 Honshio-cho, Shinjuku-ku, Tokyo 160. *Tel:* 03 358 2111/2070 *Telex:* 28122j snowtky

Manufacture dairy products and frozen foods. Carrying out research related to pharmaceuticals and health foods including bioreactors and cell fusion for production of erythropoietin as well as host-vector systems.

Software Development Co Ltd

8-12 Shibuya 3-chome, Shibuya-ku, Tokyo 150.

Produces a desk top microcomputer system that provides a genetic engineering workstation with capabilities of accessing the European Molecular Biology Laboratory and Los Alamos DNA sequence databases (see section I - databases and abstracting services). Includes software for amino acid sequence deduction, a homology search and location of restriction enzyme recognition sites.

Somar Corporation

11-2 Ginza 4-chome, Chuo-ku, Tokyo 104. Tel: 03 542 2151 Telex: 252 2971 osrmtk

Manufacture chemicals, electronic equipment and recording media. Research interests include aspects of pulp and paper production including slime control agents as well as aspects of plant tissue culture.

Special Reference Laboratories Ltd

12th floor Shinjuku Daiichi Seimei Bldg, 7-1 Nishi Shinjuku 2-chome, Shinjuku-ku Tokyo 160. Tel: 03 348 0691

Supplies diagnostics. Subsidiary of Fujirebio, Japan.

SRI International

Imperial Tower 9th Floor, 1-1 Uchiswaicho 1-chome, Chiyoda-ku Tokyo 100.

A contract research and consulting organization supplying single client and multiclient studies with an emphasis on the application of biotechnology to industry and business (see SRI International, US).

Stauffer Japan Ltd

Godo Kaikan Building, 3-27 Kioi-cho Chiyoda-ku, Tokyo 102. Tel: (03) 239 0661 Telex: 24262

Supplies a wide range of chemical products, including intermediates for pharmaceuticals and agrochemicals. Subsidiary of Stauffer Chemical Co,

Sumika Agricultural Development Co Ltd

2-7 Yokobori, Higashi-ku, Osaka 541. Tel: 06 204 1241

Design, construct and market agricultural systems and materials. Affiliated with Sumitomo, Japan.

Part III JAPAN

Sumitomo Chemical Co Ltd

Sumitomo Building 5-15, Kitahama, Higashi-ku Osaka 541. Tel: 06 220 3272 Telex: 63823 sumika

2-7-9 Nihonbashi Bldg, Nihonbashi Chuo-ku, Tokyo 103.

Tel: 03 278 7000 Tx: 2224751 sumika

Manufacture industrial chemicals, plastics and rubbers with biotechnological applications in eg reverse osmosis membrane modules and electronic instrumentation. Carrying out research using recombinant DNA technology, cell fusion and monoclonal antibodies, immobilized enzyme bioreactors, plant biotechnology and fermentation for breeding new plant varieties by cloning and plant tissue culture and hybrid rice using chemical hybridizing agents as well as producing secondary metabolites. Also developing cloning and expression of mammalian oxygenases in yeast, human hormones, diagnostics and therapeutics.

Sumitomo Chemical Engineering Co Ltd

13-5 Kudan Kita-1-chome, Chiyoda-ku, Tokyo 102. *Tel:* (03) 230 8400 *Telex:* 0232 4020

Provides a full range of engineering services including consultancy, design, construction and commissioning of chemical plant.

Sumitomo Electric Industries Ltd

Research and Development Department, 1-3 Shimaya 1-chome, Konohana-ku Osaka 554

Produce electrical and fibre-optic systems as well as materials for electronics. Carrying out research on biologically based microelectronics (biochips) as well as biosensors and automated screening systems for monoclonal antibody producing cells. Commercial device based on these systems is to be marketed for use in the pharmaceutical industry and for research.

Sumitomo Heavy Industries Ltd

2-1 Ohtemachi 2-chome, Chiyoda-ku, Tokyo 100. *Tel:* (03) 245 4321 *Telex:* 22264

Research Department, 63-30 Yuhigaoka Hiratsuka-shi, Kanagawa-ken

Tel: (0463) 23 1811

Manufactures process equipment and chemical plant including systems for environmental control. Carrying out research on anaerobic digestion and other biomass energy systems.

Sumitomo Shoji Kaisha Ltd

Manufactures bulk industrial enzymes and vitamins. Products include amylases, amyloglucosidases, cellulases, galactosidases, inulases, pectinases and proteases. Research interests include recombinant DNA technology.

Sunstar Inc

Manufactures cosmetics and related products. Working on the production of interferon and developing colorimetric test kits for bacterial detection.

Suntory Ltd

1-2-3 Moto-Akasaka, Minato-ku, Tokyo 103.

Institute for Biomedical Research, 1-1-1 Wakayamadai, Shimamoto-cho Mishima-gun Osaka.

Tel: 075 962 1661

Manufactures alcoholic beverages, soft drinks and processed food. Carrying out research on antiviral compounds, lymphokine production including gamma-interferon, fatty acid metabolism and use of cell fusion to produce monoclonal antibodies as well as methods of energy efficient ethanol production. Has developed a stable hybridoma for production of human monoclonal antibodies.

Taisho Pharmaceutical Co Ltd

Research Center, Yoshino-cho 1-chome, Ohmiya-shi Saitama 330. Tel: (0486) 63 1111

Manufactures pharmaceuticals and health products. Carries out screening of biological compounds and formulations prior to clinical testing. Carrying out research in genetic engineering of animal cell cultures for production of physiologically active substances as well as monoclonal antibodies.

Taito Co Ltd

48 Fukae-Hama-machi, Higashi-Nada-ku, Kobe 658.

Developing method of mass production of high purity collagenase with low protease activity safe for use in drugs, in joint venture with Nitta Gelatin Inc, Japan.

Takara Shuzo Co Ltd

Nissei Building, Shijo Higashinotoin, Shimogyo-ku Kyoto 600. Tel: 075 241 5180 Telex: 5422127 takara

Manufactures alcohol, distilled spirits, food additives and seasonings based on fermentation processes. Carrying out research on brewing, antibiotics, anti-cancer agents, enzymes from microorganisms, cultivation of mushrooms and production of bioethanol from biomass. Techniques used include tissue culture of plant and animal cells, cell fusion for monoclonal antibodies and recombinant DNA technology. Markets reagents for genetic engineering worldwide; products include restriction endonucleases, DNA modifying enzymes, synthetic DNA (artificial genes) and diagnostic kits.

Takarazuka Research Centre

4-2-1 Takatsukasa, Takarazuka, Hyogo 665. *Tel:* 0797 73 7791

Sumitomo research centre comprising 3 laboratories for pesticides research, biotechnology, and biochemistry and toxicology.

Takasago Perfumery Co Ltd

Manufactures a wide range of organic chemicals and biological products, including pharmaceuticals, biochemicals, enzymes, agricultural chemicals, flavours, food additives and fruit juices.

Takasago Thermal Engineering Co Ltd

2-8 Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101.

Tel: 03 255 8230 Telex: 222 5473 ttetok Fax: 03 251 6122

R & D Center, 3150 Iiyama Atsugi-city, Kanagawa-prefecture 243-02, 0462 48 2752

Design and install heating, ventilation and air conditioning systems including controlled environment systems, clean rooms and containment facilities.

Takatsuki Research Laboratory

2-10-1 Tsukahara, Takatsuki, Osaka 569. Tel: 0726 96 3331

Sumitomo research laboratory for development of advanced electronics and new materials for analytical and separation technology and instrumentation.

Takeda Chemical Industries Ltd

27 Doshomachi 2-chome, Higashi-ku, Osaka 541.

Tel: 06 204 2111 Telex: 63404

Central Research Division, 17-85 Jusohonmachi 2-chome, Yodogawa-ku Osaka 532.

Tel: 06 301 1231 Tlx: 63404

Manufactures pharmaceuticals, organic chemicals, agrochemicals and foods. Fermentation products include amino acids, vitamins, coenzymes, antibiotics, growth substances etc. Carrying out research on recombinant DNA technology, cell fusion and mass culture of mammalian cells in relation to corporate activities as well as the production of alpha and gamma interferon, other lymphokines, and interleukin-2.

Tamonoi Vinegar Co

1-1-32 Kurumanocho-nishi, Sokai-shi, Osaka.

Produces acetic acid by fermentation.

Tanabe Seiyaku Co

Manufactures pharmaceuticals, food additives, amino acids, organic acids, coenzymes, vitamins and enzymes. Developing immobilized enzyme and immobilized cell systems for such products.

Teijin Ltd

1-1 Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100. Tel: 03 506 4035 Telex: 22866

Produces resins for immobilized enzyme systems and has research and development programmes in monoclonal antibody production and the synthesis of biologically active polypeptides. Have developed a method of mammalian cell culture for production of recombinant factor VIII.

Toa Nenryo Kogyo KK

1-1 Hitotsubashi 1-chome, Chiyoda-ku, Tokyo 100. Tel: 03 286 5111 Telex: 222 7055 tonen

Petrochemical company carrying out research on production of microalgae as well as on genetic manipulation and protein engineering. Using genetic engineering techniques to mass produce alpha-tumour growth factor from cancer cells using recombinant E coli for preparation of monoclonal antibodies for treatment of cancer.

Toa Pharmaceutical Co Ltd

2-1-11 Sasazka, Shibuya-ku, Tokyo 151. Tel: 03 375 0511 Fax: 03 375 0539

Research Division, 606 Kondou Tatebayashi, Gunma 374. Tel: 0276 72 4942 Fax: 0276 72 4943

Manufacture, import and export pharmaceutical products and cosmetics and carry out clinical tests. Has a research programme which includes aspects of recombinant DNA technology and production of monoclonal antibodies.

Toagosei Chemical Industry Co Ltd

14-1 Nishi-Shimbashi 1-chome, Minato-ku, Tokyo 105. Tel: 03 597 7215 Telex: 222 3915 tgktok Fax: Fax: 03 597 7217/7218

Manufacture a wide range of inorganic and organic chemical products. Carrying out research on fermentation processes and on the use of recombinant DNA technology in the areas of pesticides and pharmaceuticals. A toxic protein produced by a type of Bacillus thuringiensis has been shown to increase the effectiveness of anti-cancer agents

Tohoku University

Faculty of Agriculture

Tsutsumidoriamemiya 1-1, Sendai 980.

Tel: (022) 227 6200

Researching into plant genetics and breeding.

Tokuyama Soda Co Ltd

4-5 Nishi-Shimbashi 1-chome, Minato-ku, Tokyo 105. Tel: (03) 597 5055 Telex: 222 3258 Fax: (03) 597 5146

Produce a wide range of organic and inorganic chemicals. Carrying out research on production of fine chemicals by combined synthetic and biological methods as well as the production of diagnostics, monoclonal antibodies and immune technology.

Tokyo Institute of Technology

Laboratory of Resource Utilization

4259 Nagatsuta, Midori-ku, Yokohama 227.

Tel: (045) 922711 Telex: 2466360

Studying the economic and technical feasibility of fuel alcohol production from sugar and starch crops in South-East Asia.

Tokyo Kasei Kogyo Co Ltd

Supplies organic reagents for DNA and RNA synthesis, including phosphorylating agents, protecting and deprotecting agents, coupling agents, nucleosides and reagents for solid phase synthesis of oligonucleotides

Tokyo Rikakikai Co Ltd

2 Toei Building 10F 4-chome Muromachi, Nihonbashi, Chuo-ku Tokyo

Tel: 03 245 0481 Telex: 2228135

Manufacturers of laboratory apparatus, including rotary and flash evaporators, peristaltic pumps, counter current chromatographic equipment and laboratory stirrers.

Tokyo University

Institute of Applied Microbiology

1-1-1 Bunkyo-Ku, Tokyo 113.

Tel: (03) 812 2111

Studing mechanism of action of beta-lactam compounds such as penicillins and cephalosporins, gene manipulation in B subtilis and E coli, genetic analysis of T4 phage and control of sporulation in B subtilis. Investigating microbial transformation of steroids, oxidative fermentation of hydrocarbons, structure and mechanism of action of amylase, industrial sewage treatment and formation of floc. Also studying microbial lectins, antibiotics effective against plant pathogens, antibiotic structure, enzyme regulation in yeast grown in chemostat culture and ion construction by artificial biomembranes.

Toray Engineering Co Ltd

4-18 Nakanoshima 3-chome, Kita-ku, Osaka 530. Tel: 06 448 5151 Telex: 0524 8249j - tekos

Design and construction company with experience which includes waste water treatment, membrane separation and anaerobic digestion.

Toray-Fuji Bionics

9-14 Nishiki, 2-chome Nerima-ku, Tokyo 176. Telex: 34528

Supplies immunological and biological reagents. Distributor for Cistron Biotechnology, US.

Toray Industries Inc

Toray Building, 2-2 Muromachi Nihonbashi, Chuo-ku Tokyo 103. Tel: 03 245 5111 Telex: 22673 Telex: 22673

Manufactures synthetic fibres and tartaric acid, as well as fibroblast interferon. Carrying out research and development in relation to the use of recombinant DNA technology for production of interferons, amino acids and prostaglandins. Developing diagnostics, DNA probes, enzymes, membrane technology and therapeutics.

Toshiba Corp

Water & Sewage Treatment Systems Section 3

1-1-1 Sibaura, Minato-ku, Tokyo 105.

Tel: 03 457 4442

Design and construct waste water and effluent treatment plant. Member of the Aquarenaissance Research Association, Japan.

Tosoh Corp

formerly Toyo Soda Manufacturing Co Ltd

Tosoh Building 7-7, Akasaka 1-chome, Minato-ku Tokyo 107. Tel: 03 585 3316/586 9145 Telex: 24475/2423137 tsktky Fax: 03 587 6986

Manufactures inorganic and organic chemicals and is extending activities in speciality products through increased research spending in areas of recombinant DNA and cell fusion technology, immunoscience, enzyme chemistry, fermentation engineering and separation technology as well as diagnostics based on monoclonal antibodies, biosensors, DNA probes and stevioside. Also produce HPLC equipment and an automated bioluminescence analyzer.

Toto Ltd

2-8-1 Honson, Chigasaki-shi, Kanagawa 253. Tel: 0467 52 5135

Manufacture systems for water and effluent treatment. Member of the Aquarenaissance Research Association, Japan.

Toyama Chemical Co Ltd

2-5 Nishi Shinjuku-3-chome, Shinjuku-ku, Tokyo 160. Tel: (03) 348 6611 Telex: 232 3150

Manufactures antibiotics. Carrying out research and development of new fermented pharmaceuticals, including interferon produced using recombinant DNA technology.

Toyo Engineering Corporation

2-5 Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100. Fax: (03) 593 0749 Tel: (03) 581 6311 Telex: 2223344

Manufactures and constructs chemical plant, including fermentation plant for chemical, pharmaceutical and food industries. Carrying out research on saccharification of cellulose, ethanol production, anaerobic digestion, production of single cell protein from fish processing wastes and the separation and purification of biologically active substances.

Part III JAPAN

Toyo Jozo Co

5-8 Shibaura-4-chome, Minato-ku, Tokyo 100. *Tel*: 03 454 7511 *Telex*: 242 3290

6-32-1 Mifuku Ohito-cho, Tagat-gun, Shizuoka-ken 410-23

Manufactures a wide range of fermentation products; including alcoholic beverages, amino acids, industrial and diagnostic enzymes using immobilized cells, antibiotics, animal feedstuffs and food products. Particular interests are continuous fermentation methods, development of antibiotics produced by fermentation and biosensors. Using recombinant DNA technology to develop enzymes and interferons. Has developed an enzyme cycling reaction to measure creatinine concentrations in blood and urine.

Toyo Menka Kaisha Ltd

Kokusai Shin-Akasaki Building, 14-27 Akasaki-2-chome, Minato-ku Tokyo.

Tel: (03) 588 7559 Telex: 22421

Developing biologicals, veterinary products, clinical diagnostics etc, using recombinant DNA and other molecular biology techniques. Associated with Inveresk International Ltd, UK.

Toyo Roshi Kaisha Ltd

7-3 Chome Nihinbashi, Honcho, Chuo-ku Tokyo.

Manufactures laboratory equipment, including temperature gradient incubators for cell culture, and fraction collectors.

Toyobo Co Ltd

2-8 Dojima-Hama 2-chome, Kita-ku, Osaka 530. Tel: 06 348 3398 Telex: 63465 toyobo

Manufacture textiles and plastics. Products include hollow fibre membranes and biochemicals. Carrying out research on biosensors, clinical analyzers, enzymes, research biochemicals and therapeutics as well as membrane technology.

Travenol Pacific Ltd

Supply immunological and biological diagnostic kits including radioimmunoassays for gonadotropin sub-units, cortisol, human immunoglobulins, insulin, parathyroid hormones, prolactin, thyroid stimulating hormone etc.

Tsukuba University

Institute of Biological Sciences

Sakura Mura, Ibaraki 305.

Tel: (0298) 53 2111

Shimoda Marine Research Centre, Shimoda 5-10-1, Shizuoka 415. Tel: (05582) 2 6605

Carrying out studies on protein structure and synthesis. Also studying culture and photosynthesis related to productivity in marine algae.

Tsukuba University

Sakura Mura, Niihiri-gan, Ibaraki 305. Tel: 53 4659 Telex: 3652580

Developing a two-phase anaerobic digester for production of biogas (methane) from agricultural wastes and residues. High-rate systems are used for production of volatile acids in the first fermenter, with methanogenesis occurring in the second stage. Effluent is discharged to an algal pond. Gas is scrubbed and used to power an internal combustion engine for generation of electricity.

Ube Industries Ltd

Pharmaceuticals Development Group

1-12-32 Nishi-Honmachi, Ube-ku, Yanaguchi 755.

Tel: 836 31 1111 Tx: 24318

Manufactures chemicals, including fine chemicals, as well as carrying out engineering of industrial plant. Developing pharmaceuticals, agrochemicals and diagnostics using techniques of monoclonal antibodies and plant cell culture as well as working on new biosensors. Projects include research on superoxide dismutase and the development of an in vitro monoclonal antibodies test kit for toxins in shell fish responsible for food poisoning in collaboration with Tohoku University.

Ueda Chemical Co

1-2-6 Takayanagi, Neyagawa-shi, Osaka.

Manufactures enzymes including cellulose, amylase and proteinase.

Unitika Ltd

68 Kitaykutaro-machi 4-chome, Higashi-ku, Osaka 541. Tel: 06 281 5021 Telex: 63401 Fax: 06 281 5563

Produces synthetic fibres and textiles. Developing thermophilic enzymes, thermostable clinical diagnostic reagents and monoclonal antibodies as well as bioreactor systems for enzymic synthesis of peptides.

Veritas Corporation

Supplies immunochemicals, purified blood fractions, animal blood products and animal tissues. Distributor for One Lambda, US.

Wakamoto Pharmaceutical Co Ltd

Manufactures ethical drugs and other pharmaceutical products. Has interests in the application of new technologies in food-technology, agriculture and chemistry. Carrying out research on biological materials (urokinase, urokallidinogenase, galactosidase and lactic acid bacterial preparations) as well as digestive enzymes and the development of bioreactors (based on thermostable beta-galactosidase cloned into B subtilis, and proteinase). Also developing ELISA diagnostics, monoclonal antibodies and animal cell culture techniques.

Wako Pure Chemicals Industries Ltd

5-13-4 Nihonbashi Honcho, Chuo-ku, Tokyo 103.

Tel: 03 270 8241 Tx: 29709

Manufactures fine chemicals and supplies monoclonal antibodies and other immunological and biological reagents. Distributor for Advanced Magnetics and Jackson Immunoresearch Laboratories, US, Immunotech, France, Janssen Life Science Products, Belgium and Serotec, UK.

Waseda University

Shinjuku-Ku, Tokyo 160. *Tel*: (03) 209 3211

Studying protein structure and synthesis.

Westfalia Separator KK

Supply centrifuges and cell harvesters.

Whatman KK

Swire House, 14 Ichibancho, Chiyoda-ku Tokyo 102.

Tel: 03 230 9101 Telex: 22248 Fax: 03 221 7957/230 9288

Distributor for filtration and chromatography products of Whatman International.

Wyeth (Japan) Corporation

Supplies antibiotics, hormonal products and other ethical drugs; products of American Home Products Corp, US.

Yakult Honsha Co Ltd

1-1-19 Higashi-Shinbashi, Minato-ku, Tokyo 105.

Tel: 03 574 8960 Telex: 2523950 yakult Fax: 03 574 7049

Develop and supply bioreactors for mass culture of recombinant microorganisms as well as collagenase.

Yamanouchi Pharmaceutical Co

5 Nihonbashi Honcho 2-chome, Chuo-ku, Tokyo 103.

Tel: 03 960 5111 Telex: 0222 2648

Produces antibiotics, diagnostics and other pharmaceutical products. Carrying out product development and pre-clinical trials as well as research on recombinant DNA technology, DNA probes and fermentation systems.

JAPAN Part III

Yamasa Shoyu Co Ltd

10-1 Araoicho 2-chome, Choshi, Chiba-ken 288.

Tokyo office: 23-8 Kakigara-cho 1-chome, Nibonbashi, Chuo-ku, Tokyo 103

Tel: 03 688 3171 Tlx: 2523131

Manufactures fermented food products and additives including nucleosides and other seasonings. Also researching into monoclonal antibodies, immobilized cells and immobilized enzymes as well as radioimmunoassay based diagnostics and kits. Other interests include anti-cancer agents, anti-viral compounds and interferon inducers as well as the production of nucleic acid related pharmaceuticals.

Yamato Scientific Co Ltd

Supply a wide range of general laboratory equipment including incubators, autoclaves, water baths, freeze dryers, tissue homogenizers, sterilizers, water stills and protein separation equipment.

Yanmar Diesel Co Ltd

1-32 Chaya-machi, Kita-ku, Osaka 530. Tel: 06 372 1111 Telex: 63436j

Technical Center, 16 Kamata Emmyoji, Oyamazaki Kyoto. Tel: 075 957 3311 Tlx: 0542 8018j yanmar

Manufacture internal combustion engines; developing systems for use on biogas, including combined heat and power systems, as well as engines which will run on biomass derived fuels such as vegetable oils and ethanol.

Yodogawa Pharmaceuticals Co Ltd

3-1-21 Utajima, Nishi-yodogawa-ku, Osaka 555. *Tel*: 06 473 0331

Supplies pharmaceuticals and pharmaceutical intermediates. Affiliated with Sumitomo, Japan.

Yokoi Vinegar Co

3-2-12 Hirano, Koto-ku, Tokyo. *Tel*: 03 642 1211

Produces vinegar.

Yoneyama Yakuhin Kogyo Co Ltd

Manufactures amino acids, biochemical reagents and technical chemicals.

Yoshitomi Pharmaceutical Industries Ltd

Manufactures pharmaceuticals and insecticides. Carrying out research using recombinant DNA technology and cell fusion for development of chemotherapeutics.

Yuki Gosei Kogyo Co Ltd

Kanemesa building 17-4, Kyobashi 2-chome, Chuo-ku Tokyo 104. Tel: (03) 567 5481 Telex: 2523860

Manufactures vitamins, amino acids and their derivatives as well as flavours and food additives. Carrying out research on methods for detection and analysis of nucleic acids, as well as the use of enzymes in industrial synthesis (biocatalysts) and the use of recombinant DNA technology.

THE NETHERLANDS

ACF Chemiefarma NV

Postbus 5, Straatweg 2, NL-3600 A Maarssen. Tel: 030 45 29 11 Telex: 47751

Produces both inorganic and organic fine chemicals as well as pharmaceutical intermediates, including sulphonamides, lignin derivatives (vanillin) and albumins.

Agricultural University

Department of Virology

De Dreijen 3, NL-6703 BC Wageningen. Tel: 08370 89111

Undertaking isolation and purification of viruses and studying virus structure. Developing methods of mass production of pharmaceutical proteins using host insects or insect cells infected with trasformed baculovirus. Also studying ways of improving baculovirus as a biopesticide by introducing toxin or hormone genes.

Agricultural University

Department of Biotechnology NL-6703 BC Wageningen. Tel: 08370 833 39

Undertaking studies on anaerobic digestion of farm wastes.

Agricultural University

Department of Food Science

rue de Dreyen 12, NL-6703 BC Wageningen. Tel: 08370 828 88

Carrying out studies on saccharification of beet pulp and potato fibre using commercial pectolytic and cellulolytic enzymes, including studies using hollow fibre membrane reactors.

Agricultural University

Department of Soils

rue de Dreyen 3, NL-6703 BC Wagenigen.

Tel: 08370 823 37

Studying plant nutrition and nitrogen metabolism.

Agricultural University

Department of Entomology

PO Box 8031, NL-6700 EH Wageningen. Tel: 08370 840 75 Telex: 45015

Carrying out research on biological control and integrated pest management against whitefly in greenhouses.

Agricultural University Wageningen

Department of Biochemistry

PO Box 9101, NL-6700 HB Wageningen. Tel: 08370 82866

Carrying out a programme of research on gene cloning including enzyme genes and the construction and biochemical characterization of specific mutated enzymes including para-hydroxy benzoate hydroxylase from Pseudomonas fluorescens.

Agricultural University Wageningen

Laboratory of Microbiology

Wesselink van Suchtelenweg 4, Wageningen.

Holds culture collection of bacteria, fungi, bacterial viruses and yeasts as well as special collections of Rhizobium, Frankia and coryneform bacteria for general and agricultural microbiology research and teaching.

AKZO NV

Produces a wide range of chemicals, including specialities used in synthesis and fine chemicals, such as fatty amines, fatty acids, surface-active agents and gluconates. Also produces inorganic and petrochemical-based products. Manufactures and distributes pharmaceuticals and enzymes (see Diosynth BV and Organon BV, Netherlands).

Alfa Laval Industrie BV

Zonnebaan 1, NL-3606 CG Maarssenbroek. Tel: 030 468 211 Telex: 40918

Postbus 1020, NL-3600 BA Maarssen

Supplies separation and dewatering equipment, including decanter centrifuges, centrifugal separators and heat exchangers, cell disruptors, laboratory and pilot scale fermenters, reverse osmosis and ultrafiltration systems of Alfa-Laval AB, Sweden.

Amical BV

Kayserdijk 37, NL-7332 AH Apeldoorn. Tel: 055 33 32 23 Telex: 49641

Produces adhesives based on starch, carboxymethylcellulose and methylcellulose.

Amicon BV

Mechelaarstraat 11, NL-4003 RE Oosterhout. Tel: 01620 56155 Telex: 54152

Supplies ultrafiltration, microfiltration and membrane separation equipment, affinity chromatography media and columns etc; products of Amicon Corp, US.

Amstelstad BV

Dennenlaan 34, NL-1161 CR Zwanenburg. Tel: 02907 34 51 Telex: 844-12028

Postbus 9100, NL-1006 AC Amsterdam

Supplies a wide range of biochemicals, reagents, enzymes and equipment including bioreactors for cell culture, downstream processing including membrane technology and ultrafiltration, research and clinical diagnostics, monoclonal antibodies etc, as well as fibroblast interferon for research purposes (see Flow Laboratories Inc US). Also offer consulting services. Distributor for Dakopatts, Denmark, Westfalia Separator AG, Germany and Advanced Magnetics, FMC Corporation Bioproducts and Southern Biotechnology Associates, US.

Amsterdam Free University

Department of Biochemistry

De Boelelaan 1087, NL-1081 HV Amsterdam. Tel: 020 548 5606

Carrying out fundamental research on the molecular biology of yeast using molecular genetic and recombinant techniques with particular reference to the biosynthesis of ribosomes and the optimization of specific protein yields. Part of the Biotechnology Amsterdam group.

Amsterdam Free University

Biological Laboratory

De Boelelaan 1087, NL-1081 HV Amsterdam. Tel: 020 548 2426

Carrying out research into the relationship between biological productivity and the energy balance in microbial cells, with particular reference to the regulation of efficiency of oxidative phosphorylation during aerobic or anaerobic electron transport in Bacillus species. Also investigating the synthesis of secondary metabolites using Petunia cells and cell culture, cytoplasmic inheritance of herbicide and pathogen resistance and male sterility. Part of the Biotechnology Amsterdam group.

THE NETHERLANDS Part III

Amsterdam University

Biotechnology Centre Department of Chemistry

BCP Jansen Instituut, Plantage Muidergracht 12, NL-1018 TV Amsterdam.

Tel: 020 525 9111

Carrying out basic research on the molecular biology of yeast including the study of mitochondrial DNA and protein translocation across membranes, microbial carbohydrate metabolism and end-product inhibition in fermentation.

Amsterdam University

Biotechnology Centre

Department of Electron Microscopy & Molecular Cytology, Plantage Muidergracht 14, NL-1018 TV Amsterdam. Tel: 020 525 9111

Carrying out basic research on biological membranes, bio-films and bacterial cell division.

Amsterdam University

Department of Microbiology

Nieuwe Achtergracht 127, NL-1018 WS Amsterdam.

Undertaking studies on behaviour of microorganisms in continuous chemostat culture, regulation of production of cell biomass and secondary products by nutrient limitation.

Amsterdam University

Department of Biopharmacy

Roetersstraat 1, NL-1018 WS Amsterdam.

Tel: 522 23 00

Carrying out research on toxicology and metabolism of alkaloids.

Amsterdam University

Biotechnology Centre

Department of Chemical Technology, Nieuwe Achtergracht 166, NL-1018 WV Amsterdam.

Tel: 020 525 9111

Carrying out research on fixed film anaerobic digestion processes.

Amsterdam University

Biotechnology Centre

Department of Plant Physiology, Kruislaan 318, NL-1098 SM

Tel: 020 525 9111

Carrying out research on cell wall structures in microorganisms of

industrial interest.

Amsterdam Valve & Fitting BV

Bouwerij 75, NL-5 XW Amstelveen. Tel: 020 470231 Telex: 18256

Postbus 1117, NL-1117 ZL Schiphol Oost

Supplies fermenters and bioreactors, centrifuges, separation equipment and laboratory equipment.

Andersen Samplers BV

PO Box 177, NL-1130 AD Volendam. Tel: 02993 67838 Fax: 02993 67249

Supply filters, particle analyzers and pumps.

Applied Biosystems

Buizenwerf 93, NL-3063 AB Rotterdam. Tel: 104 523 511 Telex: 84426249

Distributor for Applied Biosystems, US.

Applied Science Europe BV

Postbus 1149, NL-3260 AC Oud Beijerland. Tel: 01860 48 22 Telex: 21676

Supplies chromatography products, biochemicals, standards, reagents, separation media etc, for gas, liquid, high performance liquid and thin layer chromatography as well as reagents for derivatization.

Applikon Dependable Instruments BV

De Brauwweg 13, NL-3125 AE Schiedam. Tel: 010 462 18 55 Telex: 26302 aplor

Telex: 26302 aplon Fax: 010 437 9648

Postbus 149. NL-3100 AC Schiedam

Supplies a range of laboratory, pilot plant and production scale fermenters and instrumentation suited to cell culture and continuous fermentation with sensors for temperature, antifoam, pH/redox, dissolved oxygen and turbidity, and a membrane sampling device. Developing uplift bioreactors for shear-sensitive cultures.

APV Gaulin International SA

PO Box 58, 's-Gravelandseweg 84, NL-1200 AB Hilversum. Telex: 43860 Fax: 035 18047 Tel: 035 12645

Manufacture a complete line of lab-scale, pilot plant and production-size cell-rupture homogenizers in range 20-50 ml to 10 000 l/h.

APV Nederland BV

Pampuslaan 126, NL-1382 JR Weesp. Tel: 02840 14322 Telex: 12042

Postbus 98, NL-1380 AB Weesp

Supplies fermentation plant, bioreactors for cell culture, computerized reactor control and data processing systems, homogenizers, equipment for ultrafiltration and reverse osmosis, drying, sterilization and heat exchange.

Avebe BV

Beneden Oosterdiep 27, NL-9641 JA Veendam.

Tel: 05987 69111 Telex: 53586

Postbus 15, NL-9640 AA Veendam

Produces potato starch, glucose and glucose syrups, starch derivatives and related products for the food, pharmaceutical, paper and textile industries, as well as animal feed products and polyurethane raw materials.

Beecham Farma BV

Sportlaan 198, NL-1185 TH Amstelveen. Tel: 20 45 98 01 Telex: 15192

Manufactures and distributes pharmaceutical products of Beecham Pharmaceutical Co Ltd, UK.

Bert Versteeg-Veetech BV

Zuiddijkweg 4, NL-4315 PC Dreischor.

Supplies bioreactors. Distributor for Anglicon Instruments, UK.

Bio-intermediair BV

Turftorenstraat 12, NL-9712 BP Groningen.

Tel: 050 13 4100

Postbus 454, NL-9700 AL Groningen

Produces monoclonal antibodies under contract using an in vitro system to meet pharmaceutical quality requirements as well as reproducible composition and concentration. Offers consulting services in the development of bioreactors, fermentation and downstream processing and ultrafiltration.

Bio-Rad Laboratories BV Nederland

Ceylonlaan 6, NL-3526 AD Utrecht.

Tel: 030 881141 Fax: 030 893914 Telex: 70942

Postbus 8144, NL-3503 RC Utrecht

Supplies materials, instruments, apparatus and reagents for separation sciences, clinical diagnosis and analysis (see Bio-Rad Laboratories, US).

Biocent BV

Heereweg 441b, NL-2161 DB Lisse. Tel: 02522 1 74 33 Telex: 4189 Fax: 02522 31101 Telex: 41898

Postbus 280, NL-2160 AG Lisse

Supplies equipment for gel electrophoresis including field inversion systems.

Bioproducts for Science Inc

PO Box 167, NL-3700 AD Zeist. Tel: 03439 1646 Telex: 40312

Supplies animal serums, growth factors and research monoclonal and polyclonal antibodies as well as offering services in custom designed ascites production. Distributor for Bioproducts for Science, US.

Biores BV

PO Box 260, NL-3440 AG Woerden.

Tel: 03480 22384 Telex: 73454 vtl Fax: 03480 22884

Manufactures molecular biologicals including cloning vectors, Thermus aquaticus (Taq) DNA polymerase, nucleases, restriction endonucleases and reverse transcriptase, markers, linkers, DNA sequencing reagents and electrophoresis equipment.

Biotechnology Amsterdam

Sarphatistraat 133, NL-1018 GC Amsterdam. Tel: 020 5255417

Carrying out basic research in areas of plant biotechnology, the production of monoclonal antibodies, enzymology and optimization of fermentation processes using yeast and bacteria. A formal collaboration between the Vrije Universiteit Amsterdam and the Universiteit van Amsterdam involving departments of biochemistry, molecular cytology, plant physiology, chemical technology and molecular biology.

Biotechnology Delft-Leiden

Nonnensteeg 3, NL-3211 VJ Leiden. *Tel*: 071 275065

Carrying out research in areas of environmental biotechnology (removal of sulphur and nitrogen from waste waters and coal as well as fermentation of solid wastes); computer programming of reactor processes; bioreactor design and downstream processing for recovery of alcohols and enzymes; production of alkaloids by plant cell cultures; physiology and genetics of yeast; studies on redox-enzymes and incomplete microbial oxidations. A joint programme between Delft University of Technology and Leiden University.

RMS

Postbus 78, NL-5080 AB Hilvarenbeek. Tel: 04255 2981

Supply immunological reagents (see Protos Laboratories, US).

Boehringer Mannheim BV

Postbus 1007, NL-1300 BA Almere. Tel: 03240 949 11 Telex: 70991

Supplies a wide range of fine chemicals and reagents for research and analysis, including enzymes, immunochemicals, antibodies, enzymes and biochemicals for molecular biology (see Boehringer Mannheim GmbH, Germany).

Bogena BV

Postbus 150 Sluisweg 2, NL-145 PE Waalwijkb, 6835.

Tel: 04160 369 92 Telex: 35018

Produces veterinary products, animal feed stuffs and pesticides; products of Central Soya Inc, US.

Bronkhorst High Tech BV

Nijverheidstraat 1a, NL-7261 AK Ruurlo. Tel: 057 352 929 Telex: 04449066 hitec

Supply equipment for fermentation and biogas and landfill gas control as well as membrane technology including cross flow filtration.

Bruker Spectrospin NV

Bruynvisweg 18, NL-1530 AB Wormer. Tel: 075 28 52 51 Telex: 19197

Supplies chromatographic systems and spectophotometers (see Bruker AM, Germany).

Brunschweig Chemie BV

Postbus 70213, Butaanweg 8, NL-1007 KE Amsterdam. Tel: 02011 31 33 Telex: 13189 brun

Supplies research and diagnostic reagents and fine chemicals, including growth factors and hormones for culture of mammalian cells. Also markets enzymes, defined sequence oligonucleotides, linkers and other material for recombinant DNA research. Supplies kits for radioimmunoassays. Agent for Collaborative Research Inc, Vector Laboratories, Southern Biotechnology Associates and Jackson Immunoresearch Laboratories, US.

Campro Benelux

Box 2, NL-3920 DA Elst.

Supply immunological reagents; products of Cordis, US and Radioassay Systems Inc, US.

Centocor-Europe BV

PO Box 251, NL-2300 AG Leiden.

Tel: 071 15 84 44

Supply human hybridomas and monoclonal antibodies for diagnostics and therapeutics. Subsidiary of Centocor, US.

Centraal Proefdierenbedrijf/Harlansprague Dawley

Woudenbergsewg 55, NL-3711 AA Austerlitz. Tel: 03439 1646 Telex: 40312

Postbus 167, NL-3700 AD Zeist

Supply laboratory animals as well as immunological products including animal serums, growth factors (epidermal, nerve and fibroblast), research polyclonal and monoclonal antibodies including conjugated products. Affiliated with Bioproducts for Science Inc, US.

Central Bureau for Mycology

Centraalbureau voor Schimmelcultures (CBS)

Oosterstraat 1, Postbus 273, NL-3740 AG Baarn.

Tel: 02154 11841

Major collection of bacteria, fungi and yeast and one of the four reference collections of actinomycetes for agricultural, industrial, medical, veterinary and insect microbiology research and teaching. Carries out both microbiological research and collection work. Offers supply of cultures as well as services for identification, contract research and patent deposit.

Central Culture Collection

Centraalbureau voor Schimmelcultures (CBS)

Oosterstraat 1, Postbus 273, 3740 AG Baarn.

Tel: 02154 11841

Supplies cultures and acys as a patent laboratory for cultures of fungi, yeasts and actinomycetes.

Central Institute of Nutrition

Utrechtesweg 48, NL-2740 AC Zeist.

Tel: 03404 184 11

Studying meat proteins, protein metabolism, amino acids, flavours and aromatic compounds.

Central Institute of Virology

Houtribweg 39, Lelystad. Tel: 03200 268 14

Carrying out purification and culture of viruses for vaccine production. Assessing methods for detection of virus disease, using immunoanalysis. Studying virus disease in cattle, pigs, poultry etc.

Central Lab of Netherlands Red Cross Blood Transfusion Service

Immune Reagents Department

Postbus 9190, NL-1006 AD Amsterdam.

Tel: 0205 12346

Supplies immuno reagents and blood fractions.

Central Laboratory of Netherland Red Cross Blood **Transfusion Service**

Department of Immune Reagents

PO Box 9190, NL-1006 AD Amsterdam.

Tel: 020 51 232 46

Supplies reagents for blood typing, as well as immune reagents against human serum proteins

Cerestar BV

formerly CPC Benelux BV

Postbus 7080, NL-3502 KB Utrecht.

Tel: 030 952911 Telex: 47983

Produces starches and glucose syrups.

Chemconserve BV

Limpergstraat 6, Rijswijk ZH.

Tel: 070 907760 Telex: 32582 chemc Fax: 070 907578

PO Box 566, NL-2280 AN Rijswijk ZH

Involved in disposal and utilization of chemical wastes.

THE NETHERLANDS Part III

Chemie Combinatie Amsterdam CV

Arkelsedijk 46, NL-4206 AC Gorinchem. Tel: 01830 211 55 Telex: 23615

Produces lactic acid, lactates and sugar alcohols (sorbitol, manitol), as well as fatty acid esters.

Chrompack International BV

Postbus 8033, Kuipersweg 6, NL-4330 EA Middleburg. Tel: 01180 11251 Telex: 37852

Manufactures columns and accessories for chromatography (see Chrompak, US).

Clean Air Techniek BV

Kuipersweg 37, NL-3449 JA Woerden. Telex: 47219 Tel: 03480 11114

Supplies laminar flow cabinets, materials for cell culture, genetic engineering, laboratory equipment and ultrafiltration systems.

Contact Flow BV

PO Box 4069, Noordenweg 2, NL-2984 AG Ridderkerk. Tel: 01804 13511 Telex: 20224 ctact Fax: 01804 28357

Manufactures fermentation equipment, including bench top bioreactors & 'fermentrol' (integrated fermentation process control) systems.

Continental Pharma NV

Postbus 103, Gerritsenweg 5, NL-7200 AC Zutphen. Tel: 05750 167 46 Telex: 49356

Supplies clinical diagnostics and reagents. Agent for Rosco AS, Denmark.

Costar Europe Ltd

Sloterweg 305A, NL-1171 VC Badhoevedorp. Tel: 2968 6051 Telex: 18646

Postbus 94, NL-1170 AB Badhoevedorp

Supplies disposable labware including culture vessels, petri plates, multi-well plates and pipettes as well as products for membrane technology and monoclonal antibodies. Distributor for Costar, US.

CSM Suiker BV

Postbus 349, NL-1000 AH Amsterdam.

Manufactures beet sugar. Uses large-scale anaerobic digestion for clean-up of wastewater from sugar processing.

Dalton BV

Postbus 154, NL-5140 AD Waalwijk.

Tel: 041 67 805 47/041 60 312 25 Telex: 35442 dalton

Supplies systems for DNA and peptide synthesis sequencing and analysis (see Applied Biosystems Inc, US), mammalian cell culture (see Endotronics Inc, US), cell sorting, electroporation and fusion, free flow electrophoresis etc as well as fermentation systems of up to 100 cubic metres. Produces oligonucleotides and peptides and offers services in contract-sequencing of proteins and contract production of monoclonal

Delft Hydraulics Laboratory

Waterloopkundig Laboratorium

Postbus 177, Rotterdamseweg 185, NL-2629 HD Delft. Tel: 01556 93 53 Telex: 38176

Coordinates interdisciplinary research on water availability and pollution control. Carries out mathematical modelling of effects of pollutants on water and environmental conditions. Offers consultancy service relating to pollution control and water quality in terms of nutrient exchange, eutrophication, dissolved oxygen, effects of toxic substances etc.

Delft Technical University

Department of Biochemistry & Biophysics

Julianalaan 67, NL-2628 BC Delft.

Tel: 015 13 32 22

Undertaking studies on protein structure and function.

Delft Technical University

Department of Chemical Engineering

Jaffalaan 9, NL-2628 BC Delft.

Modelling biochemical and microbial processes as a 3503s of developing models of organisms for use in the design of bioreactors aimed at batch, batch fed and continuous culture.

Delft University of Technology

Transfer Office

Stevinweg 1, NL-2628 CN Delft. Tel: 015 783767 Telex: 3815 Telex: 38151

Postbus 5048, NL-2600 GA Delft

Promotes the technical and industrial activities of the university.

Dijkstra Vereenigde BV

Kabelweg 47, NL-1014 BA Amsterdam.

Tel: 020 824905 Telex: 16202

Postbus 8219, NL-1005 AE Amsterdam

Supplies laboratory equipment including systems for cell culture of Techne (Cambridge) Ltd, $U\bar{K}.$

Diosynth BV

Postbus 20, NL-5340 BH Oss.

Tel: 04120 66944 Telex: 37503

Manufactures pharmaceuticals. Production division of Akzo NV, Netherlands.

Dorr Oliver Europe

Postbus 9090, Baden Powell Weg 305, NL-1006 AB Amsterdam.

Manufactures ultrafiltration equipment including modules and cartridge systems used in construction of large-scale systems of enzyme recovery and clarification of fermentation broth. Offers complete design services including fully automated operation and cleaning systems.

Du Crocq Aromatics International BV

Postbus 6, Ijsselmeerstraat 14, NL-1270 AA Huizen.

Tel: 02152 537 42 Telex: 43369

Produces essential oils, flavouring materials, perfumes and related aromatic chemicals.

Du Pont De Nemours (Nederland) BV

NEN Division

Helftheuvelweg 1, NL-5222 AV s'Hertogenbosch.

Tel: 073 21 44 25

Postbus 2060, 5202 CB s'Hertogenbosch.

Tel: 073 20 65 50

Supplies radiochemicals, enzymes and products for molecular biology of the New England Nuclear Division of Du Pont de Nemours, US.

Duke Scientific Europe

Olmenlaan 6, NL-3833 AV Leusden.

Tel: 033 947834 Telex: 47045 Fax: 033 948975

Supply particle analyzers, membrane filtration equipment, standards for flow cytometry etc. Offer services in quality control.

Telex: 14232

Vitamins & Chemicals Division, Postbus 70 Nieuweweg 2-2a, NL-3900 AB Veenendaal.

Tel: 08385 191 31 Tlx:37155

Produces fine chemicals, pharmaceuticals, veterinary products, vitamins, cholesterol and its derivatives, lanolin and fatty acids, etc. Subsidiary of the Solvay Group, Belgium.

EKATO BV

Ambachtsstraat 13c, NL-3861 RH Nijkerk.

Tel: 03494 60404 Fax: 03494 60593

Supplies fluid industrial agitators and plant; products of EKATO,

Electro-Nucleonics International BV

Adriaan van Bergenstraat 202-208, NL-4811 SW Breda.

Tel: 076 22 20 33 Telex: 54597

Supplies instruments and other products for clinical chemistry, immunology and haematology. Subsidiary of Electro-Nucleonics Laboratories Inc, US.

Eli Lilly Nederland

Stationsplein 97, NL-3511 ED Utrecht. Tel: 030 316364 Telex: 40873

Postbus 19 003, NL-3501 DA Utrecht

Markets antibiotics, pharmaceuticals, diagnostics etc, products of Eli Lilly

Elsevier Scientific Software

Postbus 330, NL-1000 AH Amsterdam. Tel: 020 5803 911 Telex: 18582

Distributes scientific software packages for use with IBM-PC and Apple computer systems.

Enraf-Nonius Scientific Instruments

Rontgenweg 1, NL-2600 AL Delft. *Tel*: 015 569 230 *Telex*: 38083

Manufactures X-ray diffraction equipment.

Erasmus University

Faculty of Medicine

Dr Molewaterplein 50, Postbus 1738, NL-3000 DR Rotterdam. Tel: 010 408 1111

Studying regulation of hexokinase, energy metabolism, nucleotide metabolism and inborn errors of metabolism.

EuroCetus BV

World Trade Centre Tower A 5th Floor, Strawinskylaan 357, NL-1077 XX Amsterdam.

Tel: 020 71 60 11/575 91 11

Subsidiary of Cetus Corp, US established to develop, manufacture and market therapeutic products in Europe. Carrying out clinical research on interleukin-II.

Euroclone BV

Plesmanlaan 125, NL-1066 CX Amsterdam. Tel: 02 512 3362/170777 Telex: 13159 blood

Supplies products for large scale cell and tissue culture. Offers contract production and research of biologicals for in vitro and in vivo applications, downstream processing and scale up of mammalian cell culture.

Euro-Diagnostics BV

Wilmersdorf 24, NL-7327 GC Apeldoorn.

Tel: 055 42 24 33 Telex: 30427 Fax: 055 425017

Postbus 2820, NL-7303 GC Apeldorn

Produces kits for clinical diagnostics based on enzyme assays and radioimmunoassays. Developing DNA-probe diagnostics and DNA and monoclonal antibody labelled reagents as well as veterinary diagnostics.

Eurosequence BV

Telex: 53935 chrug Fax: 050 63 45 56

Offers custom services in synthesis, analysis and purification of peptides, proteins and oligonucleotides.

Eurotherm International Benelux BV

Johan Frisostraat 1, NL-2382 HJ Zoeterwoude.

Tel: 071 411 841 Telex: 39073

Supplies systems for temperature regulation, recording and control.

Kabelstraat 19, NL-1322 AD Almere.

Tel: 032 406 01 44

PO Box 50104, NL-1305 AC Almere

Design, manufacture and market PFA and other plastic equipment for transport and storage of liquids.

Galtek Corp

Fluoroware Inc.

Kabelstraat 19, NL-1305 AC Almere. Tel: 03240 60144 Telex: 47578

PO Box 50104, NL-1322 AD

Manufacture a wide range of equipment for liquid and gas handling based on injection moulded Teflon PFA and other plastic products. Offers custom production and fluid handling systems design service.

Geletine Delft NV

Postbus 3, Rotterdamsweg 268-270, NL-2600 AA Delft.

Tel: 015 56 93 01 Telex: 38073

Produces pharmaceutical-grade gelatin and dicalcium phosphate from

Gibco Europe BV

Hekven 3, NL-4824 AD Breda. Tel: 076 419944 Telex: 64016

Supplies media for culture of cells, tissues and microorganisms as well as veterinary vaccines.

Gist-brocades Farmaca Nederland BV

Postbus 324, Fijdastraat 7-9, NL-2280 AH Rijswijk.

Telex: 38103 Tel: 070 90 17 10

Manufactures antibiotics and steroids. Subsidiary of Gist-brocades NV, Netherlands

Gist-brocades NV

Wateringseweg 1, NL-2611 XT Delft. Tel: 015 799111 Telex: 38103 Telex: 38103

Postbus 1, NL-2600 MA Delft

Manufactures yeasts, bread improvers, beta-lactam antibiotics, penicillin, steroids, solvents, acetoin and a wide range of bulk industrial enzymes, including amylases, aminoglucosidase, dextranase, invertase, galactonase, inulase, glucanase, isomerases, lipase, esterases, oxidases, catalases, pectinase, proteases etc for use in food, brewing, pharmaceutical and waste treatment, agricultural, textile and other industries. Also produces research and diagnostic enzymes and mixed activity preparations using genetic engineering and fermentation technology.

Gist-Diederik BV

PO Box 193, NL-3316 BE Dordrecht.

Tel: 078 18 06 66 Telex: 29308

Produces fresh yeast, dried yeast and bakers' sundries. Subsidiary of Gist-brocades NV, Netherlands.

Granges Graver NV

Molenweg 107, NL-2660 Willebroek.

Tel: 031 86 71 11 Telex: 31293

Constructs plants for treatment of wastewater, sewage and industrial effluent, and supplies related equipment, including separators, gravity settlers, mechanical aerators etc.

Greiner BV

Kalkovenweg 21, NL-2401 LJ Alphen a/d Rijn. Tel: 01720 20900 Telex: 39931

Postbus 280, NL-2400 AG Alphen a/d Rijn

Supply general laboratory equipment, disposable labware and products for tissue culture including calf, equine and bovine serum; products of HyClone, US.

Griffin Europa BV

Postbus 1121, Rudonk 18, NL-4801 BC Breda.

Tel: 031 76 412080 Telex: 54632

Supplies a wide range of laboratory equipment. Distributors for Gallenkamp, UK.

Groningen University

Department of Medical Microbiology

Postbus 72, Oosteringel 59, NL-9700 AB Groningen.

Tel: 050 13 33 41

Undertaking varied bacteriology and serology studies.

Groningen University

Department of Chemical Engineering

Nijenborgh 16, NL-9747 AG Groningen.

Tel: 050 63 44 86

Carrying out research on chemical process engineering and downstream processing in cooperation with the Groningen Biotechnology Centre.

Grontmii

Huize Houdringe, Postbus 203, NL-3730 AE De Bilt.

Tel: 030 767911 Telex: 47947

Offer consultancy and process management in the area of environmental biotechnology.

H C J Huikeshoven BV

Postbus 181, NL-4000 AD Tiel. Telex: 47474 Tel: 034 45 14 41

Supplies products for chromatography and filtration including speciality media of Schleicher & Schuell GmbH, Germany.

Harlan Sprague Dawley

Woudenbergseweg 55, NL-3711 AA Austerlitz. Telex: 40312 haroc Tel: 034 39 16 46

Postbus 167, NL-3700 AD Zeist

Part of the international group headed by Harlan Sprague Dawley Inc, US supplying genetically defined mice and rats, congenic strains and mutants as well as monoclonal and polyclonal antibodies and isolators for maintaining virus-free animals. Distributor for Harlan Olac, UK.

HBT Holland Biotechnology BV

Niels Bohrweg 13, NL-2333 CA Leiden. Tel: 071 219521 Telex: 39350 Postbus 394, NL-2300 AJ Leiden

Produces monoclonal antibodies.

HCS Industrial Automation BV

Populierenlaan 3, NL-8051 DA Hattem. Tel: 05206 43051 Telex: 42390

Postbus 88, NL-8050 AB Hattem

Produces hardware and software systems for process control and data handling.

Heineken NV

Postbus 28, Weteringplantsoen 21, NL-1000 AA Amsterdam. Tel: 020 70 91 11 Telex: 11595

Manufactures beer and potable spirits. Offers technical services in brewing, distilling and soft drink production. Research interests include fermentation, brewing and yeast metabolism.

Hercules BV

Postbus 5822, Veraartlaan 8, NL-2280 HV Rijswijk. Tel: 070 15 00 00 Telex: 31172

Manufactures cellulose derivatives and other chemical products, including resins, glues and emulsifiers.

Hewlett Packard Nederland BV

Startbaan 16, NL-1187 XR Amstelveen. Tel: 020 5476911 Telex: 13216

Postbus 667, NL-1180 AR Amstelveen

Supplies analytical equipment including chromatographs and radioactivity counters (see Hewlett Packard, US).

Hicol BV

Postbus 1525, NL-3260 BA Oud Beijerland. Tel: 01860 14822 Telex: 21676 Fax: 01860 19179

Postbus 1151, Rotterdam

Supplies reagents for immunology, electrophoresis and affinity chromatography, as well as fine chemicals for research and industry. Agent for Polysciences Inc, US.

Hoechst Holland NV

Hogehilweg 21, NL-1101 CB Amsterdam 20. Tel: 020 590 8887 Telex: 12266

Postbus 12987 NI -1100 AZ Amsterdam 20

Manufactures and distributes pharmaceuticals and diagnostics; products of Hoechst AG, Germany.

Hoffmann-La Roche BV

Distributes products of Hoffmann-La Roche & Co AG Switzerland.

Holurieka-Holding BV

Postbus 44 7800, NL-7800 AA Emmen. Tel: 05910 14888 Telex: 30068

Manufactures industrial scale stainless steel fermenters and storage vessels.

ICI Holland BV

Wijnhaven 107, NL-3011 WN Rotterdam. Tel: 014 0122 Telex: 21207

Postbus 551, NL-3000 AN Rotterdam

Distributes pharmaceuticals, agrochemicals and other products of Imperial Chemical Industries plc, UK.

De Ruyterkade 125, NL-1011 AC Amsterdam. Tel: 02 0242 28 88 Telex: 84416468

Supplies immunological and biological reagents; products of Incstar Corp,

Institute for Experimental Gerontology

Lange Kleiweg 151, ZH Rijswijk. Tel: 015 14 09 30 Telex: 327 Telex: 32785

Undertake analysis of blood serum antibodies, protein isolation (lysosomes and their enzymes). Developing methods in immunofluorescence analysis.

Institute for Storage & Processing of Agricultural Produce

Postbus 18, Bornsesteeg, NL-5967 AA Wageningen. Tel: 08370 190 43 Telex: 45371

Developing a two-stage anaerobic system in which acids leached from digesting solid wastes (domestic rubbish, straw or other agricultural residues) are fed to a continuous upflow reactor.

Instruchemie Hilversum BV

Beresteinseweg 38, NL-1217 TJ Hilversum. Tel: 035 234341 Telex: 43776

Postbus 1585, NL-1200 BN Hilversum

Supplies immunoreagents. Distributor for Serotec, UK.

Integro BV

Herengracht 46, NL-1506 DT Zaandam. *Tel*: 075 310553 *Telex*: 19217

Postbus 1211, NL-1500 AE Zaandam

Specialize in low endotoxin animal serums and tissue culture media products. Distributor for Z L Bocknek Ltd, Canada.

International Flavors and Fragrances (Nederland) BV

Liebergerweeg 72-98, NL-1221 JT Hilversum. Tel: 035 83 92 22 Telex: 43031

Manufactures flavours for food and beverages as well as products for use in cosmetics, detergents, soaps etc. Subsidiary of International Flavors & Fragrances Inc, US.

11b Amersfoortsestraat, NL-3769 AD Soesterberg. Tel: 03463 3804 Telex: 70354 iren

Supplies diagnostic systems based on monoclonal antibodies, radioimmunoassay systems and other immunochemical reagents.

J H Ritmeester BV

Nievw Gracht 201, NL-3512 LN Utrecht. Tel: 030 316422 Telex: 47066

Supplies biochemicals, reagents, monoclonal antibodies, bioreactors and plastic disposables for cell culture. Agent for Corning Glass, US and KC Biologicals, US.

J T Baker Chemicals BV

Postbus 1, Rijsterborgherweg 20, NL-7400 AA Deventer. Tel: 05700 87500 Telex: 49072 Fax: 05700 11342

Supplies a wide range of laboratory chemicals, fine chemicals, enzymes and other diagnostic products, materials for chromatography and enzymes for genetic manipulation (see J T Baker Chemical Co, US).

Jan Dekker BV

Postbus 10, Plein 13 No 1, NL-1520 AA Wormerveer. Tel: (075) 28 11 44 Telex: 19273

Produces enzymes, preservatives, colours and antioxidants for the food, brewing, cosmetic and animal feed industries. Subsidiary of Naarden International BV, Netherlands.

Janssen Pharmaceutica BV

Dr Paul Janssenweg 150, NL-5026 RH Tilburg. Telex: 52667 janfa Fax: 013 370297 Tel: 013 370296

Supplies diagnostic reagents and other products of Janssen Biochimica, Belgium.

Keyser & Mackay

Leidsegracht 19, NL-1017 NA Amsterdam. Tel: 020 263323 Telex: 11971

Postbus 3899, NL-1001 AR Amsterdam

Supplies enzymes and other products of Novo Industri AS, Denmark.

Kipp & Zonen BV

Mercuriusweg 1, NL-2624 BC Delft. Tel: 051 56 10 00 Telex: 38137

Fax: 015 62 03 51

Manufactures analytical apparatus including high-resolution printer/plotters.

Koppert BV

Veilingweg 64, NL-2651 BE Berkel en Rodenrijs. Tel: 01891 4044 Telex: 25117 komac Telex: 25117 komac

Supply insect predators and other biological control agents against red spider mite, whitefly, leafminers, thrips etc as well as formulated biopesticides based on Bacillus thuringiensis or on mixtures of organic acids. Carrying out research on the use of viruses, bacteria and fungi in biological and integrated pest control programmes.

Labinco BV

Postbus 3259, NL-4800 DG Breda. Tel: 076 417582 Telex: 74169

Supply a range of laboratory equipment including small centrifuges, shakers, homogenizers and heater stirrers.

Laboratorium Services Benelux

Diagnostic Division

Van Golstein 26, NL-7339 GT Apeldoorn. Tel: 3155 41 33 55 Telex: 36419

Supplies antiserums, histochemical antibodies, radioimmunoassay kits and other reagents and diagnostics for fendocrinology and neurobiology. Agent for Immuno Nuclear Corp, US.

Labsystems BV

PO Box 220, Staringlaan 5, NL-2740 Waddinxveen. Tel: 01828 102 33 Telex: 26401

Supplies monoclonal antibodies, clinical instruments and pipette systems; products of Labsystems, US.

Lameris Laboratorium

Merwedeweg 5, NL-3621 LP Breukelen. Tel: 03462 62044 Telex: 47531

Postbus 55, NL-3620 AB Breukelen

Supplies reagents and equipment for biochemistry, microbiology, cell culture etc including fermenters, centrifuges and general laboratory equipment.

Leiden University

Department of Biochemistry

Postbus 9500, Wassenaarseweg 64, NL-2333 RA Leiden. Tel: 071 275996 Telex: 39427

Undertaking studies on plant viruses and biochemistry of proteins and their synthesis. Also investigating mechanisms of repair of DNA.

Leiden University

Transfer Office

Niels Bohrweg 11-13, NL-2333 CA Leiden. Tel: 071 275996 Telex: 39427

PO Box 9500, NL-2300 RA Leiden

Promotes interaction between the University and industry in general as well as establishment of joint research proposals. Also provides laboratory facilities which may be rented by industry on condition that the work is related to the University's research interests.

Leiden University

Centre for Bio-Pharmaceutical Sciences

PO Box 9502, NL-2300 RA Leiden.

Tel: 071 14 83 33

Conducts multidisciplinary research in drug production, pharmakokinetics, drug metabolism and drug targeting, drug interaction with biomolecular systems in medical and veterinary treatment and toxicology.

Lelystad Gemeente

Stadhuiplein 2, NL-8232 ZX Lelystad. Tel: 03200 78911

PO Box 91, NL-8200 AB Lelystad

Produces enzymes for use in the healthcare, medical and pharmaceutical industries

Leo Pharmaceutical Producten BV

Jules Verneweg 31, NL-7821 AD Emmen. Tel: 05910 146 96 Telex: 77100

Postbus 45, NL-7800 AA Emmen

Supplies health care products for veterinary and medical use. Products include vaccines, antibiotics, hormones, cytotoxins and vitamin D; metabolites of Leo Pharmaceutical Products AS, Denmark.

Laboratory for Monoclonal Antibodies

Postbus 9060, NL-6700 GW Wageningen.

Tel: 08370 19151

Developing monoclonal antibodies for use in agricultural research. Areas of interest include antibodies against virus for use in screening of bulbs and seed potatoes, against phytopathogenic bacteria, against plant hormones (abscisic and indole acetic acid), against steroids and parasites (for use in control of meat quality), against neuropeptides of the colorado beetle, against proteins responsible for expression in gene regulation, etc. A joint project between Wageningen Agricultural University and the Institutes of the Ministry of Agriculture and Fisheries.

Lumac RV

Baanstraat 115-117, NL-6372 AE Landgraaf.

Tel: 045 318335 Telex: 56937

Postbus 31101, NL-6370 AC Landgraaf

Supplies products for scintillation counting, including scintillators, solubilizers and oxidizer chemicals.

Marius Instruments

Hollantlaan 18, NL-3526 AM Utrecht.

Tel: 030 884624 Telex: 47711

PO Box 7018, NL-3502 KA Utrecht

Supplies fermenters, bioreactors and computerized control and data handling systems of LSL Biolafitte SA, France.

MCA Development BV

Bieslookstraat 31, NL-9731 HH Groningen.

Tel: 050 424248 Telex: 53751

Produce monoclonal antibodies.

Merck Sharp & Dohme BV

Supplies pharmaceutical products of Merck & Co Inc, US.

Meyvis en Co BV

Pergolesilaan 4, NL-4614 VV Bergen op Zoom.

Tel: 01640 36922 Telex: 78069

Postbus 265, NL-4600 AG Bergen op Zoom

Supplies fermentation equipment, bioreactors, shakers and other laboratory equipment of Infors AG, Switzerland.

Millipore BV

Postbus 166, NL-4870 AD Etten Leur.

Tel: 01608 22000

Supplies filter systems, membranes, HPLC equipment etc (see Millipore and Waters, US).

THE NETHERLANDS Part III

Mogen International

Einsteinweg 97, NL-2333 CB Leiden. Tel: 071 25 82 82 Fax: 071 22 14 71

Developing improved agricultural and horticultural crops such as potato in relation to crop protection and productivity using methods of plant biotechnology. Offer services in research and development.

Mycofarm BV

PO Box 8, NL-3730 AA De Bilt. Telex: 40817 Tel: 030 76 00 45

Supplies animal healthcare products including antibiotics, steroids, poultry subsidiary of Gist-brocades NV, Netherlands.

Naarden International NV

Postbus 2, Huizerstraatweg 28, NL-1400 CA Bussum.

Produces flavours and fragrances as well as other aromatic compounds and bulk industrial enzymes.

Neslab Instruments Europa BV

Waalreseweg 17, NL-5554 HA Valkenswaard. Tel: 049 028 9887 Telex: 51832 Fax:

Fax: 049 028 9295

Supplies low temperature cryobaths, offering temperatures to minus 80 degrees centigrade, with control stability of 0.1 degrees centigrade, as well as constant temperature circulators, controllers and water baths.

New Brunswick Scientific Benelux BV

Gallenkamp Pelsweg 5a, NL-3768 HT Soest. Tel: 02155 16834 Telex: 43217 Fax

Fax: 02155 14399

Postbus 71, NL-3761 AB Soest

Supplies a wide range of instruments and reagents for use in cell biology including: DNA and peptide synthesizers, sequencers and software; custom peptides; reagents for DNA, RNA and peptide synthesis; cell fusion and transfection equipment; shakers and incubators; centrifuges; media preparation equipment; plate pourers; low temperature systems; cell culture equipment; laboratory and pilot fermenters as well as control systems; downstream processing systems including cross-flow filters; chromatography columns and media.

Nijmegen University

Department of Microbiology

Toernooiveld, NL-6525 ED Nijmegen.

Tel: 080 55 88 33

Studying metabolic pathways, enzymology and nutrient requirements of methanogenic bacteria. Determining population dynamics of methane bacteria in rumen, sludge digesters and biogas plant.

Nikon Europe BV

Schipholweg 321, Postbus 222, NL-1170 AE Badhoevedorp. Tel: 02968 94406 Telex: 13328 Fax: 02968 98335

Supply optical instruments including microscopes.

Kernhemseweg 2, NL-6718 ZB Ede. *Tel*: 08380 19013 *Telex*: 37205

Postbus 20, NL-6710 BA Ede

Supplies equipment and reagents including fermenters, bioreactors and enzymes as well as downstream separation systems including ultrafiltration and other membrane technology.

Nordic Immunological Laboratories BV

Langestraat 55-61, Postbus 22, NL-5000 AA Tilburg. Tel: 013 421170/351085 Telex: 52293

Produces immuological reagents and diagnostics including polyclonal antibodies against gamma globulins, immunoglobulins, cells and tissues.

Nuclilab BV

Van Broeckhuysenstraat 7, NL-6721 TC Bannekorn. Tel: 08389 65 98 Telex: 37238 nlab

Supplies diagnostic laboratory reagents, including radioimmunoassay kits for steroids, placental proteins, bile acids and prostatic acid phosphatase.

Nutacon BV

Postbus 7771, NL-1117 ZM Schiphol Oost.

Tel: 020 451 31 Telex: 17133

Supplies purified proteins and reagents for clinical diagnostics, including immunochemicals. Distributor for Kent Laboratories, US.

Nycomed BV

PO Box 9546, NL-2003 LM Haarlem.

Supplies immunological and biological reagents; products of Nycomed AS Diagnostics, Norway.

Organon International BV

Kloosterstraat 6, NL-5349 AB Oss.

Tel: 0120 620 73

Manufactures pharmaceuticals. Research division of Akzo NV, Netherlands.

Organon Teknika BV

Boseind 15, NL-5281 RM Boxtel.

Tel: 041 165 49 11 Telex: 50265

Supplies immunological and biological reagents; products of Organon Teknika, US.

Packard Instrument BV

Clinical Operations Division

Postbus 9403, NL-9703 LP Groningen.

Tel: 050 41 33 60 Telex: 53799

Supplies chemicals and reagents for liquid scintillation counting, including organic scintillators, counting cocktails, emulsifiers and counting gels, as well as liquid scintillation counting vials. Also produces gel media for liquid chromatography.

Packard Instrument BV

Postbus 519, NL-2600 AM Delft.

Telex: 38047 Tel: 015 56 9305

Supply gas chromatography systems and radioactivity counting systems.

Pagues BV

Postbus 52, NL-8560 AB Balk.

Tel: 05140 34 41 Telex: 46417

Offer engineering and design services in anaerobic digestion systems for producing gas for heating or electricity from farm wastes as well as anaerobic filters for treatment of industrial wastewaters.

Perkin Elmer Netherland BV

Hanzeweg 16, NL-2803 MC Gouda.

Tel: 01820 28122 Telex: 28146

Postbus 490, NL-2800 AL Gouda

Supplies chromatography equipment and spectrophotometers of Perkin Elmer Corporation, US.

PFW (Nederland) BV

Nijverheidsweg Zuid 7, NL-3812 EA Amersfoort.

Tel: 033 30 44 44 Telex: 79421

Postbus 3, NL-3800 AA Amersfoort

Produces flavours, fragrances and aromatic chemicals.

Pharma Bio-Research International BV

Beilerstraat 23, NL-9401 PB Assen. Tel: 05920 16465 Telex: 53326

Postbus 147, NL-9400 AC Assen

Supply equipment for HPLC.

Pharmachemie BV

Nijverheidsweg 48-50, NL-2031 CP Haarlem. *Tel*: 023 31 92 09 *Telex*: 41879

Postbus 552, NL-2003 RN Haarlem

Distributes pharmaceuticals and diagnostics; products of Oxoid Ltd, UK and Nyegaard & Co, Norway.

Pharmacia LKB Produkten BV

Wiltonstraat 11-13, NL-2722 NG Zoetermeer.

Tel: 079 31 92 01 Telex: 31404

Postbus 216, NL-2700 AE Zoetermeer

Supplies instruments and chemicals for liquid chromatography, electrophoresis, electrofocusing, isotachophoresis, microtomy, fermentation and calorimetry; products of Pharmacia LKB-Produckter AB, Sweden.

Pharmacia Nederland BV

Biotechnology Division

Ohmweg 12, NL-3442 AA Woerden. Telex: 40625 Tel: 03480 77631

Postbus 17, NL-3440 AA Woerden

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectrofocusing and cell studies (see Pharmacia Biotechnology, Sweden).

Phase Separations BV

Coenecoop 129A, NL-2741 PJ Waddinxveen. Tel: 01828 14833

Supplies accessories for chromatography as well as liquid chromatographs, HPLC systems, chromatography pumps, supports and media etc.

Philips Gloeilampenfabrieken NV

Instrument Division

Pieter Zeemanstraat 6, NL-5621 CT Eindhoven.

Tel: 040 78 84 90 Telex: 35000

Manufactures a wide range of analytical equipment including spectrophotometers, chromatographs, ion-specific electrodes scintillation and gamma-counters, electron microscopes etc. Also produces industrial and domestic electrical apparatus and appliances.

Philips Nederland BV

Groep Analyse

Boschdijk 525, Eindhoven.

Tel: 040 78 82 11 Telex: 51238

Supplies analytical instruments, including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK).

Pierce Eurochemie BV

Postbus 1512, NL-3260 BA Oud Beijerland.

Fax: 1860 191 79 Tel: 1860 192 77 Telex: 21676

Supplies reagents and standards for amino acid analysis, protein sequencing, peptide synthesis etc, as well as a wide range of accessories for chromatography (see Pierce Chemical Co, US).

Piittersen BV

Pampuskade 13, NL-8605 AS Sneek.

Tel: 05150 18615 Telex: 46016

Postbus 192, NL-8600 AD Sneek

Supply separation equipment of Westfalia Separator, US.

Promega BV

Niels Bohrweg 11-13, NL-2333 CA Leiden.

Tel: 071 21 71 21 Telex: 84430250

Supplies immunological and biological reagents; products of Promega Corp, US

Research Institute for Plant Protection

Binnenhaven 12, Wageningen.

Holds culture collection of plant viruses for research in breeding crops for

Revco Scientific International

Postbus 321, NL-8600 AH Sneek

Telex: 46289 Tel: 051 50 253 00

Manufactures refrigeration systems that can maintain temperatures down to -120 degrees C designed for use in a wide range of applications.

Rhone Poulenc Nederland RV

Draaistroom 1, NL-1181 VT Amstelveen.

Tel: 020 5473911 Telex: 12544

Postbus 10, NL-1180 AA Amstelveen

Supplies cross flow filtration systems and fermenters of Rhone Poulenc, France.

Richard van Seenus Almere BV

Bolderweg 6, NL-1332 AT Almere. Tel: 03240 20450 Telex: 70531 Telex: 70531

Postbus 50.065, NL-1305 AB Almere

Supplies equipment and reagents including ultrafiltration equipment and other membrane technology, HPLC systems and accessories as well as products for genetic engineering and cell culture.

Romicon Ultrafiltration

Melchelaarstraat 14, NL-4903 RE Oosterhout.

Tel: 01620 320 52

Supplies hollow fibre membranes in cartridge form for use in purification, concentration and fractionation of biological materials from a few litres per hour to over 200 litres per minute. A wide range of membranes of different size and type are available for food, pharmaceutical research and industrial

Salm & Kipp

Merwedeweg 5, NL-3621 LP Breukelen. Tel: 03462 62814 Telex: 47531

PO Box 55, NL-3620 AB Breukelen

Supplies fermentation equipment, reagents for biochemistry and cell culture, products for applied microbiolog, centrifuges, HPLC systems and accessories, etc.

Sanbio BV

Heinsbergenstraat 50, NL-5402 EG Uden. Tel: 041 32 511 15 Telex: 74827

Fax: 041 32 666 05

Postbus 540, NL-5400 AM Uden

Supplies materials for immunology and tissue culture including antibodies and antiserums against albumins, complement components, drugs, enzymes, fluid and tissue components etc, as well as complement fixation test reagents, immunoglobulins and materials for radioimmunoassay. Distributor for Zymed Laboratories, Jackson Immunoresearch Laboratories, RIBI Immunochem Research and Genzyme, US, Biosoft, France and Cedarlane Laboratories, Canada.

Schleicher & Schuell Nederland BV

Postbus 335,, NL-5201 AH s'Hertogenbosch.

Tel: 073 216269 Telex: 50100 Fax: 073 215826

Supplies a wide range of filter and speciality papers as well as materials for chromatography (see Schleicher and Schull, US).

Sensvs

Sensor Systems

Garenhof 2, NL-2201 LR Noordwijk.

Tel: 01719 15525

Produce electrodes and sensors.

Shell International Petroleum Co

Carel Van Bijlandtlaan 30, Den Haag.

Tel: 070 77 23 46 Telex: 31005 Produces a wide range of chemicals.

Skalar Analytical BV

Spinveld 2, NL-4815 HS Breda. Tel: 076 22 54 77 Telex: 54233

PO Box 3237, NL-4800 DE Breda

Supply analytical equipment including segmented flow analysers, process analysers, an automatic digestion system for safe handling of hazardous material and a sampler processor.

Sopar-Biochem

Burg de Manlaan 2, NL-4837 Breda.

Supply protein hydrolysates and peptones, fermentation nutrients and bulk culture media ingredients. Distributor for Marcor, US.

Spark Holland BV

P de Keyserstraat 8, NL-7825 VE Emmen.

Tel: 05910 317 00 Telex: 30094 Fax: 05910 30035

Postbus 388, NL-7800 AJ Emmen

Manufactures accessories for chromatography including autoinjectors for HPLC (performing fixed or variable injections as well as automatic pre-column derivatization), column thermostats, multidimensional column switching devices, electrochemical detection systems etc.

THE NETHERLANDS Part III

Stichting Licentec

Bernadottelaan 15, PO Box 8323, NL-3503 RH Utrecht. Tel: 30 94 14 56/30 94 59 42 Telex: 47910

Provides consultancy in licensing, patents and research contracts for the Netherlands and international clients in biotechnology, chemicals, pharmaceuticals, diagnostics, medical supplies and electronics.

Stokvis Meettechniek

Slaak 34, NL-3061 Rotterdam. Tel: 010 33 31 11 Telex: 22231

Supplies microscopes, fibre optics, illuminators and other optical devices.

Strategic Biotech International

Dolderseweg 2, NL-3712 BP Huis ter Heide. Tel: 03404 31636 Postbus 6, NL-3712 ZG Huis ter Heide

Biotechnology consultants.

Substantia BV

Postbus 8166, NL-1005 AD Amsterdam. Tel: 3120 11 96 05 Telex: 13252

Supplies reagents and instruments for clinical diagnostic purposes.

Sulzer Nederland BV

Bezuidenhoutseweg 29, NL-2594 AC Den Haag. Tel: 070 471424 Telex: 34403

Postbus 11721, NL-2502 AS Den Haag

Supplies bioreactors, fermenters and computerized reactor control systems of MBR Bio Reactor AG, Switzerland as well as engineering services and anaerobic waste treatment plant.

Teesing Installatietechniek BV

Verrijn Stuartlaan 40, NL-2288 EL Rijswijk.

Tel: 070 956780 Telex: 31022

PO Box 16, NL-2280 AA Rijswijk

Supplies equipment and fine chemicals for use in the agriculture, food, bio-energy and environment industries.

TNO

Central Organization for Applied Scientific Research Juliana van Stolberglaan 148, NL-2595 CL Den Haag.

Tel: 070 496500 Telex: 31660

PO Box 297, NL-2501 BD Den Haag

Supporting research & development in biotechnology. Also provides consultancy and the development of databanks and information sources.

Institute for Fishery Products

Dokweg 37, NL-1620 Ijmuiden. *Tel:* 02550 190 22

Researching into chemistry and microbiology of fish processing and food products.

TNO

Institute for Cereals & Flour

Lawickse Allee 15, NL-6140 Wageningen.

Tel: (08370) 190 51

Undertaking studies on structure and properties of cereal protein and lipids, as well as emulsifiers.

TNO

Radiobiological Institute

Lange Keiweg 151, Rijswick. Tel: 015 14 09 30 Telex:

Telex: 32785

Undertaking transplantation studies and developing radioimmunological techniques.

TNO

Biotechnology Coordination Office

Ultrechseweg 48, Postbus 108, NL-3700 AC Zeist. Tel: 03404 55444 Telex: 40022 Fax: 0340

Fax: 0340 57224 Telex: 40022

Supporting research and development in areas of applied biochemistry, applied microbiology, cell culture, downstream processing, safety, computer software for process control, enzymes, fermentation, chromatography, membrane technology, monoclonal antibody production, food processes, health and medicine, etc.

Tracor Europa

Postbus 333, NL-3720 AH Bilthoven.

Tel: 030 780855 Telex: 70775 traco

Supplies a wide range of analytical instruments for chromatography and spectroscopy; products of Tracor Instruments, US.

U Gene Research

Catharijnesingel 59, NL-3511 GG Utrecht. Tel: 030 39 44 63

Offer contract services in development of recombinant DNA and RNA probes for rapid identification of bacterial infections. Have developed a rapid probe for antibiotic resistance in Staphyloccocus. Carry out clinical trials, phases 1-3, for the pharmaceutical industry to test antibiotics, immunostimulatorsetc in vitro for antibacterial and antiviral activity. Have produced monoclonal antibodies against Campylobacter, Staphylococcus, E coli and viruses. Developing test kits.

UCB Farma Nederland BV

Druivenstraat 3 Nieuwe Kadijk, NL-4816 KB Breda. Tel: 076 879222 Telex: 74327

Supplies immunodiagnostics and other products of UCB, Belgium.

Unichema Chemie BV

Postbus 2, NL-2800 AA Gouda. Tel: 01820 42911 Telex: 20661

Developing chemicals from fats and oils as well as biological and enzymic conversion techniques.

Unilever NV

Postbus 760, Burgermeesters Jacobplain 1, NL-3000 DK Rotterdam.

Tel: 010 64 59 11 Telex: 21415

Manufactures foods, animal feed, chemicals, soaps, detergents and toiletries.

Utrecht University

Department of Molecular Cell Biology

Padualaan 8, NL-3584 CH Utrecht.

Tel: 0305 32782 Telex: 40087 Carrying out research on coronaviruses.

Verder Vleuten BV

Utrechtseweg 23, NL-3451 GB Vleuten. Tel: 03407 1641 Telex: 47338

Postbus 1, NL-3450 AA Vleuten

Supply laboratory membrane filtration systems.

VG Instruments BV

Rijnkade 17a, NL-1382 GS Weesp.

Tel: 02 940 80484 Telex: 12097

Fax: 02 940 19052

PO Box 171, NL-1380 AD Weesp

Supply mass spectrometer systems designed for analysis of gases generated during fermentation (see VG Instruments Inc US).

Vital Scientific CV

Kanaalweg 24, Postbus 100, NL-6950 AC Dieren.

Tel. 31 8330 190 25 Telex: 35369

Manufactures microprocessor controlled spectrophotometers operating over the range fron 330 to 1000 nm, automated chemical analyzers and other analytical equipment.

Vitatron Scientific BV

Kanaalweg 24, NL-6950 AB Dieren. Tel: 8330 190 10 Telex: 35369

Postbus 202, NL-6950 AE Dieren

Manufactures automated analysers for measurement for enzymes and substrates by endpoint, kinetic or two-point methods suitable for clinical

Wageningen Biotechnology

Salverdaplein 11, NL-6701 DB Wageningen.

Promotes collaborative research projects between the Agricultural University in Wageningen and various research institutes supported by the Ministry of Agriculture and Fisheries.

Wellcome Nederland BV

Ijsselmeerlaan 2, Postbus 248, NL-1380 AE Weesp.

Tel: 02940 18383 Telex: 14480 wellc

Supplies medical and veterinary pharmaceuticals, fine chemicals, diagnostics and laboratory reagents (see Wellcome Diagnostics UK).

Westburg BV

Arnhemseweg 87, PO Box 214, NL-3830 Leusden.

Tel: 033 95 00 94 Telex: 79406

Supplies immunological and biological reagents. Distributor for Milab, Sweden and Biomakor, Israel.

WHO Reference Laboratory

Red Cross Blood Transfusion Service

Plesmanlaan 125, NL-1066 CX Amsterdam.

Tel: 020 5123240 Telex: 13159

Supply polyclonal antibodies against human gamma-globulins, rheumatoid arthritis, ribosomal protein, smooth muscle etc, serums amd human complement.

Widwa BV

Arkansasdreef 22, NL-3565 AR Utrecht. Tel: 030 618818 Telex: 40875

Postbus 9202, NL-3506 GE Utrecht

Manufacture membrane systems for use in downstream processing of biotechnical products.

Zaadunie BV

Westeinde 62, NL-1601 BK Enkhuizen. Tel: 02280 11411 Telex: 57053

PO Box 26, NL-1600 AA Enkhuizen

Developing new plant varieties using micropropagation, recombinant DNA technology and plant breeding to produce young plants for horticulture and speciality crops in collaboration with Sandoz Group.

Zeiss Nederland BV

Postbus 323, NL-1380 AH Weesp. *Tel*: 02940 15080

Supply light microscopes and related optical equipment.

Zoopharm BV

Postbus 8, NL-3730 AA De Bilt. Tel: 030 76 00 45 Telex: 40817

Supplies animal health care products including antibiotics, steroids, poultry vaccines, pig vaccines, feed additives, rabies vaccine and pet products. Subsidiary of Gist-brocades NV, Netherlands.

PO Box 2, NL-9123 ZR Metslawier. Tel: 05192 1442

Developing products for use in agriculture by genetic engineering.

Zuid Nederlandse Spiritusfabriek BV

Wittoucksingel 52, NL-4612 PB Bergen op Zoom.

Tel: 01640 34920 Telex: 78277

Manufacture fermentation ethanol.

NORWAY

Apothekernes Laboratorium fur Specialpraparater

Harbitzalleen 3, Oslo 2

Tel: 02 55 93 90 Telex: 11332

Supplies antibiotics and other pharmaceuticals.

Bio-Tech AS

Karl Johans Gt 7, N-0154 Oslo 3,

Developing cell culture systems and peptide synthesis.

Biotest AS

Rodsvn 4C, PO Box 888 Krakeroy, N-1600 Fredrikstad. Tel: 032 42144 Telex: 72591

Supplies agarose for research and pharmaceutical applications as well as other diagnostic products. Distributor for Vector Laboratories, US and Sera-Lab, UK.

Central Institute For Industrial Research

PO Box 350, Forskningsveien 1, Blindern Oslo 1. Tel: 02 69 58 80 Telex: 71536

Undertakes contract research for both industry and government in areas of industrial chemistry, materials research and electronics.

Chiron Laboratories AS

Jarleveien 4, N-7000 Trondheim. Tel: 7 52 45 06 Telex: 55159

Supplies analytical standards for use in chromatography of fuels and oils, chiral intermediates and biochemical substrates.

CIBA-Geigy Pharma AS

N-2011 Strommen.

Tel: 02 71 48 03

Products include antibiotics, steroids, agrochemicals and dyes of Ciba-Geigy AG, Switzerland.

Culture Collection of Algae

Norwegian Institute for Water Research

PO Box 333 Blindern, Oslo. Tel: 0472 235280

Supply algal cultures.

D Meszansky AS

Holstgate 6, Postboks 4324, Torhov Oslo 4.

Tel: 02 37 07 88

Supplies a wide range of equipment and accessories for separation and molecular biology. Distributor for Pharmacia Biotechnology, Sweden.

Dynal AS

PO Box 158, Skoyen, N-0212 Oslo 2. Tel: 02 507800 Telex: 79133

Manufacture magnetic polystyrene 4.5 micrometre beads.

Dyno Particles AS

Postboks 160, N-2001 Lillestrom.

Tel: 06 81 70 01 Telex: 78246 Fax: 02 31 76 10

Manufacture uniform sized microspheres of from 0.5 to 100 micrometers suitable for applications in liquid chromatography, immunodiagnostics and calibrations. Subsidiary of Dyno Industrier \overline{AS} .

E Pedersen & Sonn AS

Thereses Gate 28, Oslo 1.

Telex: 19845 Tel: 02 60 44 98

Supplies laboratory reagents and equipment; specializes in cell culture products. Agents for Gibco Europe, UK.

Einar D Fineide AS

Odinsveg 10 PO Box 85, N-1472 Fjellhamar.

Tel: 02 706020 Telex: 18930

Supplies proteins and peptides with hormonal or biological activity as well as peptide synthesis reagents. Agent for UCB- Bioproducts, Belgium and Boehringer Mannheim GmbH, Germany.

Heigar & Co AS

Stanseveien 31, PO Box 49 Grorud, Oslo 9.

Tel: 255054 Telex: 77259

Supply a wide range of laboratory apparatus, equipment and reagents. Agents for Gallenkamp, UK and Damon/IEC, US.

ICI Norge AS

Drammens 126, Oslo.

Tel: 02 55 35 80

ICI Pharma AS, Stortingst 14, Oslo 1.

Supplies pharmaceutical and other products of Imperial Chemical Industries plc, UK.

Ing F Heidenreich

Schweigaardsgate 32, N-0191 Oslo 1.

Tel: 02 197055 Telex: 8160652/79935

Supplies diagnostic and immunochemical reagents including products of Cedarlane Laboratories, Canada and Zymed Laboratories, US.

Jahres Fabrikker AS

Postboks 235, N-3201 Sandefjord.

Tel: 034 684 00 Telex: 21469

Supplies edible oils and fats, fatty acids and fatty acid esters.

Kebo Bredal AS

Posboks 64, Hvameien 1, N-2013 Skjellen. *Tel*: 047 22 01 130 *Telex*: 76229

Supplies biochemicals for microbiology, enzymology and molecular biology. Agents for United States Biochemical Corp, US.

Kvaerner Engineering AS

PO Box 222, N-1324 Lysaker.

Developing methods for the production of methane and animal feed by anaerobic digestion of food wastes.

Laborel AS

Caspar Stormsvei 2, PO Box 109 Alnabru, N-0614 Oslo 6. Tel: 02 647130 Telex: 74123

Supply immunological and biological reagents. Agent for Milab, Sweden.

Lilleborg Fabriker AS

Oslo 4, 02 22 00 50. Cables: 71181

Manufactures fatty acids, oils and fats, as well as glycerol and animal feeds

Part III NORWAY

Marine Biochemicals AS

PO Box 3271 Gronnasen, N-9001 Tromso.

Fax: 83 82304 Tel: 83 81195 Telex: 65901

Stakkevollvn 65, N-9000 Tromso

Develops, manufactures and markets biochemicals from marine raw materials. Products include: high protein hydrolyzates from fish for food/feed and fermentation; ultrafiltered protein hydrolyzates (peptones) for fermentation and culture media; proteolytic (digestive) cold adapted enzymes; alkaline phosphatase of marine origin (molecular biology quality); DNA-extracts from fish milt (80% DNA); nucleosides/nucleotides as fine chemicals.

MATFORSK

Norwegian Food Research Institute

Oslovn 1, N-1430 As.

Fax: 9 94 35 18 Tel: 9 94 08 60

Carrying out research in food biotechnology.

Med-Kjemi AS

Kirkevn 230, PO Box 413, N-1371 Asker. Tel: 02 78 26 92 Telex: 18317

Supplies clinical diagnostics and reagents. Agent for Rosco AS, Denmark.

Medical Microbiological Laboratory, Ulleval Hospital

Oslo

Hold culture collection of animal viruses and tissue cultures for medical microbiology.

Millipore AB

Enebakkveien 135, Oslo 6.

Tel: 02 67 82 53

Supplies membranes and filters, water treatment and chromatographic apparatus, enzymes and diagnostics kits (see Millipore, US).

NIVA

Norwegian Institute for Water Research

PO Box 333, Brekkaveien 19 Blindern, 0314 Oslo 3.

Tel: 02 23 52 80

Carrying out research on water pollution and effluent treatment. Hold culture collection of algae including special collections of cyanobacteria, Oscillatoria and Selenastrum for general, industrial and phycological research as well as aquaculture and bioassays. Offer identification services.

Norsk Philips AS

Analytical Systems

Postboks 1, Manglerud, Oslo 6.

Tel: 02 68 02 00 Telex: 72640

Supplies a wide range of analytical equipment including spectrophotometers, chromatographs, ion specific electrode systems etc (see Philips NV, Netherlands).

Norske Hoechst AS

PO Box 177, Jorgen Eeeg Okernv 145, Okern Oslo 5.

Tel: 02 64 38 00 Telex: 71744

Supplies pharmaceutical, agrochemical and other products of Hoechst AG, Germany

Nycomed AS Diagnostica

Box 4284 Torshov, Lillogatan 3, N-0401 Oslo 4. Tel: 472 226350 Telex: 77149

Supply diagnostic products of Nyegaard & Co AS, Norway and Hemagen Diagnostics, US.

Nyegaard & Co AS

Postboks 4220, Torshov, N-0401 Oslo 4.

Tel: 472 38 98 00 Telex: 77149 Fax: 472 2 34 73

Produce pharmaceuticals including media for use in isopycnic centrifugation of biological products, including whole cells, organelles, ribosomal subunits, native and denatured nucleic acids and viruses; based on an iodinated medium similar to metrizamide.

Organon Teknika

PO Box 325, N-1371 Asker.

Telex: 77048 Tel: 02 78 43 65

Supplies pharmaceutical products of Organon Teknika, US.

Oslo University

Department of Pharmacology

Blindern, Oslo 3.

Carrrying out research on plasma proteinases and other enzymes.

Oslo University

Department of Physiology and Biochemistry

Blindern, Oslo 3.

Studying insulin and mechanism of ATPasc.

Pfizer AS

Sofiesgate 60, Oslo 1.

Telex: 16947 Tel: 02 69 47 90

Supplies pharmaceuticals and food additives; products of Pfizer Inc, US.

Protan AS

Biopolymer Division

PO Box 420, N-3000 Drammen.

Tel: 03 83 76 60 Telex: 76594

Manufactures alginates from Laminaria hyperborea and Ascophyllum nodosum. Products are suitable for textile printing, food industry use, gelation and thickening, coating of welding rods, as a bulking or disintegration agent in tablets, and for immobilization of cells and enzymes in calcium alginate beads.

Rhone-Poulenc Norge AS

Kongensg 14, Oslo 1. Tel: 02 41 55 43

Telex: 18867

Supplies agrochemical products of Rhone-Poulenc SA, France.

Skatron AS

PO Box 100, N-3408 Tranby.

Tal. 473 85 07 70 Telex: 78625 ska Fax: 473 83 09 78

Manufactures equipment for laboratory diagnostic work including multi-well dilutors and dispensers, microplate washers, supernatant collection systems and cell harvesters for use in thymidine studies, in particular, enabling easy transfer of material for liquid scintillation counting.

Solberg & Andersen AS

PO Box 34 Bryn, Brynsveien 5, Oslo 6. Tel: 02 19 10 00 Telex: 8561749

Telex: 8561749

Supplies kits and components for radioimmunoassays as well as chemicals and reagents for enzymology, biochemistry and histochemistry. Agent for Cambridge Medical Diagnostic Inc, US.

Stord Bartz Industri AS

Postboks 777, N-5000 Bergen.

Tel: 21 10 30 Telex: 42051

Produces industrial separation and dewatering equipment, including screw presses for the food and animal feed industries

Trondheim University

Institute of Marine Biochemistry and Biology

N-7034 Trondheim NTH.

Studying methods of collecting, storing and culturing young sporophytes of brown seaweeds (Laminaria and Alana) and culture on rope structures in the sea. Investigating synthesis of marine polysaccharides and carotenoids as well as studying the physical and chemical properties of algal polysaccharides.

Vinmonopolet

PO Box 6675, Haslevangen 16, Rodelokka Oslo 5.

Tel: 02 19 96 00 Telex: 19536

State alcohol monopoly with sole rights to import, sales and production of wines and potable spirits.

Weiders Farmasoytiske AS

PO Box 9113, Vaterland Oslo 1.

Telex: 18151 Tel: 472 20 45 15

Supplies fine chemicals, alkaloids and pharmaceutical products.

PORTUGAL

Abbott Laboratories Lda

Rua 9 Lote 40, Zona Industrial de Alfragide, P-2700 Amadora. Tel: 97 69 03 Telex: 16816

Supplies pharmaceuticals, diagnostics, antibiotics, vitamins and other products of Abbott Laboratories, US.

Bayer Portugal Sarl

Rua Sociedade Farmaceutica 3, Lisbon 1.

Manufactures and distributes chemical products such as pesticides, dyes, synthetic fibres etc of Bayer AG, Germany.

Beecham Portuguesa

Rua Me Rodriques 4, Lisbon 3. Tel: 61 43 37

Supplies antibiotics, vaccines, bulk vitamins and other products of Beecham Pharmaceutical Co Ltd. UK.

Brocades Portuguesa

Productos Quimicos e Farmaceuticos Lda 2293 Apartadao, P-1107 Lisbon.

Tel: 019 211 29 41 Telex: 28681

Supplies antibiotics including penicillin and its derivatives, spectinomycin, amoxicillin, kanamycin sulphate, natamycin etc., as well as steroids and enzymes. Also supplies diagnostics and other kits and reagents for clinical chemistry, radioimmunoassay, seroimmunology, bloodgroup serology, haematology, bacteriology, virology and immunochemistry The representative of the pharmaceutical division of Gist-brocades NV, Netherlands.

Carlo Erba (Portugal) Lda

Avenida da Republica 85-1, Lisbon 1. Tel: 76 00 49 Telex: 16548

Manufactures pharmaceuticals and other chemicals (see Montedison SpA, Italy).

Centrofarma Lda

S Martinho do Bispo, Coimbra. Tel: 200 11 Telex: 13253

Manufactures and distributors human and veterinary pharmaceuticals, including antibiotics, antiseptics and vaccines (see Bayer AG, Germany).

Ciba-Geigy Portuguesa Lda

Supplies agrochemical and chemical products of Ciba-Geigy AG, Switzerland.

Cipan

Avenida Gomes Pereira 74, P-1500 Lisbon.

Tel: 70 41 51 Telex: 14343

Manufactures raw materials for antibiotic production as well as finished products.

Elnor

Rua de Camoes 835-845, Porto.

Supplies centrifuges manufactured by Damon/IEC, US.

Eurofarma

Av Infante Santo 21, 2 Dto, P-1300 Lisbon. Tel: 678507 Telex: 44568 sagril Fax: 678254

Distributor for Janssen Biochimica, Belgium.

Fabrica Portuguesa de Fermentos Holandeses Lda

Apartado 2293, P-1107 Lisbon Codex. *Tel*: 019 211 29 41 *Telex*: 12662

Produces fresh yeast and bakers' sundries. Subsidiary of Gist-brocades NV, Netherlands.

Filtrom Comercia e Tecnica de Filtros Lda

Av Julio Dinis 10-1G, Edifficao Apolo 70, P-1000 Lisbon. Supplies filtration systems.

Freda-Companhia Quimico Farmaceutica Sarl

1 Dto Rua Braacamp 10, Lisbon 1. Tel: 57 46 64

Manufactures vitamin products.

Gulbenkian Institute of Science

Laboratory of Microbiology

P-2781 Oeras Codex.

Studying effect of alcohols on glucose transport systems of yeast (Saccharomyces).

ICI Portuguesa Sarl

Rua Filipe Folque 2-19, Lisbon 1. *Tel*: 56 21 61 *Telex*: 12208

Marketing subsidiary of Imperial Chemical Industries plc, UK.

Institute Pasteur De Lisboa

Avenida Marechal Gomes da Costa 9, P-1899 Lisbon Codex. Tel: 85 20 61 Telex: 13763

Manufactures pharmaceuticals and distributes products of American Home Products Inc, US.

Instituto Superio Tecnico

Laboratorio de Engenharia Bioquimica

P-1096 Lisbon Codex.

Tel: 80 20 45

Carrying out research on physiological and biochemical limitations to ethanol production by yeasts.

Izasa-Portugal SA

Avda Ventura Terra 15, Retaguarda 1, P-1600 Lisbon.

Tel: 7977280 Telex: 42536

Supplies a wide range of laboratory apparatus. Distributors for Gallenkamp, UK.

Labometer Lda

Rue Duque de Palmela N 30/1-G, P-1200 Lisbon.

Tel: 537 284 Telex: 18489

Supplies immunological reagents and diagnostic kits; products of Dakopatts AS, Denmark.

Laboratorio de Lisboa Lda

Estrada de Alfragide, Alfragide, P-2700 Amadora. Tel: 97 03 06

Manufactures vaccines for veterinary use as well as speciality pharmaceuticals.

Laboratorio Unitas Lda

C do Correio Velha 8, P-1100 Lisbon.

Tel: 86 51 41

Supplies hormone preparations, vitamins, antibiotics and chemotherapeutics.

Part III **PORTUGAL**

Laboratorios Atral Sarl

Avenida Gomes Pereira 74, P-1500 Lisbon.

Telex: 12241

Produces raw materials for manufacture of antibiotics, veterinary medicines and feed additives.

Laboratorios Wellcome de Portugal Lda

Rua Visconde de Seabra 4-4a, P-1700 Lisbon.

Telex: 16655 Tel: 1771618

Supplies pharmaceutical and diagnostic products of Wellcome Foundation,

Landerdiagnostico SA

Av Infante Santo 21-22 D, P-1300 Lisbon. Telex: 44568

Supplies immunological and biological reagents. Distributor for Immunotech SA, France.

Landerlan de Portugal Productos de Diagnostica Lda

Av Marques de Tomar 33-1-Esq, P-1000 Lisbon.

Tel: 76 76 78 Telex: 43846

Supplies laboratory diagnostics and reagents for molecular biology including restriction enzymes and other products of New England Biolabs Inc, US. Also distributor for Serotec, UK.

Mitsui & Co Europe Lda

Edificio Mobil, R Castilho 165-3, Lisbon 1.

Tel: 65 61 01

Acts as a marketing and information office for Mitsui, Japan.

Montedison Portuguesa Lda

Rua D Luis 19-5, P-2000 Lisbon.

Tel: 67 60 81 Telex: 12162

Supplies products of Montedison SpA, Italy.

Rua Marques de Fronteira 3, Apartado 1970, P-1000 Lisbon.

Telex: 13454 Tel: 68 19 06

Supplies diagnostic reagents for routine clinical use including applications in enzymology, immunology, bacteriology, virology etc. (see BioMerieux SA, France).

Mycofarm

Divisao Veterinaria da Brocades Portuguesa

av Ferreira Godinho 2293 Apartado, Cruz Quebrada, P-1495 Lisbon 2. Tel: 91 211 29 41 Telex: 12662

Supplies animal health-care products including antibiotics, steroids, poultry vaccines, pig vaccines, feed additives, rabies vaccine and pet products. Subsidiary of Gist-brocades NV, Netherlands.

Organon Portuguesa

Av Visconde Valmor 65-1 e 2, P-1000 Lisbon.

Tel: 736565 Telex: 15866

Supplies immunological and biological reagents. Distributor for Organon Teknika, US.

Pfizer Laboratorios Sarl

PO Box 1402, Rodrigo Fonseca 139, P-1000 Lisbon.

Tel: 68 01 77

Distributes products of Pfizer Inc, US.

Philips Portuguesa Sarl

Avenida Eng Duarte Pacheco 6, Apartado 1331, P-1900 Lisbon Codex. Tel: 68 31 21

Supplies analytical instruments, including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK).

Profabril

Centro de Projectos Sarl

Parca de Alvalade 6, P-1700 Lisbon.

Offers engineering consultancy services.

Reagente 5 Quimica & Electronica Lda

Supplies immunological and biological reagents. Distributor for Hemagen Diagnostics, US.

Rhone-Poulenc Agrop

Rua Antonio Enes 25-2 D, P-1000 Lisbon.

Tel: 54 41 80

Distributes agrochemical products of Rhone-Poulenc SA, France.

Rohm & HaaS (Portugal) Lda

Avenida Columbano, B Piheiro 94-7, P-1000 Lisbon.

Tel: 77 76 03 Telex: 18338

Supplies products of Rohm & Haas Co, US.

Socilda

Soc Con e Industrializadora Lda

Rua Sarmento de Beires, Lote 38-B-Loja Box 1980, P-1000 Lisbon.

Tel: 805445 Telex: 15685

Supplies products for molecular biology as well as pharmaceuticals and separation equipment of Pharmacia AB, Sweden.

Universidade do Porto

Centro de Engenharia Quimica

Rua dos Bragas, P-4099 Porto Codex.

Tel: 38 28 08

Carrying out research on the production of fuel alcohols by fermentation including studies related to the physiological basis for improving the process.

Universidade do Porto

University of Oporto

Rua Di Manuel II, P-4003 Porto Cedex.

Tel: 27437

Carrying out research on aspects of bioreactor design as well as on microbial leaching.

Universidade Nova de Lisboa

The New University of Lisbon

Praca do Principe Real 26, P-1200 Lisbon.

Carrying out research on anaerobic digestion and other aspects of waste

Universidade Tecnica de Lisboa

The Technical University of Lisbon

Almeda de Santo Antonio dos Capuchos 1, P-1100 Lisbon 1.

Carrying out research on plant cell culture as well as techniques of enzyme immobilization and biocatalysis.

SPAIN

Abbott Laboratories SA

Josefe Valcarcel 48, Apartado 967, Madrid 27. Tel: (91) 204 9190 Telex: 22944

Supplies pharmaceuticals and chemicals in a product range, including antibiotics (penicillin, erythromycin), diagnostics and vitamin preparations (see Abbott Laboratories, US).

Afora SA

Arifau 240, Barcelona 6. Tel: 2009911 Telex: Telex: 52486

Supplies a wide range of laboratory apparatus. Distributors for Gallenkamp, UK.

Agrar Investigacion SA

Monasterio de Cogullada s/n, E-50014 Zaragoza. Tel: 29 0330 Telex: 58136

Carrying out a programme of research using techniques of cell and tissue culture, plant regeneration and genetic improvement to produce new seed varieties including winter cereals (wheat, barley, oats and triticale), corn and sunflower as well as to develop and introduce new varieties of pulses, forage crops and grasses.

AGROTEC SA

Agrotecnica de Semillas SA

PO Box 1021, Lachar, 2808 Granada. Telex: 78789 agtc

Carrying out a breeding programme to develop new varieties and hybrids of crop plants including beans, sunflower, rapeseed, maize, wheat, barley and cotton as well as to select pepper hybrids and varieties of melon, watermelon and cucumber.

Agrupacion Llorente-Fides

Carretera de El Pardo km 1, E-28035 Madrid. Tel: 723 1017 Telex: 45006 ilex

Applying cell fusion, recombinant DNA and gene sequencing techniques to investigate protein structure, function, isolation and purification, and production of monoclonal antibodies and enzymes in the study of hepatitis, fertility control and red cell antigens and antibodies related to blood grouping and alloimmune haemolytic disease in the newborn.

Alfonso Deselaers SA

Muntaner 479, E-08021 Barcelona. Tel: 93 211 9662 Telex: 83154105

Suppplier of immunological and biological reagents. Distributes products of Atlantic Antibodies, US.

Almu SA

Ctra de Beniel km 0.3, Zeneta, Murcia. Telex: 67845 pqal Tel: 811 466 77

Have a joint venture with Universities of Murcia and Leon to use cell fusion and recombinant DNA technology to culture and screen microorganisms for production of amino acids by fermentation. Developing controlled large scale production and downstream processing systems for amino acids by fermentation and enzymic conversion. Also undertaking protein isolation and purification as well as stabilization and immobilization of enzymes.

Alter Laboratories SA

Mateo Inurria 30, Madrid 16. Telex: 22946 Tel: 259 2000

Manufactures pharmaceuticals, cosmetics and dietary products.

Antibioticos SA

Bravo Murillo 38, Antibe, Madrid 3. Tel: 446 7000 Telex: 22933

Carrying out research on antibiotics, recombinant DNA technology and strain improvement as well as producing animal feed additives. Supported by Montedison Group.

Arteche

Apartado 1, Munguia-Vizcaya. Tel: 674 0750 Telex: 32059

Supplies microscopes, fibre optics, illuminators and other optical devices.

Asociacion de Investigacion para la Mejora de la Alfalfa

Barrio de Movera 165, E-50016 Zaragoza.

Tel: 976 57 4788

Develops techniques for the production of new varieties of Alfalfa with improved pest resistance.

Atom SA

Paseo del Monte 34, E-08024 Barcelona. Tel: 214 7904 Telex: 83151227

Supplies laboratory reagents, diagnostic assay kits, stains and fine organic chemicals. Agents for Clin-Tech Ltd, UK. Distributor for Dakapatts, Denmark, Advanced Magnetics and Hemagen Diagnostics, US and Biosoft, France.

BASF Espanola SA

Paseo de Gracia 99, Barcelona 8. Tel: 215 1354 Telex: 52488

Supply fine chemicals, agrochemicals, pharmaceuticals and other products of BASF AG, Germany.

Bayer Hispania Industrial SA

Via Layetana 196, Barcelona 37. Tel: 227 9151 Telex: 54482

Products include antibiotics (penicillin), organic acids, antiseptics, alkaloids and vaccines (see Bayer AG, Germany).

Nunez de Balboa 39 4-esqda, E-28001 Madrid.

Tel: 91 435 0812 Telex: 46218

Supply immunological and biological reagents. Distributor for Sanbio, Netherlands.

Biocon Espanola SA

Poligono Industrial Torrente de Ramasa 52/54, Las Franquesas de Valles, Barcelona

Tel: 849 3184 Telex: 51414

Supplies enzymes natural colours and related products for the following industries: brewing, distilling, food, baking/milling animal feed, dairy, starch processing and pharmaceutical. Subsidiary of Biocon Ltd, Ireland.

Biodiagnostic

Jose Abascal 45 2-dcha, E-28003 Madrid.

Tel: 441 7100 Telex: 46216

Supplies immunological and biological reagents; products of Biomakor, Israel.

Biokit SA

Corega 603-605, E-08025 Barcelona. Tel: 347 7511 Telex: 50605 biok

Supply a range of diagnostic test kits for clinical use.

Part III **SPAIN**

BioMerieux SA

Canarias 16, Madrid 7.

Telex: 13454 Tel: (91) 467 1414

Supplies diagnostic reagents for routine clinical use including applications in enzymology, immunology, bacteriology, virology, etc (see BioMerieux SA, France).

Bioser SA

C/Tarragona 106, E-08015 Barcelona. Tel: 93 224 92 47 Telex: 50632

Supply products and reagents for use in microbiology and bacteriology.

Boehringer Mannheim SA

Biochemicals Division

Copernico 61-63, Barcelona 6 Tel: 201 7878 Telex: 52589

Supplies a wide range of fine chemicals and reagents for research and analysis, including enzymes, immunochemicals, antibodies, coenzymes and biochemicals for molecular biology (see Boehringer Mannheim GmbH, Germany).

Bristol-Myers SA

Isla Java, Madrid 34.

Tel: 729 4888 Telex: 23623

Supplies pharmaceutical products including antibiotic as well as cosmetics and proprietary drugs (see Bristol Myers Co, US).

CASIS

Calidad Ambientes y Sistemas SA

Sirio 54, Izqda Bajo D, Madrid 30. Tel: 409 2564

Telex: 42356

Supplies plug-flow anaerobic digesters for production of methane from agricultural wastes and manures.

Corporacion Bioligica Farmaceutica SA

Gran Via 68, E-28013 Madrid Tel: 247 0882 Telex: 50307 letis

Developing new products for allergy diagnostics by microbial fermentation including monoclonal antibodies and modified allergens for medical treatments as well as products for diagnosis and investigation of parasitic diseases.

CCMCU

Culture Collection of Microorganisms of Ciudad Universitaria Madrid Department of Microbiology, Escuela Tecnica Superior de Ingenieros Agronomos, Ciudad Universitaria Madrid.

Holds culture collection containing bacteria, fungi and yeasts, with special collection of Rhizobium for general microbiology research and teaching.

CECOSA

Cia Espanola de Cultivos Oleaginosos SA

C/ Genova 9-5, E-28004 Madrid.

Tel: 91 419 12 63-31 Telex: 41076 cecos

Undertaking a research programme to develop new hybrids of crop plants including sunflower, soybean etc, in relation to stress resistance, for example drought or frost.

CECT

Coleccion Espanola de Cultivos Tipo

Valencia University, Microbiology Department, Burjasot Valencia. Holds culture collection containing bacteria and fungi for general and industrial microbiology research and teaching.

CEPSA

Compania Espanola de Petroleos SA

C/ Picos de Europa 7 Poligno, Poligno Industrial San Fernando de Henares, San Fernando Madrid.

Tel: 91 675 5612

Produce alkaline proteases, amylases, glucose-isomerase, and other enzymes and products for the food and pharmaceutical industries by microbial fermentation, separation and purification. Have a research programme of screening and cell culture of selected microorganisms for aerobic fermentation using recombinant DNA technology.

Cerestar

formerly CPC Espana SA

Via Augusta 59, Edificado Mercurio, Barcelona 6. Tel: 228 4900 Telex: 52265

Produces glucose, high-purity sugars, syrups, dextrins and other starch

CH Boehringer Sohn Ingelheim SA

Pablo Alcouar 3, Barcelona.

Tel: 203 1951

Supplies pharmaceutical specialities and immuno-diagnostic reagents (see Boehringer Ingelheim AG, Germany).

Cobos SA

Calabrias 236-240, E-08029 Barcelona. Tel: 239 87 88 Telex: 97687 pcob

Manufacture analytical balances.

Comercial Rafer SL

Colle Bolonia 12, E-50008 Zaragoza. Tel: 976 237 400 Telex: 58252

Supplies immunological and biological reagents including polyclonal antibodies; products of One Lambda Inc, US.

Comerimsa

Fuencarral 101, Madrid 4.

Tel: 446 4312 Telex: 23860

Supplies kits and components for radioimmunoassays as well as chemicals and reagents for enzymology, biochemistry and histochemistry. Agent for Cambridge Medical Diagnostics Inc, US.

Compania Espanola de la Penicilana y Antibioticos SA

Instituto de Farmacologia Espanola

Mendez Alvaro 57, E-28045 Madrid.

Tel: 227 3020 *Telex:* 45448 cepp

Have a research programme to select microrganisms using cell fusion technology and screen microbial products for new antibiotics for medical use. Developing new systems for monitoring, separation and purification of products in large scale fermentation and downstream processing, as well as microbial conversion.

Cooper Zeltia SA

Apartado 16 La Relva-Carretera de Modende, Porrino, E-36400 Pontevedra.

Tel: 986 33 0400 Telex: 83104

Manufactures, develops and sells chemical reagents for domestic and industrial use as well as pharmacological and biological reagents for veterinary use including vaccines for swine fever, rabies, brucellosis and foot and mouth disease. Have a joint venture with the University of Santiago de Compostela to investigate immunoresponses to viruses and bacteria and a method of early detection of pregnancy in cows.

Crison Instruments SA

PO Box 29039, Barcelona 08080.

Telex: 97740 crsne Tel: 211 3112/0345

Manufactures pH controllers and pH meters.

Cubian SA

Carretera Puebla de Cazalla km1 Apartado 36, Marchena, Sevilla. Tel: 843 617/843 618

Have an extensive research programme using tissue culture techniques to genetically improve all aspects of Sunflower as a crop plant.

Cultek SL

Caidos Division, Azul 20, Madrid 16. Tel: 91 457 0890 Telex: 46658

Supplies diagnostic and laboratory reagents including chromatographic materials as well as immunoassay and cell culture products. Agents for Bio-Rad Laboratories, Flow Laboratories, and Vector Laboratories, US as well as Nordic Immunological Laboratories, Netherlands.

Curtex SA

Carretera del Medio 219, Hospitalet, Barcelona.

Supplies reagent-grade chemicals, fine chemicals for research and enzymes. Agent for Rohm GmbH, Germany.

Degremont SA de Depuracion de Aguas

Carretera Erleches sn, Apartado 1485, Bilbao. Tel: (94) 453 0900 Telex: 32373

Designs and constructs waste-treatment plant for potable, industrial and sewage water.

Empresa Nacional del Uranio SA

Centro de Saelices el Chico Grupo Mineralurgico Ciudad Rodrigo, Salamanca.

Tel: 923 461 139

Developing techniques of bacterial leaching of uranium ores.

ENADIMSA

Empresa Nacional Adaro de Investigacions Mineras SA

Serrano 116, Madrid 6.

Telex: 42083 Tel: 262 4110

Andalucia KM 12, Getafe, Madrid.

Tel: 797 3400

Has a wide programme of studies related to the use of biomass for energy including the production of landfill gas, use of stillage for energy production, anaerobic digestion of farm wastes, use of crop residues as fuels and economic aspects of biomass use. Detailed studies have been carried out on stirred-tank anaerobic digesters, plug-flow digesters, contact systems and anaerobic down-flow filters.

Essex Espana SA

Avenida Generalisimo 61, Madrid 16.

Telex: 23704 Tel: 279 5300

Manufactures pharmaceutical products (see Schering-Plough Corp, US).

Eurosemillas SA

Ronda de los Tejares 36, Cordoba. Telex: 76504

Carrying out a breeding programme using tissue culture techniques to develop homozygous lines of crop plants including beans, cotton and sunflower.

Hoechst Iberica SA

PO Box 490 Traversa de Gracia 47-49, Barcelona 21.

Tel: 227 71525 Telex: 52496

Supplies antibiotics, hormones, agrochemicals and other products of Hoechst AG, Germany.

Hucoa-Erloss SA

Ave del Generalissimo 161, Madrid 16.

Supplies centrifuges and other laboratory equipment. Distributor for Damon/IEC, US. Also distributes immunological reagents; products of Nycomed AS Diagnostics, Norway.

ICI Espana

Gran Via Sur Km 2 2, Hospitalet, Barcelona.

Tel: (93) 335 6014 Telex: 52184

Distributes products of Imperial Chemical Industries plc, UK.

INGENASA

Inmunologia y Genetica Aplicada SA

Hermanos Garcia Noblejas 41 - 2 piso, E-28037 Madrid.

Tel: 1 268 0501

Administration:, PI Marques de Salamanca 8, Madrid.

Tel: 1 255 5022

Markets enzymes, veterinary therapeutics, vaccines and immunoenzymatic diagnostics. Using techniques of recombinant DNA techniques of molecular biology to develop new products for agricultural and veterinary applications as well as human health care. Products under development include monoclonal and polyclonal antibodies, test kits for pregnancy and ovulation, brucellosis, allergy and parasitosis, anti-human immunoglobulin, differential HSV-I/HSV-II assay and tumour market, as well as animal and plant viral diagnostics. Offer contract research services.

Instituto Behring SA

Travesera de Gracia 47-49, Barcelona 21.

Supplies fine chemicals, radioimmunoassay kits and reagents, as well as other supplies for clinical chemistry (see Hoechst AG Germany).

Interguim SA

Buscalla 10 Aparado 70, San Cugat de Valles, Barcelona.

Tel: 674 1450 Telex: 54006

Supplies organic chemicals and pharmaceutical intermediates.

Izasa SA

Aragon 90, E-08015 Barcelona Tel: 254 8100 Telex: 51027

Supplies diagnostic laboratory reagents including radioimmunoassay kits. Agent for Nordiclab OY, Finland as well as Centocor Inc and Immunon/Lipshaw Corp, US.

Knoik Instruments SA

Ctra Cerdanyola 73-75 PO Box 136, Sant Cugat de Valles, E-08024 Barcelona.

Tel: (93) 674 32 50 Telex: 59199 konke

Supplies fermentation equipment, amino acid analyzers and accessories for analytical chromatographs as well as research biochemicals and enzymes.

La Cruz del Campo SA

Avda de Andalucia 1, Sevilla.

Tel: 954 57 4000 Telex: 72239 campo

Carrying out research in the field of brewing, including flavour stability in beer, new processes of brewing and genetically engineered improvement of industrial yeast strains. Also have a research programme to develop improved barley strains.

Laboratorio de Aplicaciones Farmacodinamicas SA Fardi

Grassot 16, Barcelona 25. *Tel*: 207 3751

Produces intermediates for pharmaceutical preparation, raw materials for the food industry and dermatological preparations.

Laboratorios Andromaco

Azcona 31, Madrid 28.

Tel: (2) 55 56 00 Telex: 49325 lac

Manufactures pharmaceuticals and other organic chemicals and biological products.

Laboratorios Bioquimicos Espanoles

Velasquez 31 - 1st floor, E-28001 Madrid. Tel: 435 9080 Telex: 48993 bior

Produce a range of non-toxic, non-pollutant biostimulants using large scale production techniques of cell and tissue culture and fermentation.

Laboratorios Hubber SA

Calle Berlin 48, E-08029 Barcelona. Tel: 93 321 7200 Telex: 51771 uber

Carrying out research and development in protein isolation and purification including the preparation of fibrinolectin for clinical use.

Laboratorios Knickerbocker SAE

Calle Comte Borrell 158, E-08015 Barcelona.

Tel: 93 323 1250 Telex: 59321 knik

Carries out research and development, production and marketing of diagnostics, monoclonal antibodies for blood grouping and for blood cell differentiation, bacterial suspensions, chemical tests and automated instrumentation for clinical, microbiological, haematological and serological use. Distributes products of Wellcome Diagnostics, UK.

Laboratorios Landerlan SA

Agastia 67, Madrid 27.

Tel: 415 6212 Telex: 23012

Supplies human blood derivatives and clinical diagnostics.

Laboratorios Leti SA

Rosellon 285, Barcelona 37.

Tel: 3 257 4805 Telex: 50307

Supplies diagnostics and reagents for use in immunoassay; products of Janssen Biochimica, Belgium.

Part III **SPAIN**

Laboratorios Normon SA

Nieremberg 10, E-28002 Madrid. Tel: 425 3266 Telex: 49360 norm

Have a joint venture with Unidad Inmunofarmacologia CSIC to investigate controlling factors of the metabolism of Actinomycetes as well as carrying out pharmacological studies on medicinal herbs and development of new antibiotics and analytical enzymes by microbial synthesis including fructokinase and urease.

Laboratorios Serono SA

Genova 17, E-28004 Madrid Tel: 341 410 7023

Telex: 4935 rono

Develops and markets pharmaceutical products for medical use in the fields of reproduction, growth, gastroenterology, immunology and virology. Uses recombinant DNA technology to develop drugs and therapeutics including follicle stimulating hormone, luteinizing hormone, human chorionic gonadotropin and alpha, beta and gamma interferons. Part of the Ares-Serono Group.

Laboratorios Sobrino SA

La Riba - Crta Camprodon s/n, Vall de Bianya, E-17813 Gerona. Tel: 29 0001 Telex: 57223

Carrying out large scale production of mammalian cells and tissues for the production of monoclonal antibodies against several viruses and the development of vaccines for veterinary use.

Laboratorios Substancia SA

Poligono Industrial Manso Mateu s/n, Prat de Llobregat, Barcelona. Telex: 52550 Tel: (03) 379 1250

Supplies clinical diagnostics and analytical reagents Agent for Rosco AS,

Lafi

Ctra 154 Km 24, Llissa de Vall, Barcelona.

Supplies pharmaceutical and veterinary products as well as agrochemicals (insecticides and pesticides).

Landerdiagnostico SA

Agastia 67, E-28043 Madrid.

Tel: 34 441 1066/415 6212 Telex: 23012

Supplies laboratory diagnostics and reagents for molecular biology including restriction endonucleases produced by New England Biolabs Inc, US. Distributor for Milab, Sweden, Serotec, UK, Immunotech, France and Janssen Life Science Products, Belgium as well as supplying antibodies; products of Jackson Immunoresearch Laboratories, US

Leon University

Department of Microbiology

Facultad de Biologia, Universidad de Leon, Leon.

Researching the cloning and expression of antibiotic production genes in Streptomyces and in E coli.

LPL SA

Laboratorio Productor de Linfoquinas SA

C/ Morales 21-27 - 2, Barcelona.

Tel: 410 2109

Using techniques of gene sequencing, cell fusion and large scale mammalian cell culture to investigate the cell surface expression of viral proteins including lentivirus and to produce antiviral monoclonal antibodies to Herpes infections etc.

Luis Ayuso SA

Gran Vial 17, Montmelmo, Barcelona. Tel: 93 568 1016 Telex: 50182 yuso

Carrying out a reseach programme in the field of microbiology to screen and culture microorganisms for large scale fermentation systems. Developing sensors and monitoring, separation and purification equipment to optimize production and downstream processing of end products including lactic acid. Also supply starter cultures.

Mallinckrodt Iberica SA

Julian Camari 35, Madrid 17.

Tel: (34) 204 4297 Telex: 83142191

Supplies reagent-grade chemicals, radioimmunoassay kits, radiopharmaceuticals and supplies for clinical analysis (see Mallinckrodt Inc, US).

Menarini Diagnostics

Alfonso XIIM 587, Badalona.

Telex: 59542 men Tel: 03 833 875 600 Fax: 03 399 4306

Distributor for Janssen Biochimica, Belgium.

Merck Quimica SA

Laboratorio de Bioinvestigacion Immunologia

C/ Caspe 108, E-08010 Barcelona. Tel: 93 245 80 62 Telex: 9419

Telex: 94190 merck

Using cell fusion technology and in vitro immunization for the production of monoclonal antibodies to gangliosides and melanoma. Also investigating immunoglobulin switching mechanisms.

Miles-Martin Laboratories SAE

Plaza de Espana 10, Madrid 13.

Tel: 341 242 5100 Telex: 83122590 milab

Supplies biochemicals and enzymes for research, clinical and industrial use including blood protein diagnostics (see Miles Laboratories Inc, US). Distributor for FMC Corp Bioproducts, US.

Millipore Iberica SA

Esplanada 5, Madrid 3.

Tel: 233 5050 Telex: 23545

Supplies membranes and filters, water treatment and chromatographic apparatus, enzymes and diagnostic kits (see Millipore UK Ltd, UK).

Montedison Hispania SA

Infanta Carlota 36-5, Barcelona 29.

Tel: 321 6061 Telex: 53022

Supplies agrochemicals, diagnostics and other products of Montedison SpA, Italy.

Murcia University

Department of Biochemistry

Santo Cristo 1, E-30001 Murcia

Tel: 968 831 750 Telex: 67058

Projects include research and development of a cross-flow reactor, anaerobic trickling filter and down-flow stationary fixed film anaerobic digester system.

Niro Atomizer SA

Gran Via de Carlos 11186/2/2a, Barcelona 28.

Tel: 3308651 *Telex:* 51530

Supplies separation, dewatering and drying equipment (see Niro Atomizer, Denmark).

Novo Espana SA

Enzyme Division

c/o Sor Angela de la Cruz 2-13, E-28020 Madrid. Tel: (1) 279 1501/279 1701 Telex: 22040

Supplies industrial enzymes and pharmaceuticals (see Novo Industri AS,

Nuclepore Iberica SA

Calle Caballero 79, Barcelona.

Tel: 51621 euco

Supplies membranes and apparatus for membrane filtration, ultrafiltration and microfiltration (see Nuclepore Corp, US).

Organon Teknika Espanola SA

Apartado 56, San Baudilia de Llobregat, Barcelona.

Tel: 661 6750 Telex: 52179

Supplies immunological reagents including antibodies for Organon Teknika, US as well as pharmaceuticals; products of the parent company Akzo NV, Netherlands.

Oxoid Espana SA

Edificio Indubuilding Goico Nave 5-8, Via de Los Problados, S/N

Hortaleza Madrid.

Tel: (341) 764 2554 Telex: 45670

Supplies microbiological growth media and antibiotic susceptibility test discs (see Oxoid Ltd, UK).

Pfizer SA

Principe de Verara 109, Madrid 2. Tel: 262 1100 Telex: 42732

Distributes citric acid, ascorbic acid, itaconic acid, antibiotics (neomycin, oxytetracycline) and other products of Pfizer Inc, US.

Pharma Mar SA

P de la Castellana 52 - 7a Planta, Madrid. Tel: 416 97 12/62 Fax: 416 48 18

Carrying out a research programme on the isolation and taxonomy of marine microorganisms and the screening of useful products. Developing a process of hemisynthesis of vincristine to maximize production. Also undertaking the isolation, identification and HPLC analysis of samples of Catharanthus roseus.

Philips Iberica SAE

Marinez Villergas 2, Madrid 27. Tel: 404 2200

Supplies analytical instruments, including spectrophotometers, gas chromatographs and liquid chromatographs (see Pye Unicam Ltd, UK). Subsidiary of Philips NV, Netherlands.

Procesos Enzimaticos SA

Calle Capitan Haya 18, E-28020 Madrid. Tel: 455 8694 Telex: 41081 figo

Calle Sierra de Guadarrama 6, Poligono Industrial San Fernando de Henares, Madrid.

Tel: 656 5014/656 5497

Research and develop, produce and market enzymic complexes for both the aerobic and anaerobic treatment of solid and liquid urban wastes.

Productora Generale De Perfumeria SL

Benito Butierrez 10, Madrid 8. Tel: 243 9510 Telex: 27307

Manufactures or distributes fine chemicals for cosmetics and pharmaceuticals, intermediates for chemical industry and perfume extracts.

Pronadisa

Pedro de Valivia 36, Madrid 6. Telex: 22659 cobao Supplies immunochemical reagents and diagnostic test kits.

Proteinas Industriales de Castilla y Leon SA

A Lorenzo Hurtado 4-1, E-47014 Valladolid. Tel: 983 35 9456/33 7386

Carrying out microbial enrichment and screening and developing a fermentation system for protein production from cereal straw for use as animal feed.

Proyecto Eureka de Insecticidas Condor SA

Condor, 41209 Torre de la Reina, Sevilla. Tel: 908 155 442 Telex: 72586

Carrying out a research programme in association with the CIDA of the Junta of Andalucia and the CSIC on embryo culture to produce interspecific crosses of Helianthus and to investigate the physiological and molecular criteria associated with stress resistance including in vitro culture methods of screening for temperature and herbicide resistance.

Quimica Iberica SA

Pol Ind Santiga Calle 2a Nave 8, Santa Perpetua de Moguda, Barcelona. Tel: 3 718 1652 Telex: 54352

Supplies pharmaceuticals, biochemicals and diagnostics; products of UCB-Bioproducts, Belgium.

Quimigranel SA

Calle Orense 34 9th floor, E-28020 Madrid. Tel: 341 455 1000/456 1614 Telex: 83142726

Supplies laboratory reagents and disposables. Agent for Gibco Europe Ltd, UK. Also distributes immunological products for Genzyme Corp and Promega Corp, US.

Rohm & Haas Espana SA

Provenza 216, Barcelona 11. Tel: 254 5105 Telex: 50316

Supplies products of Rohm & Haas Co, US.

San Miguel Fabricas de Cerveza y Malta SA

Poligono Industrial 'El Segre' Apartado 67, Lerida. Tel: 200 600 Telex: 57733 samil

Carrying out research related to brewing including development of

improved barley strains for brewing, hydrolysed protein products from brewing yeast and fermentation using immobilized yeast.

Sandoz SAE

Gran Via de Las Cortes, Catalanas 764, Barcelona 13. Tel: 245 1700 Telex: 509937

Manufactures pharmaceuticals and chemicals (see Sandoz AG, Switzerland).

Satic

Recaredo 4, E-08005 Barcelona. Tel: 00343 3079800 Telex: 97200

Manufacture water and solution treatment equipment including a water demineraliser.

Schering Espana SA

Mendez Alvaro 55, Madrid 7. Tel: 468 1300 Telex: 42586

Supplies pharmaceutical and chemical products (see Schering AG, Germany).

Schott Iberica SA

Barcelona 13.

Supply laboratory glassware (see Schott Gerate GmbH, Germany).

Semillas Batlle SA

C/ Josep Pane 14, Bell-lloc, Lleida. Tel: 973 560 000 Telex: 52147

Have established an extensive breeding programme to develop new varieties of crop plants including wheat, triticale and barley, Vicia faba minor, V sativa, V faba major, Lupinus, onion and lettuce.

SES Iberica SA

Cataluna 287, CP 50014, Zaragoza. Tel: 976 57 1694 Telex: 58102 azuca

Carrying out research on genetic improvement of a range of rhizobial cell cultures in relation to the mechanism of plant growth promotion involving rhizobacteria.

Seville University

Department of Biochemistry

Apartado 1095, Sevilla.

Studying growth of nitrogen-fixing cyanobacteria for both production of cell biomass and possibly for production of ammonia using immobilized cell systems. Investigating nitrogen fixation in Azobacter.

Spanish Culture Collection

Departamento de Microbiologia Facultad de Ciencias Biologicas Universidad de Valencia, Burjasot, Valencia.

Tel: (096) 3630011

Supply bacterial, fungal and yeast cultures.

Travenol SA

Poligono Industrial Las Mercedes, C Ancha S/N Nave 11, Madrid 22. Tel: 91 205 2250 Telex: 64012

Supplies diagnostic and pharmaceutical products of Baxter Travenol Laboratories Inc, $\ensuremath{\mathsf{US}}.$

UNIASA

Union Industrial y Agroganadera SA

Camino de Purchil 66, Granada. Tel: 958 28 0800 Telex: 78452 unga

Carrying out research and development of cell culture systems for the production of monoclonal antibodies as well as stabilization and immobilization of enzymes in relation to human milk composition, lipid metabolism and the development of related nutritional products.

Part III SPAIN

Unidad de Bioingenieria

Instituto de Agroquimica y Tecnologia de Alimentos Jaume Roig 11, E-46010 Valencia. Tel: 3 690 800 Telex: 64197 aytv

Undertaking contractual research in the fields of brewing and production of cellulases.

Union Alcoholera Espanola SA

Ruiz de Alarcon 5, Madrid 14. Tel: 221 6480 Telex: 42406 Produces yeasts and ethanol.

Uquifa SAE

Produces alkaloids, fine chemicals and speciality pharmaceuticals.

Vervi Bioquimica SA

Crta Olot km 7'2, Palol de Revardit, Gerona. *Tel*: 20 63 62

Carrying out research and development of aerobic fermentation systems including the design of ultrafiltration membranes, sensors and process monitoring equipment for the investigation of iron-dextran complex formation and the separation and purification of dextran.

SWEDEN

Abetong Sabema

Box 24, S-351 03 Vaxjo. Tel: 470 100 10 Telex: 52145 abetong

Produces thermophilic biogas plants to manufacture methane by anerobic digestion. Development was in association with the Royal Swedish Institute of Technology and two Danish companies. Has more than 30 years experience in manufacture of precast concrete elements for all building sectors, including agricultural applications and large-scale storage tanks and cisterns. A company in the Euroc group.

Abitec AB

Villavagen 36, S-64050 Bjornlunda Tel: 046 158 20420

Fax: 046 158 20426

Carrying out large scale cell culture for production of biologicals, single cell proteins, speciality chemicals and enzymes.

ABP International AB

Box 965, S-220 09 Lund.

Tel: 46 46 181700 Telex: 33063 abpint

ABP International AB

Box 965, S-220 09 Lund.

Telex: 33063 abpint Tel: 46 18 17 00

Research and develop plasmid stability techniques, production of amino acids, chiral compounds, fine chemicals and biological intermediates. Also offer contract research and waste water treatment. Part of the Volvo

AC Biotechnics AB

Industrial Biotechnology

PO Box 946Industrial Biotechnology, S-220 09 Lund. Tel: 046 18 17 00 Telex: 33063 Fax: 46 159 Fax: 46 159 291

Offers process development and scale-up services, complete plant for production of bioproducts, process technology for production of speciality and fine chemicals as well as wastewater treatment systems.

Alfa Laval Separation AB

Industrial Biotechnology

Box 500, Munkhattevagen, S-147 00 Tumba.

Tel: 46 75 36 50 00 Telex: 10260

Offers services in research and development to meet needs in food processing, the chemical and pharmaceutical industries, etc as well as the scale up of recombinant DNA based processes to production level. Resources range from microbial physiology to engineering and supply of process equipment. Technologies include heat exchange, sterilization, fermentation, centrifugal separation, cell disruption, liquid/liquid extraction, membrane filtration, automation, plant engineering and installation. Developed continuous single-reactor power alcohol production systems with cell recycle - the Biostil process, now acquired by Nobel Chematur, Sweden.

Amerad Betong AB

S-171 04 Solna. Tel: 08 730 05 40

Box 12148, Segelbatsvagen 9, S-102 24 Stockholm.

Tel: 08 13 18 00 Tx: 11678

Constructs turnkey sewage and biochemical effluent treatment plants.

Astra AB

S-151 85 Sodertalje, 075 53 29 80. Cables: 19237

Manufactures pharmaceuticals and protein supplements for enrichment of food and animal feed, as well as other consumer goods and agricultural and horticultural products.

Axel Johnson Engineering AB

Box 1004, S-149 01 Nynashamn. Tel: 075 21 42 00 Telex: 17882

Manufactures industrial heat exchangers, filters, band presses, sedimenters and other equipment for dewatering and separation.

Axel Johnson Instruments AB

Box 1365, S-171 26 Solna.

Telex: 85417582 Tel: 46 8734 0540

Supplies reagents for cell separation and products for tissue culture of FMC Corp, US.

BASF Svenska AB

Box 53008, S-400 14 Goteborg. Tel: 031 81 32 60 Telex: 2327

Supplies products of BASF AG, Germany.

Bayer (Sverige) AB

Box 5237, S-402 24 Goteborg. Tel: 031 83 05 80 Telex: 21154

Distributes products, including antibiotics (penicillin), organic acids, antiseptics, alkaloids and vaccines of Bayer AG, Germany.

Bergman & Beving AB

Box 10024, Karlavagen 76, S-10055 Stockholm.

Distributor for Damon/IEC, US.

Bestobell Mobrey AB

Box 9116, S-10272 Stockholm.

Tel: 08 68 0435

Specialists in level and flow measurement. Supply level floats and meters for both liquids and dry materials.,

Bio-Ion Nordic AB

PO Box 15045, Seminariegatan 30, S-750 15 Uppsala. Tel: 46 18 15 23 15 Telex: 12442 Fax: 46 18 15 11 14

Supply laboratory equipment including mass spectrometry system with software.

Bio-Zac AB

Box 2032, S-175 02 Jarfella.

Tel: 0758 50374 Telex: 14023

Supplies reagents and chemicals for culture of mammalian cells as well as enzymes, oligonucleotides, linkers and other products for recombinant DNA research. Agent for Collaborative Research and Zymed Laboratories, US and UCB Bioproducts, Belgium.

Biocarb AB

Box 739, Solvegatan 41, S-223 70 Lund. Tel: 046 16 86 00 Telex: 830 51 52

Supply biologically active carbohydrates and offer basic pharmaceutical research and analysis services (normally on a joint venture basis). Supply fine chemicals freeze dried and delivered under nitrogen. Products include oligosaccharides, glycolipids, glycopeptides, glycoproteins, lectins, monoclonal antibodies, affinity gels, HSA-conjugates and labelled proteins. Developing diagnostic kits for autoimmune diseases and monoclonal

antibodies for cancer diagnostics and therapeutics.

Biocell Laboratories AB

Fortia AB, PO Box 604, S-751 25 Uppsala.

Research and development company providing cell biology, tissue culture and immunology capabilities to all three divisions of Pharmacia Fine Chemicals AB, Sweden.

Part III **SWEDEN**

Biodisk AB

Pyramidvagen 7, S-171 36 Solna. Tel: 87 30 07 60

Develop and produce clinical diagnostics using microbiological processes.

BioInvent International AB

S-223 70 Lund.

Tel: 046 16 85 50 Telex: 33709 Fax: 046 11 08 06

Operate in three business areas: immunology; separation; microbiology. Immunology is focused on hybridoma technology, offering an in vitro immunization kit, custom hybridoma development and GMP large scale production of monoclonal antibodies. Research projects include development of human monoclonal antibodies for therapeutic applications. Human monoclonal antibodies against CMV, HIV and digoxin are available. In separation offer GMP purification in an in-house developed fully automated purification system. Microbiology research covers the applications of bacterial detachment and adhesion to development of therapeutics for gastrointestinal and other disorders.

Biolink

PO Box 324, StaElgatan 14, S-751 05 Uppsala. Tel: 46 18157760 Telex: 76913

Supply equipment for cell culture, fermentation and downstream processing including bioreactors, centrifuges and membrane technology.

Biolytica

S-223 70 Lund.

Tel: 046 168780 Telex: 8305035 Fax: 046 152547 Produce monoclonal antibodies by large scale cell culture.

BioNative AB

Box 1452, S-901 24 Umea. Tel: 46 90 19 01 90 Fax: 46 90 19 37 36

Produces interferon-alpha from human leukocytes, antiserums to human interferon-alpha and natural interleukin-2 as well as developing monoclonal antibody based diagnostics for research.

Biopool AB

Box 1454, S-901 24 Umea.

Tel: 46 90 19 00 00 Telex: 8485026 Fax: 46 90 19 45 40

Develops and produces cardiovascular diagnostics and fibrinolytics. Products include polyclonal and monoclonal antibodies specific for fibrinolytic components, assay kits including ELISA kit for tissue plasminogen activator, as well as bioreagents and standards.

BioQuest HB

Nya Varvet, Byggnad 90, S-421 71 V Frolunda. Tel: 031 290522

Developing systems for anaerobic treatment of agricultural wastes.

Biosystem AB

PO Box 24, S-351 03 Vaxjo. Tel: 470 225 45 Telex: 52145

Supplies biogas plants for production of methane gas and electricity from farm wastes. Two standard systems are available; a prefabricated one suited to use with 50 to 250 head of cattle, or 335 to 700 pigs; the other is larger and built to order and erected entirely on site. The systems are based on stirred tank reactors. The company can also offer anaerobic filter technology. A member of the Euroc group, Sweden.

Biox AB

Box 143, S-175 23 Jarfella. Tel: 0758 39493 Telex: 12442

Supplies laboratory and microbiological equipment, including cell-disintegration apparatus.

Boehringer Mannheim Scandinavia AB

Biochemicals Division

Box 147, S-161 26 Bromma 1.

Tel: 08 98 81 50 Telex: 13054 bm scand

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Bofors Nobel Kemi

Box 800, S-691 80 Bofors.

Tel: 0586 810 00 Telex: 73346

Manufactures pharmaceutical intermediates and other industrial chemicals.

Bohlin Reologi AB

Box 742, S-22370 Lund.

Tel: 046 15 0360 Telex: 33709

Supplies automatic and laboratory viscometers.

Bristol-Myers Co Svenska AB

Box 4081, Hufvudsta Gard, S-171 04 Solna.

Tel: 08 182 02 60 Telex: 11540

Supplies antibiotics, pharmaceuticals, organic acids and other products of Bristol-Myers Co, US.

Bruker Spectrospin AB

Sagvagen 12, S-184 00 Akersberga

Tel: 0764 680 60 Telex: 15 725

Supplies spectrophotometers and chromatographs (see Brucker AM, Germany).

Carbohydrates International AB

Box 6, Lundavagen 151, S-232 00 Arlov.

Tel: 40 43 15 30 Telex: 33105 fiber Fax: 40 43 15 51

Developing diagnostic and therapeutic products based on biologically active carbohydrates and glycoproteins. Market a test for E coli. Carrying out research on applications in blood grouping, monoclonal antibody diagnostics for cancer, bacterial diagnostics and pesticides. Subsidiary of Medicarb AB, Sweden.

Cardo AB

Box 17050, S-200 10 Malmo 17.

Offers biotechnical processes through its subsidiary AC Biotechnics AB, Sweden.

Chemicon AB

Box 20524, Stadiongatan 65, S-200 74 Malmo.

Tel: 040 10 08 08 Telex: 33307 medsca Fax: 040 91 77 65

Supplies diagnostic and other reagents including antiserums and radioimmunoassay kits for drugs as well as carrying out custom synthesis. Distributor for Janssen Biochimica, Belgium.

Chemoferm AB

Box 604, Hagersten 6, S-126 06 Stockholm.

Tel: 08 976018 Telex: 13176

Manufactures fermenters especially for use with hazardous materials. Supplies media and serums for cell culture. Agent for Gibco Europe Ltd,

Ciba-Geigy AB

Box 931, Kopparg 7, S-601 19 Norrkoping. *Tel*: 11 11 22 20 *Telex*: 64198

Distribute products including antibiotics, steroids and hormones of Ciba-Geigy AG, Switzerland.

CPC Industriprodukter

Sergelgatan 1, S-10523 Stockholm.

Telex: 13177 Tel: 08 24 4135 Fax: 08 11 5916

Supplies glucose syrups and other products of CPC Europe, Belgium.

Cyanamid Nordiska AB

Archimidesv 4, Pa Bromma. Telex: 17519 Tel: 98 83 80

Distributes agricultural, industrial and medical products of the American Cyanamid Co, US.

Dakopatts AB

Box 6122, Elsa Borgs Gata 30, S-126 06 Haegersten.

Tel: 08 88 03 55 Telex: 15258

Supplies reagents and diagnostics kits for immunological studies; products of Dakopatts AS, Denmark. Also distributor for Cedarlane Laboratories, Canada.

SWEDEN Part III

Diagnostika

Box 40, S-311 01 Falkenberg.

Tel: 034 61 11 80 Telex: 34840

Supplies kits and components for radioimmunassays as well as reagents for enzyme, biochemical and histochemical research; products of Cambridge Research Biochemicals, US.

Du Pont de Nemours Nordiska AB

Tingvallavagen 9, S-19501 Marsta. Tel: 0760 25860

Distributes immunoreagents and biologicals; products of E I Du Pont de Nemours & Co. US.

Electrolux Fermentation

S-205 25 Malmo.

Tel: 040 189 530 Telex: 32363

Provides complete fermentation systems from 20-litre working volume to industrial scale

EnerChem AB

Box 7030, S-22007 Lund 7. Telex: 046 12 4220

Consultant engineers in the fields of anaerobic digestion and biogas plants. Construct anaerobic digesters working in the mesophilic range. A complete biogas plant or just the digester with control units can be supplied.

Energikonsult

Box 8133, S-104 20 Stockholm. Telex: 10361 Tel: 08 23 46 00

Offers consultancy in biological energy systems, related to forestry and wood plantations in particular.

Erco Lakemedel AB

Grevgatan 34, S-114 53 Stockholm. Tel: 08 63 09 10 Telex: 11183

Distributes products of Boehringer Mannheim GmbH, Germany, Ecopharm AS, Denmark and Organon BV, Netherlands.

Extraco AB

Stidsvig, S-264 00 Klippan. Tel: 043 52 22 00 Telex: 72499

Produces edible fats, fatty acids, gelatin and related products.

Farmaco AB

Box 9007, S-102 71 Stockholm. Tel: 08 18 58 40

Distributes pharmaceutical products of its parent company Fortia AB, Sweden.

Fermenta AB

Apelbergsgarten 57, S-111 37 Stockholm. Tel: 08 23 83 50 Telex: 12792 ferm

Mariefredsvagen-36, S-15200 Strangas.

Tel: 0152 12960

Manufactures antibiotics. Carying out research on plant protection and animal health.

Ferring Pharmaceuticals

Box 30561, Soldattorpsuagen 5, S-200 62 Malmo. Telex: 32652 ferrings Tel: 46 40 15 9070

Manufactures peptides of pharmaceutical interest, particularly pituitary and related hormones. Carries out hormone modification. Researching the production of effective peptides in tablet form and developing novel neuropeptides.

Ferrosan AB

Box 839, S-201 80 Malmo.

Telex: 32101 Tel: 046 40 93 66

Produces fine chemicals, pharmaceuticals and animal health products.

Flow Laboratories Svenska AV

Box 1164, S-171 23 Solna.

Tel: 08 83 81 20 Telex: 11646 Flowlab

Supplies a wide range of chemicals, reagents and equipment for cell culture, research and clinical diagnostics etc, as well as fibroblast interferon for research purposes (see Flow Laboratories Inc US).

Gothenburg University

Culture Collection

Department of Clinical Bacteriology, Guldhetsgatan 10, S-413 46 Goteburg. Tel: 031 60 20 16

Hold culture collection of bacteria and yeasts including special collections of Moraxella, Campylobacter, Haemophilis and non-fermenters for general and medical microbiology research and teaching. Offer service in identification.

Gothenburg University

Department of Genetics

Vasaparken 411, S-400 10 Gothenburg.

Studying amplification of specific genes in tumour cells from ascites cell cultures of mice, using recombinant DNA, biochemical and cytogenetic methods.

Gothenburg University

Botanical Institute

Carl Skottsbergsgata 22, S-413 Goteburg.

Tel: 031 41 87 00

Developing batch-fed mesophilic anaerobic digester for production of biogas (methane) from dairy cow manure, in association with Bioquest,

HighTech Receptor AB

SK-EPP Suite 2, S-211 20 Malmo. Tel: 40 35 07 50 Telex: 32637

Carrying out research and development of genetically engineered receptors for purification, diagnostics and therapeutics in conjunction with Sumitomo, Japan.

Hilleshoeg AB

PO Box 302, S-261 23 Landskrona

Telex: 72361 hillesh Tel: 418 260 60 Fax: 418 205 53

Undertakes research into methods of breeding sugar beet and forest plants using conventional and in vitro methods of crop improvement as well as production of natural plant products for medicine.

Histo-Lab

Bethlehem Trading Ltd

Fjallgaten 18, S-413 17 Goteborg.

Tel: 301 42 35 65 Telex: 201110 foxtex

Supplies clinical diagnostics and reagents for histology.

Hofstedt Engineering and Development AB

Box 12153, S-10224 Stockholm.

Tel: 468 545090

Small engineering company whose activities include management of a wheat based fuel-ethanol plant, based on the Alpha Laval Biostil process at Skaraborg, producing 20,000 l/day of anhydrous alcohol as well as an animal feed product with high protein content.

Immunsystem AB

Box 8012, S-750 08 Uppsala. Tel: 018 13 89 09 Telex: 12442

Manufacture polyclonal antibodies against human placental lactogen and prolactin.

Innovent

Nybrogatan 34, S-114 39 Stockholm.

Tel: 08 63 11 55

Manufacture exhaust ventilated benches and specialise in all aspects of development and marketing of services, systems and products within the field of safety ventilation.

Inventron AB

Box 82, S-431 21 Molndal.

Tel: 031 87 83 70 Telex: 20943

Produce a wide range of industrial measuring and control equipment for pH, conductivity, pressure, level, flow rate etc.

Part III **SWEDEN**

Johnson A & Co AB

Box 57, S-201 21 Malmo. Tel: 32617

Supplies immunochemicals and purified proteins, culture media and hydrocolloids such as agarose. Agent for Cappel Laboratories, US.

Johnson and Johnson AB

S-191 84 Sollentuna.

Tel: 08 754 01 00 Telex: 10915

Supplies products of Johnson & Johnson Inc, US.

KabiGen AB

Strandbergsgatan 49, S-112 87 Stockholm. Tel: 08 13 8393/9144/8917 Telex: 15 Telex: 15761 kgen Fax: 08 54 82 62

Markets human growth hormone, interferons, immunoglobulins, polyclonal antibodies and other pharmaceuticals. Has licensed its system for production of insulin-like growth factor used in wound and burn treatments etc, to Genentech, US. Also developing mass culture systems for production of proteins involved in blood coagulation and fibrinolysis, including Factor VIII as well as working on tissue plasminogen activator. Joint venture between Cardo AB and KabiVitrum AB, Sweden.

KabiVitrum AB

Lindhagensgaten 133, S-112 87 Stockholm. Tel: 08 54 09 60 Telex: 17065 kabi

Supplies chromogenic peptide substrates for analysis of proteolytic enzymes as well as other clinical and research diagnostic products based on enzymic, immunological or radiochemical techniques.

KabiVitrum Diagnostica

Jan Rebelstraat 8, S-110 69 Stockholm.

Manufactures diagnostic test kits for both manual and automated clinical blood and other tests.

Karlshamns Olefabriker AB

S-292 00 Karlshamn.

Tel: 454 143 00 Telex: 4510

Produces purified fatty acids, vegetable proteins and crude, refined or hydrogenated vegetable and animal oils, and fats for the food industries.

Karo Bio AB

Huddinge University Hospital R-64, S-144 86 Huddinge.

Fax: 87 74 82 61 Tel: 87 46 56 20

Investigating bone growth and repair and developing diagnostics for infectious disease.

Karolinska Institute

Department of Clinical Chemistry

S-112 83, Stockholm 60.

Tel: 08 54 06 00 Telex: 17178

Carrying out studies on biochemistry and metabolism of human hormones.

Karolinska Institute

Department of Physiological Chemistry Box 60400, S-104 01 Stockholm 60. Tel: 08 34 05 60 Fax: 08 34 11 01

Studying metabolism of steroids.

Kebo Lab AB

Domnarvsgatan 4, S-163 94 Spanga Stockholm.

Tel: 08 760 00 20 Telex: 85411362

Supplies a wide range of amino acids and derivatives, nucleic acids, nucleotides, coenzymes, enzymes, vitamins, buffers and carbohydrates. Agent for United States Biochemical, and Atlantic Antibodies, US.

Kemi-Interessen AB

Box 6018, S-172 06 Sundbyberg Tel: 08 28 91 60 Telex: 10048

Distributes pharmaceutical raw materials, chemical intermediates, feed additives and agricultural chemicals. Subsidiary of Bofors Nobel Kemi, Sweden.

Kemila Preparat AB

Box 609, S-191 26 Sollentuna. Telex: 15396 Tel: 08 35 90 40

Supplies clinical diagnostics, serums, antiserums and monolconal antibodies. Agent for Sera-Lab Ltd, UK, Nordic Immunological laboratories, Netherlands and Southern Biotechnology Associates and Vector Laboratories, US.

Kornsas Marma AB

S-801 11 Gavle.

Tel: 026 19 20 00 Telex: 47030

Produces kraft paper, sulphate pulp and related products.

Labassco AB

PO Box 5205, Jaernringen 19-21, S-433 85 Partille.

Tel: 031 44 90 40 Telex: 20831

Supplies a wide range of laboratory apparatus and equipment. Distributor for Gallenkamp, UK. Also distributor for Jackson Immunoresearch Laboratories, US.

Labkemi AB

Frofastegatan 111, S-421 31 Vastra Frolunda.

Fax: 031 477890 Tel: 031 490640 Telex: 21419

Supplies laboratory separation products.

Laboratorie Design AB

PO Box 7, S-181 21 Lidingo. Tel: 08 767 03 95 Telex: 13219

Supplies blood-grouping and tissue-typing reagents, immunological reagents and bacterial growth media. Agent for KC Biologicals Inc, US.

Ludwig Institute for Cancer Research

Box 595, Biomedical Centre, S-751 23 Uppsala.

Carrying out research on growth regulatory factors in relation to cancer.

Lund University

Department of Biotechnology

PO Box 124, S-22100 Lund.

Carrying out research on monoclonal antibodies and hybridoma

Lund University

Department of Marine Biology

Box 740, S-220 07 Lund.

Tel: (046) 12 46 70

Studying growth of seaweeds and other marine plants as well as investigating possible uses, including conversion to biogas (methane) by anaerobic digestion or use as a raw material for extraction of various chemicals.

Lund University

Department of Technical Microbiology

Box 740, S-220 07 Lund.

Tel: 046 12 46 00

Studying use of immobilized biocatalysts, including enzymes and cells, in relation to enzymic saccharification of cellulose and glucose fermentation, with yeasts, to produce ethanol from cellulose. Using immobilized cells and enzymes in multi-step systems. Investigating methods of regenerating coenzymes. Using immobilized cells and enzymes in multi-step systems and investigating the use of immobilized plant cell cultures for production of secondary products.

Lyckeby Starkelsfordadling AB

Box 75, S-292 00 Karlshamn.

Tel: 0450 150 20

Manufactures glucose monohydrate and industrial starch derivatives.

Marwell AB

Kyrbacken 27, S-171 50 Solna.

Tel: 08 83 82 81 Telex: 14345

Supplies proteins and peptides with hormonal or other biological activity, as well as peptide synthesis reagents. Agent for UCB-Bioproducts,

Medelco AB

Box 668, S-126 06 Hagersten.

Supplies agarose for research and pharmaceutical applications.

Box 97, S-741 00 Knivsta.

Tel: 018 165851

Supplies immunological and biological reagents including polyclonal antibodies against human immunoglobulins and human kappa chain, and animal immunoglobulins.

Mikron AB

PO Box 7071, S-172 07 Sundyberg.

Tel: 08 98 02 25

Supplies microscopes, fibre optics, illuminators and other optical devices.

Milab

Box 97, S-741 00 Knivsta.

Tel: 18 16 58 50 Telex: 76118 Fax: 18 13 37 11

Carrying out cell hybridization and producing monoclonal antibodies (see Biosoft, France).

Milkfood AB

S-260 23 Kagerod.

Fax: 46 418 802 34 Tel: 46 418 803 60

Produces milk-based powders, dairy-based speciality food ingredients including yoghurt powder with incorporated freeze-dried bacteria, starter cultures, flavour ingredients for confectionery, non-dairy creamer, animal feed supplements, silage inoculants, and bacterial probiotics including biolactin and Streptococcus faecium, to replace antibiotics which are illegal in Sweden.

Mobo-Chemetics AB

Box 313, Stora Torget 1, S-891 01 Ornskoldsivk 1.

Telex: 6082 Tel: 0660 100 30

Designs and constructs turnkey effluent systems for pulp and paper industries.

Modocell AB

Box 500, S-891 01 Ornskoldsvik

Tel: 0660 105 003 Telex: 6054

Produces wood pulp and related products.

Monocarb AB

Solvegatan 41, S-223 70 Lund.

Tel: 046 16 89 00 Telex: 8305152 Fax: 046 15 13 95

Offer services in large scale production of monoclonal antibodies.

Montoil AB

Box S-100 55 Stockholm.

Supplies industrial enzymes.

National Bacteriological Laboratory

Luudagat an 2, Solna, S-105 21 Stockholm.

Undertaking purification and characterization of bacterial proteins, toxins and enzymes. Studying use of enzymes in analysis and blood proteins.

Ninolah AB

Box 137, Upplands Vasby 1, S-194 01 Stockholm.

Tel: 0760 86070

Supplies fermentation equipment (see LH Fermentation, UK).

Nobel Chematur AB

Box 430, S-691 27 Karlskoga.

Tel: 46 586 865 00 Telex: 73567 nochem Fax: 46 586 594 50

Manufacturers in the alcohol industry. Have acquired the Biostil fermentation alcohol process from Alfa-Laval.

Nordiska AB Naarden

Box 66., Vikhoegsvaegen 9, S-240 21 Loddekopinge.

Tel: 046 70 92 85 Telex: 32489

Distributes flavours, fragrances and enzymes of Naarden International NV. Netherlands.

Novakemi AB

PO Box 6021, Getfotsvagen 52-54, S-122 06 Enskede. Tel: 08 390490 Telex: 19081

Distribute affinity-purified antibodies to immunoglobulins and hybridoma screening systems; products of Kirkgaard & Perry Laboratories Inc, US. Also distributor for Southern Biotechnology Associates and Jackson Immunoresearch Laboratories, US.

Novum

Huddinge University Hospital

Karolinska Institute, Centre for Biotechnology, S-141 86 Huddinge. Tel: 46 08 711 87 30 Fax: 46 08 711 66 59

New Centre for Life Sciences set up for commercial development in biotechnology. Comprises: Centre for Biotechnology; Department of Medical Nutrition; Department of Molecular Biology; Centre for Dental Technology and Biomaterials; Department of Medical Technology; KaroBiosis AB.

Nycomed AB

Postbox 1215, S-181 23 Lidigo.

Supplies immunological and biological reagents; products of Nycomed AS Diagnostics, Norway.

Nyegaard & Co AB

Herserudsvagen 5254, S-122 06 Lidingo. Tel: 08 765 2930

Supplies media for use in centrifugal separations (see Nyegaard & Co,

Oncholab AB

S-223 70 Lund.

Tel: 46 16 86 08 Telex: 8305152 Fax: 46 15 13 95

Developing the use of low-density lipoproteins as carriers of drugs and biologically active compounds.

Organon Teknika AB

PO Box 5076, S-421 05 Vastra Frolunda.

Tel: 031 29 94 90 Telex: 21791

Supplies antibiotics, insulin, enzymes, diagnostics, apparatus and other products of Organon Teknika, US.

PAAB Projektinstrument Automatik AB

Box 8, S-661 00 Saffle.

Tel: 0533 150 60 Telex: 5347

Produces a wide range of measuring and control equipment, including meters for pH, redox potential, conductivity, oxygen temperature, flow rate etc for industrial use. Also manufactures data loggers, microprocessors and equipment for long-distance data transmission.

Perstorp/Percell Biolytica AB

S-223 70 Lund

Tel: 046 16 87 80 Telex: 8305035 perstp Fax: 046 15 25 47

Manufacture products for biotechnology, analytical instruments, polymers, surface materials, speciality chemicals and medical technology including materials for bioseparation such as affinity chromatography membrane filtration, aqueous two-phase separations, ion exchange and chiral separations. Products include columns for antibody purification based on Protein G and culture equipment including a gelatin microcarrier.

Perstorp Biotec AB

S-284 80 Perstorp

Tel: 043 53 80 00 Telex: 72000/72470

Carrying out research in the area of carbohydrate chemistry, production and separation of speciality chemicals, enzymes and technology for analysis. Subsidiary of Perstorp AB.

Pfizer AB

Nytorpsvagen 2, S-183 20 Taby 3.

Telex: 19254 Tel: 08 785 01 30

Supplies pharmaceuticals and food additives (see Pfizer Inc, US).

Part III **SWEDEN**

Pharmacia CanAg

PO Box 12136, S-402 42 Goteborg. Tel: 46 31 42 73 40

Biotechnology division of Pharmacia producing and applying monoclonal antibodies for the diagnosis and treatment of human carcinomas.

Developing diagnostic tests as well as immunohistochemical and immunoscintigraphic techniques.

Pharmacia LKB Biotechnology AB

S-751 82 Uppsala.

Tel: 018 16 30 00 Telex: 76070 fineup Fax: 018 14 38 20

Comprises three divisions: Laboratory Separations, Process Separations and Molecular Biology. Manufactures and distributes a comprehensive range of reagents for molecular biology including restriction endonucleases, DNA and RNA modifying enzymes, M13 sequencing systems, nucleotides, oligonucleotides and gene assembler oligonucleotide synthesis systems through the Molecular Biology Division as well as complete gel filtration, ion exchange and affinity chromatography systems, complete systems and consumables for all electrophoretic techniques, centrifugation medium and biochemicals through the Laboratory Separations Division.

Pharmacia LKB-Produkter AB

Box 305, Annedalsvagen 33-39, S-161 26 Bromma. Tel: 08 799 80 00 Telex: 10492

Develops, manufactures and markets instruments and reagents for use in liquid chromatography, electrophoresis, electrofocusing isotachophoresis, fermentation, microtomy and calorimetry. Products include complete systems or kits for separation or purification of proteins, nucleic acids and complex mixtures of hydrolysis products using a variety of media, including agarose, SDS-polyacrylamide gel and immunoelectrophoresis techniques. Chromatography equipment includes systems for high performance liquid chromatography, columns and packing materials, as well as fraction collectors designed for continuous use cold rooms.

Philips Analytical Systems AB

S-115 84 Stockholm. Tel: 08 782 1000

Supplies a wide range of scientific instruments including spectrometers, chromatographs, radioactivity counting systems and microscopes (see

Purac AB

Box 1146, Bankgatan 15, S-221 05 Lund. Tel: 046 13 51 00 Telex: 32786

Constructs turnkey wastewater treatment plant. Specializes in tertiary treatment using advanced biological systems.

Roche Producter AB

Box 250, Storsatragrand 12, S-127 25 Stockholm 1. Tel: 08 97 03 30 Telex: 10729

Supplies diagnostics, cosmetics, perfumes, flavourings and plant protection products of Hoffmann-La Roche & Co AG, Switzerland.

Royal Institute of Technology

Department of Water Resources Engineering S-100 44 Stockholm. Tel: 78 78 242

Investigating the effects of antibiotics and chemotherapeutics on the production of biogas from animal wastes using anaerobic digestion, as well as effects of heat treatment on rates of gas production.

Sala International AB

Box 136, S-733 00 Sala. Tel: 0224 132 20 Telex: 7536

Manufactures a range of separation and dewatering equipment, including screens, cyclones, screw presses, sedimentation equipment, filters and presses, as well as pumps and conveyors for semisolids or liquids.

Sandoz AB

Box 122, Kemistvagan 7, S-183 11 Taby. Tel: 08 756 02 60 Telex: 10918

Distributes products of Sandoz AG, Switzerland.

Sangtec Medical AB

Division Bonner Medical Box 20045, S-161 20 Bromma.

Telex: 12570 ilabs Tel: 46 8 988 330

Manufactures antiserums and other blood products.

Scan-Agent

Box 10248, S-100 55 Stockholm. Tel: 08 60 44 35 Telex: 17312

Supplies products for chromatography and filtration including speciality products of Schleicher & Schull GmbH, Germany.

Scandinavian Diagnostic Services

Box 40, S-311 01 Falkenberg. Tel: 034 68 30 50 Telex: 85438230

Supplies diagnostic products as well as genetic engineering products of Promega Biotech, US.

Skandigen AB

Norrlandsgatan 15, S-111 43 Stockholm. Tel: 08 796 95 90 Telex: 14916 skagen

Venture capital group supporting research in areas of continuous fermentation of Protein A, hyaluronic acid, pertussis vaccine, synthetic peptides, native interferon and alpha-interferon diagnostics, electrotransfection, instant hematinagar, autologous blood transfusion, recombinant human albumin and antithrombin III.

Sorigona AB

Box 17050, S-200 10 Malmo. Tel: 040 24 92 00

Manufacture turnkey plants and offer consultancy in design of plant for treatment of effluents high in carbohydrate and proteins by combination of anaerobic treatment with nitrogen reduction and the recovery of ammonia salts if required. Services include feasibility studies, pilot tests, process engineering, start up and personnel training in such areas as production of ethanol, amino acids, yeast, cheese, citric acid, single cell protein, potato, starch, sugar etc. Member of the Cardo Group, Sweden.

Sauibb AB

Box 925, Vesslevagen 2, S-181 09 Lidingo. Tel: 767 02 00 Telex: 17571

Supplies products of E R Squibb & Sons, US.

Stadex AB

Kopparbergsgatan 31, S-214 44 Malmo. Tel: 040 866 40 Telex: 32239

Produces invert sugar, dextrins, starch derivatives, feed protein, starch-based raw materials and related compounds for industrial applications.

State Bacteriology Laboratory

Statens Bakteriologiska Laboratorium

S-105 21 Stockholm.

Maintains national culture collection.

Stora Kopparbergs Berglags AB

S-791 80 Falun.

Tel: 023 800 00 Telex: 74010 Fax: 74010

Produces paper, pulp and related products.

Studsvik Energiteknik AB

S-611 82 Nykoping.

Tel: 0155 80 00 00 Telex: 64013

Carrying out basic research as well as developing new energy technologies, including renewable energies based on biological conversion of natural raw materials.

Svenska Cellulosa AB

Kvissleby, S-851 88 Sundawall. Telex: 71000 Tel: 060 19 30 00

Produces pulp, paper, purified cellulose and related products.

Svenska Hoechst AB

Box 42026 Vretensborgsv 14, Vastberga Industreomr Hagersten, S-126 12 Stockholm.

Tel: 08 19 00 60 Telex: 10456

Supplies agrochemicals and other products of Hoechst AG, Germany.

Svenska ICI AB

Frofastagatan 79, Vastra Frolunda, S-401 23 Goteborg 1. Tel: 031 45 09 65 Telex: 20665

Supplies products of Imperial Chemical Industries plc, UK.

Svenska Labex AB

Sundstorget 3, S-252 21 Helsingborg. *Tel*: 042 13 92 90 *Telex*: 72512

Supplies clinical diagnostic kits and reagents. Agent for Mercia-Brocades Ltd. UK.

Svenska Serono AB

Hantverkargatan 7, Box 22114, S-10422 Stockholm.

Supplies diagnostic test kits based on monoclonal antibodies using a magnetic separation technique. Part of Ares-Serono Group.

Svenska Sockerfabrika AB

Box 17050, S-200 10 Malmo.

Tel: 040 24 90 00

Produce oligosaccharides for drugs and diagnostics.

Svenska Unilever Forvaltnings AB

Box 7838, S-103 98 Stockholm. Tel: (08) 23 80 Telex: 19232

Supplies products of Unilever NV, Netherlands.

Swedforest Consulting AB

Bjornstigen 89, S-171 93 Solna. Tel: 08 85 02 85 Telex: 11758

Offers consultancy in fuelwoods plantations and management of forests for energy production.

Swedish Forest Products Research Laboratory

Box 5604, S-114 86 Stockholm.

Carrying out studies on biochemistry of fungi and other microorganisms capable of degrading cellulosic materials. Also investigating mechanism of action of cellulases.

Swedish Institute of Agricultural Engineering

S-750 07 Uppsala.

Carrying out joint development programme with Swedish University of Agricultural Science on anaerobic digestion of farm wastes including studies on biogas burners and electricity generation using engine cooling water for heating the digester.

Swedish University of Agricultural Sciences

Department of Microbiology

S-750 07 Uppsala.

Carrying out studies on nitrogen fixation by free-living and symbiotic micoorganisms, and microbiology of cellulose degradation. Hold culture collection of bacteria, fungi and yeasts including special collections of Rhizobium and other soil organisms for general and agricultural microbiology research and teaching.

Swedish University of Agricultural Sciences

Box 7033, S-750 07 Uppsala.

Carrying out a joint development programme with the Swedish Institute of Agricultural Engineering on anaerobic digestion of farm wastes, including studies on biogas burners and electricity generation using engine cooling water for heating purposes.

Swedish Water and Air Pollution Research Institute

Institutet for Vatten & Luftvardsforskning

Box 21060, S-100 31 Stockholm.

Tel: 08 24 96 80

Undertaking research, process development and consultancy in water treatment, pollution control etc.

Swelab Instrument AB

Box 839, S-12108 Johanneshov. Tel: 08 81 03 30 Telex: 17493

Manufacture precision instruments for liquid handling including automatic diluters and mixers including a hemo-sampler for automated and precise determination of haemoglobin in venous blood.

Svn-Tek AB

Haradshovdingegatan 6, S-902 45 Umea.

Tel: 090 13 24 10

Carrying out research and development of adhesin antigens, antibodies and DNA fragments encoding for antigen. Also produce superoxide dismutase by rDNA techniques.

Tecator AB

Box 70, S-263 01 Hoganas.

Tel: 042 423 30 Telex: 72695 Fax: 042 403 49

Supplies instruments for detection or determination of fibre, nitrogen, proteins, chemical oxygen demand, heavy metals, moisture etc as well as equipment for solvent extraction, sample preparation and HPLC designed for use in industrial, wastewater or industrial applications.

Techtum Instruments

Kungsgatan 145, S-902 45 Umea. Tel: 090 118880 Telex: 54145

Manufactures specialized equipment for use in plant science, including spectroradiometers and algal cultivation systems.

Termo Kvl AB

Florettgatan 15 A, S-25266 Helsingborg.

Tel: 042 151450 Telex: 72629

Manufacture a wide range of laboratory refrigeration equipment.

Umea University

Unit for Applied Cell and Molecular Biology

S-901 87 Umea.

Tel: 090 13 35 36

Carrying out research in the area of gene regulation in several prokaryotic and eukaryotic systems.

Umea University

Department of Plant Physiology

S-091 87 Umea

Tel: 090 16 54 16

Carrying out studies on the molecular biology of development and adaptation of the photosynthetic apparatus in plants.

Upjohn AB

Box 289, Ogardesv, S-433 25 Parille.

Tel: 031 44 72 70 Telex: 27187

Distributes pharmaceutical products of Upjohn Co, US.

Uppsala University

Department of Analytical Pharmaceutical Chemistry

Box 574, S-751 23 Uppsala.

Studying use of ion-pair chromatography and fluorometry for analysis of drugs.

Varian AB

Skytteholmsvagan 5, PO Box 1099, S-171 22 Solna.

Tel: 08 82 00 30 Telex: 10403

Supplies electronic analytical instruments including chromatographs and spectrophotometers (see Varian Instruments, US).

Wallenberg Laboratory

Dag Hammarskjolde Vag 21, S-752 37 Uppsala.

Tel: 018 10 15 30

Studying biochemistry of viruses, RNA synthesis, virus DNA replication and virus protein translation.

Water Laboratory in Uppsala

Vattenlaboratoriet i Uppsala

Box 8043, S-750 08 Uppsala.

Tel: 018 14 62 80

Developing methods of water purification, pollution control, etc.

Part III SWEDEN

Wellcome Foundation Ltd

Box 2118, S-183 02 Taby 2. Tel: 468 768 75 39 Telex: 17859

Supplies pharmaceutical products and diagnostics of the Wellcome Foundation, UK.

Zeiss Svenska AB

Box 27324, S-102 54 Stockholm 7. Tel: 08 63 10 00 Telex: 19305

Supplies light microscopes and related optical equipment.

SWITZERLAND

Abbott Laboratories

Chemical Division

2 rue Thalberg, CH-1201 Geneve. Tel: (022) 31 95 30 Telex: 27276

Distributes pharmaceuticals and pharmaceutical raw materials (see Abbott Laboratories, US).

Adolf Kuhner AG

Dinkelbergstrasse 1, CH-4127 Birsfelden-Basel.

Tel: 061 313 21 21 Telex: 964253 Fax: 061 313 21 26

Manufactures fermentation and culture shaking machines and incubator shakers for laboratory and industrial applications.

Agpharm AG

Reussinsel 28, CH-6002 Lucerne. Tel: 041 22 03 01 Telex: 865

Telex: 865694 Fax: 041 22 85 08

Supplies pharmaceutical specialities.

Alfa-Laval Industriegesellschaft AG

Oberfeldstrasse 20, CH-8302 Kloten. Tel: 01 814 0212 Telex: 52339

Supply industrial centrifuges and separation systems.

Altamira Capital Corp

475 rue Michel Jasmin, Dorval, Quebec H9P 1C2.

Tel: 514 631 2682

Venture capital company with interests in veterinary diagnostics.

Amec AG

Hegnauerstr 55, Wangen CH-8602.

Tel: 01 833 4979

Manufactures blenders and homogenizers.

Amicon Division

W R Grace

Ave Montchoisy 35, CH-1006 Lausanne.

Fax: 21 26 81 84 Tel: 21 49 91 11 Telex: 25355

Supply industrial membrane filtration and ultrafiltration equipment including spiral, hollow fibre and plate membranes, chromatography systems and bioreactors (see Amicon Division, W R Grace, US).

Amicon Schweiz

Neugasse 6, CH-8005 Zurich.

Tel: 01 42 47 11 Telex: 822694

Supplies a wide range of products for separation, filtration and chromatography (see Amicon Corp, US).

Amimed AG

Birsfelderstrasse 44, CH-4132 Muttenz/BL.

Tel: 061 61 36 64 Telex: 965892 amig

Markets products for immunodiagnostics, biochemistry, cell biology and biotechnology - all products of Janssen Biochimica, Belgium.

Anawa Laboratories

Anawa Trading SA

Unterdorfstrasse 23, CH-8602 Wangen.

Tel: 01 833 05 55 Telex: 826379 Fax: 01 833 05 75

Supplies immunological and biological reagents including

radioimmunoassay kit for atrial natriuretic factor. Distributor for Janssen Life Science Products, Belgium.

api bioMerieux SA

51-53 avenue Blanc, CH-1202 Geneve.

Fax: 022 36 92 92 Tel: 022 32 57 60 Telex: 289863 apbm

Write to: CP 133, CH-1211 Geneve 21

Supplies diagnostic and analytical laboratory reagents and instruments; products of bioMerieux, France.

Applied Biosystems

Ruechligweg 101, CH-4125 Riehen.

Tel: 061 49 61 61 Telex: 845963611

Supply instrumentation for protein sequencing and DNA synthesis and purification. Subsidiary of Applied Biosystems, US.

Applied Research Laboratories SA

En Vallaire, CH-1024 Ecubiens.

Tel: 021 34 97 01 Telex: 450393 Fax: 021 35 37 24

Supplies inductively coupled plasma spectrographs and x-ray fluorescence spectrometers. Subsidiary of Fisons plc, UK.

Arbeitsgemeinschaft Bioenergie (ARBI)

Unterdorf 143, CH-8933 Maschwanden. Fax: 01 767 1601 Tel: 01 767 18 19

Offer development, consulting and engineering in the field of bioenergy, mainly biogas production from agricultural, industrial and municipal (solid) wastes. Design high rate anaerobic filters as well as appropriate technologies for developing countries and ethanol plant.

Ares-Serono NV

Ares Applied Research Systems NV

2 chemin des Mines, CH-1202 Geneva.

Telex: 289854 Tel: 022 32 61 80

Headquarters of Ares-Serono Group. Supplies infertility products extracted from natural biological sources as well as pharmaceutical products in the fields of human growth, immunology and virology. Also market products for treatment of bleeding gastric ulcers and disorders of the circulatory system.

Assay AG

Zeughausgasse 7A, CH-6300 Zug. Tel: (0422) 113 73 74 Telex: (

Telex: 65118

Supplies proteins and peptides with hormonal or biological activity, as well as peptide synthesis reagents. Agent for UCB-Bioproducts SA, Belgium.

Auer Bittmann Soulie AG

Munchensteinerstrasse 87, CH-4002 Basel.

Tel: 061 50 50 80

Manufactures light microscopes and accessories including microtomes. Supplies products of Merck, US.

AVL AG Biomedical Instruments

. CH-8207 Schaffhausen.

Telex: 897231 Fax: 053 33 16 17 Tel: 053 34 16 66

Manufactures instruments for clinical microanalysis including blood, gas and electrolyte analyzers.

Bachem Feinchemikalien AG

Hauptstrasse 144, CH-4416 Bubendorf.

Tel: 061 931 23 33 Telex: 966081 Fax: 061 931 25 49

Manufactures biologically active peptides as well as amino acid derivatives and phospholipids, human and mouse lymphokines and cytokines including colony stimulating factors, interleukins and interferons. Provides a custom synthesis service.

Part III **SWITZERLAND**

Basel University

Biocenter

Klingelbergstasse 70, CH-4056 Basel. Tel: 061 25 38 80

Studying the biochemistry of cells, regulation of cancer, enzyme isolation and kinetics, enzymes and mutagenesis, cell membrane structure and genetic engineering.

Basel University

Department of Surgery

Petergraben 17, CH-4000 Basel.

Tel: (061) 25 25 25

Researching into peptide chemistry, enzyme kinetics, immunology and immunochemistry.

BASF (Schweiz) AG

Appital, Postfach, CH-8820 Wadenswil/Au. Subsidiary of BASF AG, Germany.

Battelle Research Institute

Geneva Research Centre

7 route de Drize, CH-1227 Carouge Geneve. *Tel*: 022 27 02 70 *Telex*: 423472 bg

Contract research organization. Carries out multi-client studies, work for individual clients and basic investigations in most areas of science and technology, including biotechnology and genetic engineering (see Battelle Memorial Institute, US).

Baxter Dade AG

Bonnstrasse 6, CH-3186 Duedingen.

Fax: 037 43 25 69 Tel: 037 43 91 11 Telex: 942096

Manufactures clinical diagnostics and automated systems for immunology, coagulation studies, clinical chemistry and microbiology. Has an interest in collaborative immunochemistry research and the development of radioisotopic and non-radioisotopic immunoassay techniques.

Bayer (Schweiz) AG

Grubenstrasse 6, CH-8036 Zurich. Tel: (01) 66 22 80 Telex: 52782

Distributor of products of Bayer AG, Germany including penicillin, organic acids, antiseptics, alkaloids and vaccines

Beckman Instruments International SA

22 rue Juste-Olivier, CH-1260 Nyon

Tel: 022 63 11 81 Telex: 419888 bec

Fax: 022 62 18 10

Supplies analytical instruments, centrifuges, chromatographic equipment etc (see SmithKline Beckman, US).

Beecham AG

Brunnmattstrasse 13, CH-3174 Thorishaus.

Tel: 031 88 03 14 Telex: 911974 Fax: 031 88 04 41

Supplies proprietary pharmaceuticals. Products include antibiotics and vaccines (see Beecham Pharmaceutical Co Ltd, UK).

Berthold AG

Adlikerstrasse 236, CH-8105 Regensdorf.

Tel: 01 840 45 73

Supply radiation measuring systems including medical in vitro diagnostic instrumentation, automated RIA, industrial monitors, flow and doserate monitoring, radioactivity imaging, clinical luminometers, etc. Company of the International Berthold Group, Germany.

Bideco AG

Im Schorli 3, CH-8600 Dubendorf.

Tel: 01 820 21 30 Telex: 826647 Fax: 01 821 14 44

Offer bioplant consulting, engineering, construction and revamping, bioprocess development and services including risk analyses, environmental impact reports, validations and site evaluations.

Bio-Rad Laboratories AG

Kanalstrasse 17, CH-8152 Glattbrugg. Tel: 01 810 16 77 Fax: 01 810 19 33

Distributes products of Bio-Rad Laboratories, US.

Bio-Science Products AG

Gerliswilstrasse 43, PO Box 1173, CH-6020 Emmenbruecke. Fax: 041 55 83 22 Tel: 041 55 58 75 Telex: 868518 bsp

Produce immunological reagents, biochemicals, blood products etc including monoclonal and/or polyclonal antibodies against gamma globulins, human blood groups and immunoglobulins, cell and tissue proteins, enzymes and hormones. Also produce serums, gamma globulins, lectins, viruses and related products.

Bioengineering AG

Sagenrainstrasse 7, CH-8636 Wald ZH.

Tel: 055 938 111 Telex: 875977 Fax: 055 95 49 64

Manufactures and supplies microbiological culture plant, laboratory and industrial fermenters, and other bioreactors with microprocessor systems available for data logging and process control. Offers custom services in fermenter clean room technology.

Bioforce AG

CH-9325 Roggwil.

Tel: 071 48 14 22 Telex: 881745 biof Fax: 071 48 19 68

Manufactures phytotherapeutics, homeopathicals, health food products and body care products.

Biogen SA

46 route des Acacias, CH-1227 Carouge Geneva.

Tel: 022 43 32 00 Telex: 421340

Involved in research and development of pharmaceutical and other products using molecular biology and recombinant DNA technology. Interests include interfon, vaccines, hormones and chemicals from biomass. Subsidiary of Biogen NV, Netherlands.

Biogenzia Lemania SA

8 avenue de Morges, CH-1004 Lausanne. Tel: 021 25 40 11 Telex: 455642

Manufactures, distributes and develops biochemicals used in diagnostic reagents. Agent for Cedarlane Laboratories, Canada and Nordic Immunological Laboratories, Netherlands.

Biokema SA

Ch de la Chatanerie 2, CH-1023 Crissier. Telex: 454170 Tel: 021 634 28 45

Supplies antibacterial compounds, biological materials and immunoserum.

Riomed AG

Staffacherstrasse 45, CH-8004 Zurich 1.

Imports and exports pharmaceutical and clinical products from France, Netherlands, Belgium, UK, US etc.

Bioreba AG

formerly Inotech Diagnostik AG

Gempenstrasse 8, CH-4008 Basel.

Telex: 963294 Tel: 061 35 04 55 Fax: 061 35 68 58

Develop and market a wide range of polyclonal antibodies against infectious agents of plants including fruit, cultivated flowering plants and vegetables. Also supply affinity purified antibodies, screening kits for hybridomas, biological reagents, reagents for plant disease diagnostics and equipment for cell and tissue culture. Distributor for Southern Biotechnology Associates and Zymed, US.

Biotest (Schweiz) AG

Badenerstrasse 816, CH-8010 Zurich.

Tel: 01 62 60 70 Telex: 822733 Fax: 432 46 77

Supplies blood-grouping and tissue typing reagents, immunological reagents and bacterial growth media.

Boehringer Mannheim (Schweiz) AG

Biochemicals Division

Industriestrasse, CH-6343 Rotkreuz.

Tel: 042 65 42 42 Telex: 865256 bm Fax: 042 64 41 45

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

SWITZERLAND Part III

Brechbuhler AG

Steinweisenstrasse 3, CH-8952 Schlieren/ZH. Tel: 01 730 4825

Route de Veyner 272, CH-1255 Veyner/GE. Tel: 022 84 1797

Supplies analytical equipment including analytical and preparative liquid chromatographs.

Buchi Laboratoriums-Technik AG

Postfach, CH-9230 Flawil.

Tel: 071 84 81 81 Telex: 881230 buchi Fax: 071 83 57 11

Manufactures equipment for food and feed analysis including Kjeldahl systems, mini-spray dryers, fluid bed dryers, rotary evaporators, preparative liquid chromatography systems and other related laboratory

Buehlmann Laboratories AG

Baselstrasse 55, CH-4124 Schoenenbuch. Tel: 061 63 28 28 Telex: 963214

Fax: 061 63 28 25 Telex: 963214

Hohe Winde-Strasse 38A, CH-4024 Basel.

Tel: 061 35 24 24 Tx: 63214

Supplies and manufactures immunoassay kits and reagents for endocrinology, immunology, allergology, microbiology, drugs, neurobiology and tumour markers. Exclusive distributor for Diagnostic Products, Gen-Probe, Advanced Magnetics, Eiken, Immunotech, T-Cell Sciences and others.

Calbiochem AG

Cysatstrasse 23A, PO Box 5334, CH-6000 Lucerne 5. Tel: 041 51 16 51 Telex: 868143 calb Fax: 041 51 45 64

Supplies biochemicals and immunochemicals for research and production. Subsidiary of Calbiochem, US.

Sonnenmattstrasse 11, CH-4132 Muttenz.

Tel: 061 61 34 34 Telex: 962649 camag ch Fax: 061 61 07 02

Manufactures equipment for use in photography of electrophoretic gels in visible light and in both long and short wavelength UV light. Leading suppliers of instrumental thin layer chromatography systems.

Canberra Packard International SA

Renggerstrasse 3, CH-8038 Zurich.

Telex: 815214 Tel: 01 481 69 44

Fax: 01 481 64 52 Supplies analytical instruments such as beta counters (LSC), gamma-counters (R1A) and flow monitors as well as chemicals and accessories (see Packard Instrument Co, US).

Carl Zeiss (Suisse) SA

Grubenstrasse 54, Postfach, CH-8021 Zurich. Tel: 01 465 91 91 Fax: 01 465 93 14

Av Juste-Olivier 25, CH-1006 Lausanne.

Tel: 021 20 62 84

Manufacture microscopes, microinjection systems and micromanipulators, image analyzers and related optical products.

CCTM

Centre de Collections de Types Microbiens

Rue du Bugnon 44, CH-1011 Lausanne.

Holds culture collection containing mycobacteria, Shigella and other medical and non-medical bacteria for general microbiology use in research and teaching

Cellena AG

Lohwisstrasse 40, CH-8123 Ebmatingen.

Tel: 1 980 22 66

Developing melatonin technology in relation to the treatment of psoriasis as well as scalp and skin products. Other areas of interest include vaccine adjuvants for neuroimmunomodulation, anti-aging compounds and tumour inhibitory factor.

Cernitin SA

Barbengo, PO Box 234, CH-6903 Lugano.

Fax: 091 55 63 25 Telex: 841351 Tel: 091 55 63 11

Manufactures and distributes pharmaceuticals, veterinary products and

Cheman AG

Postfach Holzliwisenstrasse 5, CH-8604 Volketswil. Tel: 01 947 22 22 Telex: 827661 Fax: 01 945 39 30

Manufactures laboratory, pilot and industrial fermenters, process control systems, laboratory-scale cell cultivation plant and complete industrial fermentation plant comprising upstream, fermentation, downstream and utilities.

Chemapol (Schweiz) AG

Leimentstrasse 21, CH-4051 Basel. Tel: (061) 22 80 82 Telex: 22248

Manufactures fine chemicals, agrochemicals and raw materials and intermediates for the pharmaceutical and chemical industries.

Ciba-Corning Diagnostics AG

Neue Winterthurerstrasse 15, CH-8305 Dietlikon.

Tel: 01 833 27 27

Supplies diagnostic laboratory reagents including radioimmunoassay kits and luminescence immunoassay.

Ciba-Geigy AG

Postfach, CH-4002 Basel.

Tel: 061 696 11 11 Telex: 962991 Fax: 061 696 40 69

Reinacherstrasse 115, CH-4002 Basel.

Tel: 061 50 33 33 Tx: 64427 Fax: 061 50 00 96

Has a biotechnology research facility working in areas of gene expression, cell transformation, microbial genetics, mammalian cell culture, immunoreaction, peptide mapping, protein modification and secretion mechanisms. Collaborates with various research institutions including Friedrich Miescher Institut, Switzerland. Has active programmes in the pharmaceutical area and in animal health including interferons, elastase inhibitors, hirudins, fibrinolytics, lymphokines, growth factors etc as well as secondary metabolites. Has joint venture, The Biocine Company, with Chiron Corp, US to research and develop and market biotechnologically synthesized vaccines.

Cilag AG

Hochstrasse 201-209, CH-8201 Schaffhausen.

Tel: 053 810 25 Telex: 896033 cil

Manufactures pharmaceutical fine chemicals and intermediates (see Johnson & Johnson Inc, US).

Codiapharm AG

Fontanettaz 11, CH-1012 Pully.

Telex: 454778 Tel: 021 28 54 33 Fax: 021 28 22 84

Supplies immunodiagnostics, pharmaceuticals and biochemicals including monoclonal antibodies and microbiological products. Distributor for Biosoft, France.

Comptronix AG

Drusbergstrasse 19, CH-8810 Horgen.

Supplies accessories, reagents and adsorption media for gas and liquid chromatography. Agents for Phase Separations Ltd, UK

Contraves AG

Schaffhauserstrasse 580, Postfach, CH-8052 Zurich.

Tel: 01 306 22 11 Telex: 829386 Fax: 01 810 91 05

Manufactures microprocessor-controlled automated cone and plate viscometers as well as other systems for measurement of viscosity and clinical analyzers including haematology cell counters and a computer-controlled reactor for use in chemical and research laboratories.

Cophar SA

Postfach 150, Moncor, CH-1701 Fribourg.

Tel: (037) 24 71 51

Produces antibiotics and vitamins.

Cora Engineering Chur AG

Sagenstrasse 97, CH-7000 Chur.

Tel: (081) 22 35 25 Telex: 74687

Engineering company with extensive experience in the food and chemical industries offering conceptual design studies, planning, engineering, construction, maintenance and complete turnkey systems.

Part III **SWITZERLAND**

Cyanamid International Corp

Postfach 1030, Zurichstrasse 12, CH-8134 Adliswil-Zurich. Tel: 01 712 31 11 Telex: 53130 Fax: 01 712 32 05

Distributes agrochemical, chemical and medical products of American Cyanamid Corp, US.

Debiopharm SA

38 petit Chene, CH-1001 Lausanne. Tel: 021 20 52 78 Fax: 021 20 5 Fax: 021 20 52 79

Investment company providing venture capital for development of new pharmaceutical products.

Diasan AG

Stampfenbachstrasse 42, CH-8023 Zurich.

Tel: (01) 362 33 30

Manufactures antibiotics and other pharmaceuticals, vitamin preparations and diet products.

Dow Chemical Europe

Batchtobelstrasse 3, CH-8810 Horgen. Tel: (01) 728 21 11 Telex: 54313 Subsidiary of Dow Chemical Co, US.

Dr Bender & Dr Hobein AG

Riedtlistrasse 15a, CH-8042 Zurich. Tel: 01 361 17 77 Telex: 816567

Supply free flow electrophoresis systems, biochemicals, cell culture media and reactors, filtration systems, chromatography products etc.

Dr E Graeub AG

Rehhagstrasse 83, PO Box 6366, CH-3001 Bern.

Fax: 031 34 20 66 Tel: 031 34 22 11 Telex: 911730

Produces microbiological and pharmaceutical preparations for veterinary

Dr H Wuthier AG

Industriestrasse 12, CH-8280 Kreuzlingen. Tel: (072) 75 31 31 Telex: 77313

Produces monosodium glutamate, amino acids, additives for animal feed, protein hydrolyzates and similar products.

Dr Rudolf Streuli AG

Utoquai 29, CH-8032 Zurich.

Tel: 01 47 23 40 Telex: 53976/816450

Supplier of immunological and biological reagents including analytical and research enzymes, products of Biozyme Laboratories, UK. Also distributor for UCB Bioproducts SA, Belgium.

Dr Wild & Co AG

Lange Gasse 4, CH-4002 Basel.

Tel: 061 22 52 11 Telex: 964340 Fax: 061 22 52 24

Produces pharmaceutical, cosmetic and dental specialities.

Du Pont De Nemours International SA

Pumpwerkstrasse 15, CH-8105 Regensdorf.

Tel: 01 841 03 30

Supplies radiochemicals, enzymes and products for molecular biology of the New England Nuclear Divison of Du Pont de Nemours (Deutschland) GmbH, Germany (see Du Pont-NEN Research Products, US).

Dynatech Produkte AG

PO Box 82, CH-8423 Embrach-Embraport. Telex: 57575

Supply research reagents for immunology, microbiology and biochemistry including highly purified antibodies to immunoglobulins obtained using affinity techniques as well as enzyme and chromophore-labelled affinity purified antibodies and poultry and veterinary diagnostics. Distributor for Kirkgaard & Perry Laboratories, US.

E Lotti SA

CP 432, 8 rue Baylon, CH-1227 Carouge Geneve. Tel: 022 42 57 66 Telex: 429382 loti

Supplies chemicals and reagents for use in laboratory instrumentation for liquid scintillation counting, histology and electrophoresis. Agent for National Diagnostics and Kent Laboratories, US.

Eastman Chemical International AG

Hertizentrum 6, CH-6300 Zug 3.

Telex: 868824 Fax: 042 21 12 52 Tel: 042 23 25 25

Distributes pharmaceutical, agricultural and other chemical products of Eastman Kodak Co, US.

Ecole Polytechnique Federale de Lausanne

Genie Biologique, CHB-Ecublens, CH-1015 Lausanne. Tel: 21 693 47 25 Telex: 454478 Fax: 21 693 Fax: 21 693 50 60

Carrying out research and development on bioreactor technology for animal cell culture.

Eli Lilly SA

PO Box 395, CH-1211 Geneva 26. Tel: 22 43 28 00

Develop and supply products of recombinant DNA technology including human insulin and insulin substitute (see Eli Lilly, US).

Ernst Keller & Co AG

Voltastrasse 102, CH-4002 Basel.

Telex: 964328 Fax: 061 57 08 61 Tel: 061 57 60 70

Agents for EKATO GmbH, Germany industrial fluid agitators.

Ernst Sander AG

Seestrasse 359, CH-8038 Zurich.

Supplies reagent-grade chemicals, fine chemicals for research and enzymes. Agent for Rohm GmbH, Germany.

Postfach 23 Sonnenberg, CH-8103 Unterengstringen. Tel: 01 750 3511

Produce scientific computer programs and systems for biometrics, organic chemistry, statistics, pharmacology, drug design and project management.

Eurotherm Produkte (Schweiz) AG

Kanalstrasse 17, CH-8152 Glattbrugg bei Zurich. Tel: 01 810 36 46 Telex: 827577 Fax: 01

Fax: 01 810 89 20

Produce temperature control and monitoring systems.

Extracta AG

Zuricherstrasse 204c, CH-9014 St Gallan.

Tel: (071) 27 39 49

Manufactures pharmaceutical and veterinary products, gelatin capsules,

Federal Research Station for Farm Management and **Agricultural Engineering**

CH-8356 Tanikon.

Tel: 052 47 20 25

Monitoring performance of anaerobic digesters on Swiss farms and developing dual-fuelled tractors.

Firmenich SA

1 route des Jeunes, CH-1211 Geneve 8.

Tel: 022 42 42 00 Telex: 423181

Produces perfumes and flavours.

Flow Laboratories AG

Lattichstrasse 8b, CH-6340 Baar/Zg.

Tel: 042 31 34 44 Telex: 868955 flow

Via Campagna, Centro Nord-Sud, CH-6934 Bioggio. Tel: 091 59 55 66 Tx: 844532 Fax: 091 59 55 69

Supplies a wide range of chemicals, reagents and equipment for cell culture, research and clinical diagnostics etc, as well as fibroblast interferon for research purposes (see Flow Laboratories Inc US).

Fluka Chemie AG

Industriestrasse 25, CH-9470 Buchs.

Tel: 085 695 11/085 602 75 Telex: 855282/855283 Fax: 085 654 49

Manufactures and distributes high-purity biochemicals, basics for biochemistry and biochemicals, chromatography equipment and accessories, nucleosides, nucleotides, ribonucleases, peptide synthesisers etc. The sales programme includes over 11,000 products for research, laboratory and pilot plant applications.

SWITZERLAND Part III

Fresenius AG

CH-6370 Stans.

Tel: 041 64 41 41 Telex: 86 61 90

Distributor for Southern Biotechnology Associates, US.

Friedrich Miescher-Institut

PO Box 2543, CH-4002 Basel. Tel: 061 37 50 46/37 66 61

Carrying out research on human DNA repair proteins using techniques of cDNA cloning and sequencing and protein purification.

Gebruder Sulzer AG

CH-8401 Winterthur.

Tel: 052 81 11 22 Telex: 896060 Fax: 052 23 42 83

Design biological systems for the treatment of water, wastewater and sludge including denitrification of drinking water, anaerobic treatment of wastes and effluents from sugar factories and paper/pulp mills and biofiltration.

Genefusion SA

19 Croix d'Or, CH-1204 Geneve Telex: 427450 Tel: (022) 28 20 44

Provides a consultancy service in the production of vaccines, hormones and monoclonal antibodies in specific serum free media.

Geneva University

Department of Microbiology

40 boulevard de la Cluse, CH-1211 Geneve 4.

Studying transcription of tRNA in Xenopus and analysis of fungal proteins and tRNA

Geneva University

Department of Biochemistry

30 quai Ernst Ansermet, CH-1211 Geneve 4.

Tel: 022 21 93 55

Conducting research on chromosome structure, membrane transport, and various protein systems including acetylcholine receptors, calmodulin, tubulin and haemoglobin. Methods include expression of cloned genes and molecular modelling using computer graphics.

Genofit SA

110 ch du Pont-du-Centenaire, CP 239, CH-1212 Grand-Lancy 1. Tel: 022 71 44 44 Telex: 423082 gfit Fax: 022 71 31 28

CH-1228 Plan Les Quates

Develops, produces and markets equipment, kits and reagents for biochemistry, molecular biology and recombinant DNA technology. Distributor for Stratagene, US lambda packaging extracts.

Gibco BRL AG

Zwingerstrasse 12, CH-4018 Basel.

Tel: 061 35 40 66 Telex: 64520 Fax: 061 35 85 92

Supplies products for tissue culture, microbiology, clinical chemistry and immunology (see Gibco Laboratories, US).

Glavo AG

Glacomettistrasse 3, CH-3000 Bern 31.

Tel: 031 44 89 82 Telex: 33352

Supplier of pharmaceutical products of Glaxo Holdings plc, UK.

Glaxo Institute for Molecular Biology SA

46 route des Acacias, CH-1227 Carouge, Geneva. Tel: 022 43 32 00 Telex: 421340

Biotechnology research unit carrying out projects in viral and fungal therapeutics, inflammatory diseases, human interleukin-2 and regulation of cell proliferation and differentiation. Part of the Glaxo Group.

Grace AG

Hertistrasse 29, Postfach, CH-8304 Wallisellen.

Tel: 01 830 44 03 Telex: 826286 Fax: 01 830 37 87

Supplies ultrafiltration, microfiltration and membrane equipment as well as affinity chromatography media and columns (see Amicon Ltd, UK and W R Grace, US).

Groupe de Travail Biogas

Bureau d'Arichitec OCA, CH-5200 Broug.

Has developed simple batch-type anaerobic digesters for production of biogas (methane) from farm manures.

Hamilton Bonaduz AG

Postfach 26, CH-7402 Bonaduz.

Tel: 081 37 01 01 Telex: 74206/851311 cham Fax: 081 37 25 63

Supplies a wide range of automated dispensing, diluting and liquid measuring devices including systems for very small volumes. Products include apparatus designed specifically for plate work such as the ELISA technique of immunoassay, as well as automated laboratory and industrial use suited to radioimmunoassays with a variety of preset programmes available. Also supply equipment for chemi- and bioluminescence measurement.

Hapar Chimie SA

16 grande Places, CH-1700 Fribourg.

Tel. (037) 22 52 03 Telex: 36505

Supplies bulk pharmaceuticals derived from animals including bovine albumin, collagen and insulin.

Hefti AG

Postfach 245, Hohlstrasse 507, CH-8048 Zurich. Tel: 061 432 13 40

Produces sugar alcohols and acids (eg sorbitol, manitol and gluconic acid), emulsifiers, defoamers, wetting agents etc, for food, paper, textile and other industries.

Heraeus AG

Raffelstrasse 32, CH-8045 Zurich.

Tel: 01 461 2055

23 rte des Jeunes, CH-1227 Carouge-Geneve.

Tel: 0222 43 2167

Supply carbon dioxide incubators, centrifuges, ovens and other laboratory equipment.

Hewlett-Packard SA

150 route du Nant-d'Avril, CH-1217 Meyrin-Geneva 2

Tel: 022 83 81 11 Telex: 419019 Fax: 022 83 8542

Supply a wide range of chromatographic and radioactivity counting equipment and accessories as well as data handling computer packages for use with laboratory instruments (see Hewlett Packard, US).

Hoechst Pharma AG

Bernerstrasse-Herostrasse 7, CH-8048 Altstetten Zurich.

Tel: 01 62 72 00 Fax: 01 62 84 63

Markets pharmaceuticals, agrochemicals etc, of Hoechst AG, Germany.

Hoffmann-La Roche & Co AG

Grenzacherstrasse 124, CH-4002 Basel.

Tel: 061 688 11 11/061 27 11 22 Telex: 962292/963386

Produces a wide range of pharmaceuticals, fine chemicals including amino acids, vitamins (ascorbic acid, calciferol, carotene, alpha-tocopherol, cyanocobalamin), diagnostic reagents, cosmetic flavourings and plant protection chemicals. Collaborating with Ajinomoto, Japan and Immunex Corp, US in marketing interleukin-2.

ICI (Switzerland) AG

Postfach Bleicherweg 33, CH-8039 Zurich.

Tel: (01) 202 50 91

Supplies products of Imperial Chemical Industries plc, UK.

Turkheimerstrasse 5, Postfach, CH-4009 Basel.

Tel: 061 39 00 25 Telex: 64005 ict

Supply reagents for immunoassay and histology as well as chromatography columns and equipment for gas chromatography, HPLC etc. Subsidiary of Sepragen Corp, US.

IG Instrumenten-Gesellschaft AG

Raffelstrasse 32, CH-8045 Zurich.

Telex: 813432 Fax: 01 461 30 01 Tel: 01 461 33 11

Supplies filtration equipment as well as balances, thermostats, freezers, plastic labware, antibodies, agarose and sterile benches.

Part III **SWITZERLAND**

Infors AG

Rittergasse 27, CH-4103 Bottmingen/Basel.

Tel: 061 47 77 00 Telex: 963479 Fax: 061 47 37 20

Manufactures fermentation and culture shakers, fermenters and bioreactors, and growth chambers for use in laboratory and industrial applications.

Ingold Messtechnik AG

Industrie Nord, CH-8902 Urdorf.

Telex: 827802 ingo Tel: 01 736 22 11 Fax: 01 736 26 36

Manufacturer of pH, redox, ion and oxygen electrodes and housings for both laboratory and industrial use in chemical, biotechnology, food, beverage and water processing (see Ingold Messtechnik GmbH, Germany).

Inotech AG

Zentralstrasse 34, CH-5610 Wohlen. Tel: 057 22 44 50 Telex: 827900

Telex: 827900 itag Fax: 057 22 34 66

Supplies laboratory and cell harvesting equipment, antibodies, immunochemicals, reagents for cultures and radioimmunoassays, cultures of mammalian cells and products for recombinant DNA research. Agent for Collaborative Research Inc, US.

Institut Biochimique SA

Via al Ponte 13, CH-6900 Lugano.

Telex: 73377 Tel: (091) 56 52 21

Manufactures speciality chemicals for use in pharmaceutical and veterinary applications.

Institute for Water Resources and Pollution Control

Uberlandstrasse 133, CH-8600 Duebendorf.

Tel: (01) 823 55 11

Provide consultancy in effluent management.

Instrumenten-Gesellschaft AG

Raffelstrasse 32 Postfach 124, CH-8045 Zurich.

Tel: 01 66 33 11 Telex: 845813432

Supplies equipment, chemicals and accessories for gel electrophoresis and chromatography; products of the Bioproducts Division of FMC Corp, US.

Ismatec SA

Laboratoriumstechnik

Feldeggstrasse 6, CH-8152 Glattbrugg-Zurich.

Tel: 01 810 30 40 Telex: 828779 Fax: 01 810 52 92

Supplies metering pumps, multichannel peristaltic pumps, universal pumps and gear pumps as well as probe handling systems.

Janssen Pharma

Sihlbruggstr 111, CH-6340 Baar.

Tel: 042 332233

Supplies immunodiagnostics, biologicals and biochemicals including antiserums, monoclonal antibodies, interleukin-2, growth factors, etc.

Kallestad Diagnostics

Krahbuhlstrasse 61, CH-8044 Zurich.

Supply immunodiagnostics and immunoreagents. Distributor for Kallestad Diagnostics, US.

Kallestad (Schweiz) AG

Zuchwilerstrasse, CH-4500 Solothrun.

Supplies immunodiagnostics and immunoreagents (see Kallestad, US).

Kinematica AG

Luzernerstrasse 147A, CH-6014 Littau/Lucerne.

Tel: 041 57 12 57 Telex: 862404 Fax: 041 57 14 60

Produce dispersion and mixing equipment.

Knoll AG

Oristalstrasse 65, CH-4410 Liestal.

Tel: 061 921 25 05 Telex: 966000 Fax: 061 921 25 63

Manufactures intermediates for pharmaceuticals and finished products.

Labaz AG

Birmannsgasse 8, CH-4009 Basel.

Supplies clinical diagnostics and other pharmaceutical specialities.

Labomatic AG

Baselstrasse 96, CH-4123 Allschwil.

Tel: 061 63 60 40 Telex: 963409 Fax: 061 63 92 62

Supply HPLC pumps and chromatographs as well as fully automated peptide synthesis systems.

Laborapparate AG

Hauptstrasse 68a, CH-9105 Schonengrund.

Tel: 071 57 13 88 Telex: 77401 Fax: 071 57 15 51

Supplies laboratory apparatus and equipment including carbon dioxide incubators, glass washing machines and cryogenic handling systems.

Laboratories Serono SA

CH-1179 Aubonne

Produces diagnostic kits, devices and reagents and clone kits. Part of the Ares-Serono Group.

Laboratorium fur Milchwissenschaft

ETH-Zentrum, CH-8092 Zurich.

Tel: 01 256 22 11

Developing anaerobic digestion for treatment of waste within a cheese factory associated with a piggery.

Labortec AG

Hauptstrasse 144, CH-4416 Bubendorf. Tel: 061 931 23 33 Telex: 966081

Fax: 061 931 25 49

Supplies machines for the synthesis and purification of peptides.

Labotrade AG

Im Kirschgarten 30, CH-4124 Schonenbuch.

Tel: 061 63 64 54 Telex: 963409 Fax: 061 63 92 62

Supply laboratory accessories.

Lausanne University

School of Pharmacy

2 rue Vuillermet 2, CH-1005 Lausanne.

Investigating the properties of biologically active natural products from plant sources.

Lausanne University

Microbial Collection Centre

Institute of Microbiology, 44 rue du Bugnon, CH-1011 Lausanne.

Tel: 021 22 33 91

Supply bacterial cultures.

Ligacon W Roll & Co AG

Ringstrasse 24, CH-8307 Tagelswangen.

Tel: 052 32 9121 Telex: 896418

Supplies membrane filtration systems and other products of AMF-Cuno, Germany.

Lonza Ltd

Muenchensteinerstrasse 38, CH-4002 Basel.

Fax: 41 61 51 87 33 Tel: 41 61 51 81 11 Telex: 965960

CH-3930 Visp.

Major manufacturer of fine chemicals and agrochemicals. Developing various biotechnological processes with emphasis on continuous fermentation systems. Company of the Alusuisse Group.

LSL Secfroid SA

Zone Industrielle, CH-1111 Aclens-Lausanne.

Tel: 021 869 95 11 Fax: 021 869 93 48 Telex: 459344

Manufactures laboratory and pilot freeze dryers, production freeze dryers, autoclaves, carbon dioxide incubators, deep-freezers, cell-disruptors, laboratory and pilot fermenters, production fermenters, cell culture vessels and ultra- and micro-filtration units.

SWITZERLAND Part III

Lucerna-Chem AG

Boite Postale 126, CH-6000 Lucerne 14.

Tel: 041 44 93 44 Telex: 865237 Fax: 041 44 93 45

Supplies chemicals and reagents for clinical chemistry, research and molecular biology, including lectins and agglutinins, antibodies and antiserums, affinity chromatography supports and carbohydrates as well as enzymes and reagents for polypeptide sequence analysis. Distributor for Biomakor, Israel, Biocarb, Sweden and Genzyme Corp, USB, Clontech and Worthington, US.

Lufttechnik & Metallbau AG

CH-5430 Wettingen.

Telex: 59 842 Tel: 056 26 3146

CH-1110 Morges.

Tel: 021 71 8184 Tx: 458 137

Manufacture laminar flow clean benches and fume hoods as well as class II microbial safety cabinets.

M Schaerer AG

Quellenweg, CH-3084 Wabern.

Tel: 031 54 29 25 Telex: 911800

Manufacture sterilizers and operating tables.

Macherey-Nagel AG

PO Box 224, CH-4702 Oensingen.

Telex: 982908 Tel: 062 76 20 66 Fax: 062 76 28 64

Supplies chromatography cartridges as well as equipment for liquid chromatography, thin layer chromatography, HPLC, etc (see Machery-Nagel, Germany).

MBR Bioreactor AG

Fax: 01 930 01 26

Carries out construction and manufacture of bioreactors, biotechnical equipment and manufacturing plant for the laboratory, pilot-plant and industrial user. Has particular experience in the field of monitoring and control systems with analogue or digital read-out of mixing speeds, temperatures, pH, redox potential, concentration of dissolved gases etc, parameters being adjustable using linear-scaled potentiometers. Products include a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing.

Medipro AG

Postfach, CH-9053 Teufen.

Tel: 071 331415 Telex: 77231

Supplies immunodiagnostics and reagents (see Sangtec Medical AB, Sweden).

Metrohm AG

PO Box, CH-9101 Herisau.

Tel: 071 53 11 33 Telex: 882712 metr

Fax: 071 52 11 14

Supply laboratory equipment including titrators, Karl Fischer titrators, pH meters and electrodes, voltammetric instruments, recorders and ion chromatographs.

Mettler Instruments AG

CH-8606 Greifensee Zurich.

Tel: 01 944 22 11 Telex: 826150 Fax: 01 944 30 90

Manufactures a wide range of electronic analytical balances which may be interfaced with computers or other peripheral equipment in a bidirectional mode as well as other equipment including reaction calorimeters.

Mettler Verkauf und Service Schweiz

Grabenstrasse, CH-8606 Nanikon-Uster.

Tel: 01 941 61 61 Fax: 01 941 60 16 Telex: 828844 mech

Supplies analytical balances and weighing systems as well as titrators. including Karl Fischer titrators for determination of moisture.

Meyhall Chemical AG

PO Box 862, Sonnenwiesenstrasse, CH-8280 Kreuzlingen.

Tel: 072 74 75 76 Fax: 072 75 21 81

Manufacturer of speciality chemicals including thickeners and stabilizers based on natural and synthetic polymers, citric acid, enzymes and malt extracts for the food and brewing, health care and pharmaceutical industries. Company of the RTZ Group, UK.

Miles (Lausanne) SA

, 5 avenue de Jordilis, CH-1000 Lausanne-Ouchy 6.

Tel: (021) 27 72 61 Telex: 24426

Distributes pharmaceuticals, diagnostics etc (see Miles Laboratories Inc, US).

Miles Scientific

c/o Rudolf Streuli AG, Utoquai 29, CH-8032 Zurich.

Tel: (01) 47 23 40 Telex: 816450

Supplies albumins, serum, both monoclonal and polyclonal antibodies, enzymes, polypeptides and reagents for electrophoresis.

Millipore AG

Steinackerstrasse 11, Postfach, CH-8302 Kloten-Zurich. Tel: 01 814 13 63

Telex: 56067 Fax: 01 814 12 87

Supplies membranes and filters, water treatment and chromatography apparatus, enzymes and diagnostic kits (see Millipore (UK) Ltd, UK).

Montedison (Suisse) SA

Lauriedstrasse 7, CH-6300 Zug 2.

Tel: 042 22 55 11 Telex: 868741 mes Fax: 042 21 65 67

Supplies speciality chemicals. Affiliated with Montedison, Italy.

Muller & Krempel AG

Schutzenmattstrasse, CH-8180 Bulach.

Tel: 01 860 3387

Rue de la Verrerie, CH-1162 St-Prex.

Tel: 021 76 2241

Supplies laboratory filtration systems and membranes including products of Schleicher & Schuell GmbH, Germany.

N Zivy & Cie SA

Postfach 412, CH-4104 Oberwil-Basel.

Tel: 061 401 03 03 Fax: 061 401 03 01 Telex: 962254

Supplies a wide range of laboratory apparatus. Distributors for

Gallenkamp, MSE, Edwards and Electrothermal, UK and Cole Parmer,

Nanolab AG

Giessenstrasse 15, CH-8952 Schlieren.

Tel: 01 730 28 22 Telex: 829004 nano Fax: 01 730 61 17

Supplies spectrophotometers, spectrofluorometers, HPLC systems, laboratory instruments and diagnostic reagents as well as instruments for biomedical applications. Formerly part of Dr W Ingold AG, Switzerland.

NE Nuclear Enterprises

25 chemin Francois Lehmann, CH-1218 Grand Sacconnex Geneve.

Tel: (022) 98 16 62 Telex: 289066

Supplies isotope counters for life science applications (see Nuclear Enterprises Ltd, UK).

Nestec SA

PO Box 353, CH-1800 Vevey.

Nestle Research Centre, Vers-Chez-les-Blancs, Lausanne

Biotechnology division of Nestle with an extensive programme of research in molecular biology and microbial genetics including lactic acid bacteria and yeast gene expression and transfer. Nestle Research Centre is developing treatment for diarrhoea using immunoglobulin extracted from milk from immunized cows.

Nichols Institute Diagnostics SA

45A route des Acacias, CH-1227 Les Acacias, Geneva. Tel: 022 42 98 40 Telex: 422002 nid Fax: 022 Fax: 022 42 98 48

Manufacturer of immunoassay diagnostic kits. International headquarters for Nichols Institute Diagnostics, US.

Niro Atomizer AG

Baumschulweg 6A, CH-6045 Meggen.

Tel: 041 37 33 19 Telex: 865508 Fax: 041 37 39 63

Supplies equipment for drying, dewatering and separation (see Niro Atomizer, Denmark).

Part III **SWITZERLAND**

Novabiochem AG

Weidenmattweg 4, Postfach, CH-4448 Laufelfingen. Tel: 062 69 19 22 Telex: 981761 nobi Fax: 0 Fax: 062 69 19 92

Manufacturer of amino acid derivatives, biologically active peptides, enzyme substrates, metabolic inhibitors, antibodies, chiral building blocks, biologically active lipids and phospholipids, etc as well as offering custom synthesis service for sophisticated organic compounds.

Novo Ferment (Switzerland) Ltd

Vogesenstrasse 132, CH-4013 Basel. Tel: (061) 57 55 11 Telex: 6297 Telex: 62970

Supplies industrial enzymes and pharmaceuticals (see Novo Industri AS, Denmark).

Novo Industrie (Pharma Schweiz) AG

Witikonerstrasse 37, Postfach 235, CH-8032 Zurich. Tel: 01 53 64 00 Telex: 56692 Fax: 01 55 96 06

Distributor of pharmaceuticals (see Novo Laboratories Ltd, UK).

Nucletron SA

11 chaussee G de Prangins, CH-1004 Lausanne.

Supplies chemicals and instruments for biochemical applications. Agents for Analytical Luminescence Laboratories, US.

O Kleiner AG

CH-5610 Wohlen.

Telex: 57325 Tel: 057 22 8586

Supplies laminar flow cabinets, ultrafiltration systems and disposable labware.

O Kleiner AG Laborbedarf

Schutzenmattweg 26, CH-5610 Wohlen. Tel: (057) 22 85 86 Telex: 57325

Manufactures clean air cabinets and fume hoods.

Opopharm AG

Kirchgasse 42 Postfach 315, CH-8025 Zurich 1. Tel: 01 259 82 65 Telex: 816409

Supply immunological and biological reagents including monoclonal antibodies. Distributor for Milab, Sweden.

Organon Teknika AG

Postfach 129, Churerstrasse 160, CH-8808 Pfaffikon.

Tel: 055 47 22 71 Telex: 867150

Supply immunological and biological reagents. Distributor for Organon Teknika, US.

P H Stehelin & Cie AG

Spalentorweg 62, Postfach 628, CH-4003 Basel.

Supplies HPLC columns, products of J T Baker, US.

PAG Oerlikon AG

Precisa Balance Division

Wallisellenstr 333, Box 8937, CH-8050 Zurich. Telex: 823112 hpiz Fax: 01 40 25 59 Tel: 01 41 44 44

Supply precision analytical balances of capacity up to 30kg with an accuracy of 0.01mg to 1g.

Sonnenweg 7, CH-4144 Arlesheim. Tel: 061 72 77 55 Telex: 96474 Telex: 964740

Supply equipment for flow cytometry and cell sorting.

Paul Scherrer Institut

formerly Eidg Institut fur Reaktorforschung CH-5232 Villigen-PSI.

Telex: 827418 psi Tel: 056 99 21 11 Fax: 056 98 26 35

Supplies radiopharmaceuticals; products of Mallinckrodt Inc, US.

Pentapharm AG

Engelgasse 109, CH-4002 Basel.

Tel: 061 312 96 80 Telex: 963473 pefa Fax: 061 311 20 49

Producers of basic biochemical materials, purified polypeptides, chromogenic substrates, collagen and snake venom enzymes for pharmaceutical, biochemical and diagnostic purposes.

Pfizer AG

Postfach 619, Militarstrasse 84. Tel: CH-8021 Zurich 4 Cal

Cables: (01) 242 80 50 Fax: 55322

Distributes antibiotics, citric acid, pharmaceuticals, agricultural chemicals and other products of Pfizer Inc US

Pharmacare AG

Mattenstrasse 2A, CH-2555 Brugg. Tel: 032 53 57 11 Telex: 934075

Supplies immunological and biological reagents including polyclonal antibodies to histocompatibility antigens; products of One Lambda Inc,

Pharmacia-pdf (Schweiz) AG

Pharmacia LKB Biotechnology Division

Lagerstrasse 14, CH-8600 Duebendorf.

Tel: 01 821 18 16 Telex: 826693 phpdf Fax: 01 821 66 71

Supplies equipment, instruments and media for liquid chromatography, electrophoresis, isoelectric focusing, cell studies, molecular biology and process separation chromatography (see Pharmacia LKB Biotechnology, Sweden).

Philips AG

Allmendstrasse 140, Postfach, CH-8027 Zurich.

Tel: 01 488 22 11 Telex: 81578011 phi Fax: 01 482 85 95

Supplies analytical instruments including electron microscopes, analytical X-ray spectrophotometers, atomic absorption, gas and liquid chromatographs (see Philips Scientific, UK). Subsidiary of Philips Export BV. Netherlands.

Products RIA Hormone

Zeughausgasse 7A, CH-6300 Zug. Telex: 845865118

Supplies radioimmunoassay kits and reagents, diagnostic enzymes, biologically active peptides, amino acids and derivatives, etc as well as antibodies and antiserums; products of Radioassay Systems Laboratories Inc, US.

Protogen AG

Weidenmattweg 4, Postfach, CH-4448 Laufelfingen. Tel: 062 69 14 14 Telex: 981761 nobi ch

Specialise in the supply of proteins from human sources including proteins, antigens, proteinic inhibitors, enzymes, antibodies, antiserums, immobilized proteins and human enzymes, as well as synthetic enzyme substrates and inhibitors and growth factors. Blood components include anti-plasmin, beta-anticollagenase, carboxypeptidase N, factor VIII, angiotensinogen, plasma-renin and PAF-receptor.

Readysysteme AG

PO Box 127, CH-8437 Bad-Zurzach Argovia. Tel: 056 49 32 33 Fax: 056 49 32 34

Distributor for monoclonal antibodies, immunochemicals, cell culture products and research laboratory systems. Manages contract research for Biosystematics. Distributor for Biological Industries, Israel.

Rhone-Poulenc Pharma (Suisse) SA

Alte Landstrasse 27, CH-8800 Thalwil. Tel: 01 723 53 11 Telex: 826867 rpph

Distributes pharmaceutical products of Rhone-Poulenc SA, France.

Robapharm AG

St Alban-Rheinweg 174, CH-4006 Basel. Tel: 061 42 00 70 Telex: 962939 rofar

Carrying out research on monoclonal antibodies in relation to vascular endothelial tissues, macrophages and smooth muscle.

Rosenmund AG

Gestadeckplatz 6, Postfach 621, CH-4410 Liestal. Tel: 061 925 11 11 Telex: 966010 ros Fa.

Fax: 061 921 99 40

Engineer and manufacture complete installations for the biotechnology, chemical and pharmaceutical industries including sterile facilities, cold rooms, containment facilities, bioreactors and freezing apparatus etc.

Roth Reagenzien

Rieterstrasse 118, CH-8002 Zurich. Tel: 01 202 5548/01 201 0696

Supplies chemicals and reagents for water treatment and analysis.

Rudolf Streuli AG

Seefeldstrasse 7a, Postfach, CH-8032 Zurich. Tel: 01 47 23 40 Telex: 816450 Fax: 01 47 01 25

Supplies proteins and peptides with hormonal or biological activity as well as peptide synthesis reagents. Agent for UCB-Bioproducts SA, Belgium and ICN Immunochemicals and Biochemicals, US.

Salvis AG

Hauptstrasse 49, CH-6015 Reussbuehl/Littau. Tel: 041 59 81 11 Telex: 868548

Bureau Suisse Romande:, 9 route de Lausanne, CH-1033 Cheseaux.

Tel: 021 731 31 15 Supplies laboratory apparatus including freeze dryers and carbon

Sandoz AG

dioxide-incubators.

Lichstrasse 35, CH-4002 Basel. Tel: 061 24 11 11 Telex: 63

Telex: 62143/96505011

Manufactures pharmaceuticals, pigments, dyes, industrial chemicals and crop protection agents as well as producing quality seeds and special foods. Carrying out research on lymphokines, growth factors, fibrinolytics, monoclonal antibodies and vaccines.

Sandoz Research Institute Berne Ltd

Monbijoustrasse 115, CH-3001 Berne. Tel: 031 46 61 11 Telex: 912262

Subsidiary of Sandoz AG, Switzerland.

Schleicher & Schuell AG

Feldbacher Strasse, CH-8714 Feldbach ZH.

Fax: 055 42 42 18 Tel: 055 42 35 00 Telex: 875098

Supplies a wide range of filter and speciality papers, glass-fibre filters, ultra and micro-filtration membranes and apparatus as well as products for chromatography. Products for use in molecular biology include nitrocellulose, DEAE membranes and diazotized media for transfer of nucleic acids and proteins (see Schleicher & Schuell GmbH, Germany).

Schweisstechnik AG

Langwiesenstrasse 12, CH-8108 Dallikon.

Tel: (01) 844 27 11

Manufactures systems for cryopreservation of biological material, suitable for use with plant cells, animal cells, bacteria and viruses.

Schweizerische Ferment AG

Vogesenstrasse 132, CH-4056 Basel.

Distributes enzymes (see Novo Industri AS, Denmark).

SEDIA

PO Box 845, CH-1701 Fribourg.

Supplies immunological and biological reagents. Distributor for Immuno-Mycologics, US.

Senn Chemicals AG

Postfach 267, Ruchwiesenstrasse 6, CH-8157 Dielsdorf. Tel: 01 853 18 35 Telex: 826486 Fax: 01 853 40 25

Produces biologicals and fine chemicals, including carbohydrates, amino acids and derivatives, chromogenic substrates, biologically active peptides, peptide building blocks, peptide substrates for enzymes etc.

Serono Diagnostic SA

Centre Industriel, CH-1267 Coinsins.

Supplies diagnostics, radioimmunoassay kits and reagents for hormone assay etc, including novel systems based on magnetic separation techniques that eliminate the need for centrifugation. Part of the Ares-Serono Group.

Siegfried AG

, CH-4800 Zofingen.

Tel: 062 50 11 11 Telex: 982444 sgf Fax: 062 51 30 82

Produces fine chemicals for the pharmaceutical industry.

Skan AG

Baslerstrasse 354, Postfach, CH-4009 Allschwil-Basel. Tel: 061 38 89 86 Telex: 963289 Fax: 061 38 30 64

Supplies laboratory equipment including micro- and molecular-filter systems, laminar airflow and containment benches.

Socorey ISBA SA

CH-1020 Renens. Telex: 455696 sisa

Manufacture fluid samplers.

Spectrospin AG

Industriestrasse 26, CH-8117 Fallanden. Tel: 01 825 48 55 59 Telex: 54850

Supply a wide range of spectophotometers, spectrometers and HPLC equipment as well as computerized data processing systems. Subsidiary of Bruker Analytische Messtechnik GmbH, Germany.

SRI International

Pelikanstrasse 37, CH-8001 Zurich.

Telex: 813132 Tel: 01 211 06 36 Fax: 01 211 61 08

A contract research and consultancy organisation supplying strategic single client and multiclient studies among others in the field of biotechnology with emphasis on the applications to industry and business. Subsidiary of SRI International, US.

Stagroma AG

Guggenbuhlstrasse 24, CH-8304 Wallisellen.

Tel: 01 830 1175

Supplies systems and accessories for chromatography including standards and HPLC columns.

Stauffer Chemical BV

8 rue Jaques-Grosselin, CH-1227 Carouge Geneve.

Tel: 022 43 60 50 Telex: 423133 Fax: 022 42 72 11

Wholely owned subsidiary of ICI plc, UK. Manufactures agrochemicals for ICI and offers technical and commercial assistance.

Supelco SA

Chemin du Lavasson 2, CH-1196 Gland.

Tel: 022 64 35 64 Telex: 419637 Fax: 022 64 18 17

Supplies standards, accessories and instruments for liquid and gas chromatography (see Supelco Inc, US).

Swiss Federal Institute of Technology

Institute of Microbiology

Universitatstrasse 2, CH-8092 Zurich.

Tel: 01 32 62 11

Studying microbial genetics and physiology, biochemical engineering and regulation of prokaryotic enzymes.

Swiss Federal Institute of Technology

Department of Biochemistry

Universitatstrasse 16, CH-8092 Zurich.

Tel: 01 3 62 11

Studying biochemistry and chemistry of peptides and their synthesis as well as working on enzymes including the crystallization of fungal lignin

Swiss Federal Institute of Technology

Institute of Molecular Biology & Biophysics

ETH-Hoenggerberg, CH-8093 Zurich.

Tel: 01 377 24 73

Researching into chemistry of peptides and proteins, antibodies to DNA and sequence analysis on thermophilic enzymes.

Swiss Federal Institute of Technology

Institute of Neurology

Honggerberg, CH-8093 Zurich.

Conducting a programme of research on aspects of cell biology including neurobiology and the role of cell surface molecules in cell interactions.

Swiss Federal Research Station for Agronomy **Zurich-Reckenholz**

Reckenholzstrasse 191, CH-8046 Zurich.

Carrying out research in molecular biology of crop plants using recombinant DNA and tissue culture techniques of gene manipulation and expression.

Part III **SWITZERLAND**

Swiss Institute of Allergy and Asthma Research

Obere Strasse 22, CH-7270 Davos-Platz.

New institute with a programme of clinical research on the pathogenic mechanisms of allergy including asthma and atopic skin diseases and the development of appropriate therapeutics.

Synmedic AG

Seebahnstrasse 85, CH-8036 Zurich. Telex: 813650 Tel: 01 463 69 90

Supply laboratory equipment including automated liquid samplers and HPLC systems. Distributor for Gilson Medical Electronics, France.

SYSTAG

System Technik AG

Bahnhofstrasse 76, CH-8803 Ruschlikon.

Tel: 01 724 00 09 Fax: 01 724 16 35 Telex: 826873

Produce automated measurement and control systems for pH, volume, flow, dosing, distillation, etc.

Tecan AG

Landhaus Holgass, CH-8634 Hombrechtikon.

Fax: 055 42 38 83 Tel: 055 41 81 11 Telex: 875844

CH-2514 Gleresse/Ligerz Tel: 032 85 2365.

Produce automated liquid handling systems including dispensers, diluters and computerized analytical systems suitable for use in radioimmunoassay, enzyme linked diagnostic reactions and fluorescence techniques.

Tecan AG

Environmental Analytics

CH-8634 Hombrechtikon.

Tel: 055 41 82 91 Fax: 055 42 19 44

Products include a NOx analyser based on chemiluminescence for measurement of air emissions

Tecnomara AG

Industriestrasse 44, CH-8304 Wallisellen.

Tel: 01 830 22 77 Telex: 827382 teca Fax: 01 830 78 52

Rieterstrasse 59, CH-8059 Zurich.

Tel: 01 202 93 25 Tx: 815544 tecx Fax: 01 202 93 57

Supplies laboratory equipment and apparatus including manual and automated pipettes, disposable laboratory ware, shakers, autoclaves, cell and tissue culture equipment etc.

Treff AG

Precision Laboratory Products

CH-9113 Degersheim.

Tel: 071 54 22 42 Telex: 883771 Fax: 071 54 22 58

Manufactures a range of precision laboratory products, made of Thermoplast: pipetters, precision pipette tips, a system of autoclavable tip and tube racks; micro tubes, autoclavable, for centrifugation and storage.

Tschudin & Heid AG

Haupstrasse 35, CH-4437 Waldenburg. Telex: 966097

Market hardware and software for computer controlled processes as well as valves and fittings.

UCB Pharma AG

Stampfenbachstrasse 69, CH-8035 Zurich. Tel: (01) 362 27 63 Telex: 58328

Supplies products of UCB-Bioproducts SA, Belgium.

Ultrafilter AG

Thurgauerstrasse 72, CH-8050 Zurich. Tel: 01 302 0500 Telex: 822415

Produces industrial ultrafiltration equipment.

Unifil AG Filtertechnik

Industriestrasse 1, CH-5702 Niederlenz. Telex: 981432 Tel: 064 51 9151

Manufactures laminar flow cabinets.

Upjohn SA

Postfach 65, Ruchstuckstrasse 25, CH-8306 Bruttisellen. Tel: 01 833 41 51 Telex: 826605 Fax: 01 833 45 30

Supplies products of Upjohn Co, US.

UTB Umwelttechnik Buchs AG

CH-9470 Buchs.

Tel: (085) 602 51 Telex: 855303

Contract engineers for wastewater and sewage treatment, consultancy and equipment supplies as well as turnkey plant. Processes include two stage aerobic biological systems, packaged treatment for small scale users, industrial effluent treatment plant, and sludge recycling systems. Sludge treatment systems include aerobic thermophilic systems and anaerobic mesophilic systems.

Varian AG

Steinhauserstrasse, CH-6300 Zug.
Tel: (042) 44 11 22/44 88 44 Telex: 84578841

Supplies instruments and accessories for chromatography and spectroscopy (see Varian Associates Inc, US).

Ventures West

321 Water St, Suite 400, Vancouver, British Columbia V6B 1B8.

Fax: 604 687 2145 Tel: 604 688 9495

Venture capital company with interests in clinical tests and diagnostics.

VICI AG

Valco Europe

Untertannberg 7, PO Box 13, CH-6214 Schenkon. Tel: 045 21 68 68 Telex: 868342 vici Fax

Fax: 045 21 30 20

Manufactures equipment for research and process control including multiposition switching and sampling valves.

Vifor SA

48 route de Drize, CH-1227 Carouge Geneve.

Supplies pharmaceutical products.

Vitroculture SA

Grand Rue 3, CH-2900 Porrentruy.

Fax: 066 66 69 48 Tel: 066 66 57 82

Cultivate mushrooms and produce mushroom-based ingredients and aromas for food products.

Volni AG

Wiesenstrasse 33, CH-8952 Schlieren.

Tel: 01 730 97 61 Telex: 827731

Fax: 01 730 90 44

Supplies fibre optics illumination for microscopy providing cool light based on tungsten halide source, fibre optic inspection instruments and fibre optic electronic control systems.

WBAG Resources

Wolf Brandenberger AG

Gattikerstrasse 5, CH-8029 Zurich.

Tel: 01 55 65 44 Telex: 56874 Fax: 01 55 30 06

Supplies high quality raw and intermediate material for cell cultivation, research and diagnostic manufacturing purposes. Products include gels and purified proteins. Develop polyclonal and monoclonal antibodies, hormones, antigens, diagnostic reagents, peptides, lectins, media, serums and plasma products.

Wild Leitz Ltd

CH-9435 Heerbrugg.

703 131 Telex: 881222 Fax: 071 703 170

Supply microscopes and related optical equipment.

Wild Leitz (Schweiz) AG

Forchstrasse 158, CH-8032 Zurich.

Tel: 01 55 6262

R de Lausanne 60, CH-1020 Renens.

Tel: 021 35 3553

Supplies light microscopes and related optical equipment.

SWITZERLAND Part III

Willy A Bachofen AG Maschinenfabrik

Utengasse 15-17, CH-4005 Basel.

Tel: 061 681 51 51 Telex: 962564 Fa

Fax: 061 681 50 58

Supplies enclosed, autoclavable mill for continuous cell disruption at rates of up to 10 litres per hour; suitable for use with yeast, fungi and bacteria.

Zimmerli Messtechnik AG

Schlossgasse 10, CH-4125 Richem 1. *Tel*: (061) 67 54 54

Supplies filter systems and filtration media including water filters, gas filters, sterilization systems and vacuum band filters.

Zurich University

Institute of Plant Biology

Zollikerstrasse 107, CH-8008 Zurich.

Tel: 01 385 42 11

Projects under investigation include methane formation from hydrogen and carbon dioxide, defined mixture cultures for the mineralization of complex substrates, culture of immobilized plant cells, microbiology of water filters and development of software for the control of biological processes.

Zyma SA

CH-1260 Nyon.

Pharmaceutical company with interests in the research and development of drugs for treatment of allergies and skin, vascular and respiratory ailments.

UNITED KINGDOM

AB AG Laboratories Ltd

11 Victoria Street, Littleport, Ely, Cambridgeshire.

Manufacture diagnostics for use as veterinary screening tests based on glutination (see Cambridge Life Sciences plc).

Abbott Diagnostics

Abbott House, Moorbridge Rd, Maidenhead, Berks. Tel: 0628 784041

Products include a rapid enzyme immunoassay for simultaneous identification of HIV1 and HIV2.

Abbott Laboratories Ltd

Pharmaceutical Division

Queenborough, Kent ME11 5EL. Tel: (0795) 663371 Telex: 96347

Diagnostic Division: Brighton Hill Parade, Basingstoke RG22 4EH Manufactures and sells antibodies and produces diagnostics based on enzyme systems and immunoassays as well as clinical chemistry and analytical equipment. Subsidiary of Abbott Laboratories, US.

Aber Instruments

Aberystwyth Science Park, Aberystwyth, Dyfed SY23 4AH. Tel: 0970 615284

Designs and manufactures electronic instrumentation including biosensors.

Aberdeen Bio-Tech Ltd

517 Bon Accord Crescent, Aberdeen. *Tel*: 0224 548441

Developing plant-disease diagnostics and therapeutics.

Aberdeen University

Department of Microbiology Aberdeen AB9 1FX. Tel: 0224 40241

Investigating the efficiency of energy utilization in microbial growth as well as aspects of the overproduction of metabolites and the transformation of ammonia based fertilizers. Also investigating commercial uses for chitin and chitinase as well as mechanisms of inhibition of chitin synthesis.

Aberdeen University Marine Studies Ltd

Department of Zoology, Aberdeen University, Tillydrone Avenue, Aberdeen AB9 2TN.

Offer biological consultancy for industry in the investigation, analysis and survey of coastal and offshore biological systems.

Abertec

Old College King St, Aberystwyth, Dyfed. Tel: 0970 31111 Telex: 35181 aby ucw

Fax: 0970 611446

Carrying out research and development in the area of agricultural biotechnology using techniques of genetic engineering of proteins, plasmid banking, mass algal culture for metabolites and products, Rhizobium genetics and rumen biochemistry.

ABM-Sturge

Manufactures food products, industrial chemicals, malt extracts, flours and enzyme preparations of fungal, bacterial and plant origins. Bulk industrial enzymes include fungal proteases for use in the baking industry, plant proteases for use in the brewing industry, and amylases and amyloglucosidase for the starch industries. Also manufactures citric acid by fermentation as well as microbial gums and linolenic acid. Formed by merger of ABM Chemicals, J & E Sturge and Sturge Biochemicals.

ABR Chemicals Ltd

Hunters Road, Weldon Industrial Estate, Corby Northants NN17 IJR. Tel: 0536 65291 Telex: 34695

Process wheat for the production of vital gluten as well as producing other related starch products, syrups and animal feed ingredients. Investigating opportunities for production of fermentation substrates from grains.

Acacia Chemicals Ltd

Worsley Bridge Rd, Lower Sydenham, London SE26 5HD. Tel: 01 650 4801

Developing biological pest control systems.

ADC Systems

Gronant, Caernarfon, Gwynedd LL54 5BY. Tel: 0286 77148

Designs and manufactures analytical and preparative equipment for pathology laboratories based on photometric determinations and robotic systems.

Advanced Biocentre Ltd

2 Lancaster House, Cox's Yard, Somerton, Somerset TA11 6SB. Tel: 0458 74073 Telex: 94012204 Fax: 0458 74079

Produces and markets plants produced by tissue culture and micropropagation.

Advanced Laboratory Techniques

1 Clarincarde Gardens, Tunbridge Wells, Kent. Tel: (0892) 30483

Supplies diagnostic reagents for radioimmunoassay including antiserums, standards and reagents, as well as kits and reagents for other diagnostic tests and haematology. Also supplies disposable laboratory products.

Advanced Protein Products Ltd

Unit 18H, Premier Partnership Estate, Leys Rd, Brockmoor, Brierley Hill, West Midlands DY5 3UP.

Tel: 0384 263862 Telex: 338427

Developing pharmaceutical intermediates and food additives, serums, plasma and proteins. Undertakes contract research and development.

AFRC Animal Breeding Research Organisation

King's Buildings, West Mains Rd, Edinburgh EH9 3JQ. Tel: 031 667 6901

Carrying out programmes of animal breeding which include the use of recombinant DNA technology.

AFRC Horticultural Research Institute

Worthing Rd, Littlehampton, West Sussex BN17 6LP. Tel: 0903 716123

Carries out research on composting and growth of edible mushrooms, developing biopesticides based on fungi as well as methods for control of Verticillium wilt on hops, using plant tissue culture for propagation as well as carrying out physiological studies on glass house crops and ornamentals. Previously the Glass House Crops Research Institute.

AFRC Institute of Animal Physiology & Genetics Research

Babraham, Cambridge CB2 4AT. Tel: 0223 832312

Studying use of recombinant DNA in bacteria to increase the digestibility of forages in ruminants. Developing veterinary diagnostics using monoclonal antibodies. Maintains close links with Animal Biotechnology Cambridge Ltd at its former laboratories at the Animal Research Station for the purpose of technology transfer.

AFRC Institute of Food Research

Bristol Laboratory

Langford, Bristol, BS18 7DY. Tel: 0934 852661 Telex: 449095

Carries out basic and applied research and technology in the areas of red meat, poultry and meat products including development of probes to assess carcass and meat quality on-line, rapid methods for assessing microbial contamination in foods and for the identification of meat species by immunoassay, and novel aseptic packaging technology.

AFRC Institute of Food Research

Norwich Laboratory

Colney Lane, Norwich NR4 7UA Tel: 0603 56122 Telex: 975453

Carries out basic and applied research and technology in the areas of food plants, cereals and eggs, on aspects of food safety, quality, productivity, efficiency of processing, storage and distribution. Also carries out basic studies on the composition and properties of raw materials, food ingredients and final products. Microbiology investigations include aspects of anaerobic digestion. Biotechnology-related activities include investigations of the production of valuable food flavour components using immobilized plant cells in culture. Maintains the National Yeast Collection.

AFRC Institute of Food Research

Reading Laboratory

Shinfield, Reading, Berks RG2 9AT. Tel: 0734 883103 Telex: 265871

Carrying out basic and applied research and technology in areas of milk and milk products, oils and fats, beverages and confectionery. Using genetic manipulation techniques to develop improved strains of lactic acid bacteria of value to the dairy industry including cultures with proteolytic ability as well as resistance to phage or antibiotics.

AFRC National Institute of Agricultural Engineering

Wrest Park, Silsoe, Bedford MK45 4HS. Tel: 0525 60000 Telex: 825808

Have carried out reseach on the design of systems for treatment and disposal of farm wastes using anaerobic digestion including systems for odour control as well as production of biogas for energy use.

AFRC Poultry Research Centre

Roslin, Midlothian EH25 9PS. Tel: 031 440 2726

Carrying out research aimed at increasing the biological efficiency of poultry production through research which includes aspects of genetics and pathology using molecular biology techniques for genetic manipulation.

AFRC Rothamsted Experimental Station

Department of Biochemistry

Harpenden, Herts AL5 2JQ. Tel: (058 27) 63133 Tel Telex: 825726

Investigating nitrogen metabolism in barley, cell culture and genetic manipulation of barley with the objective of modifying storage proteins.

Agricultural Genetics Company Ltd

Acts as a technology transfer organisation developing commercial products from appropriate plant science based work from some institutes of the Agricultural and Food Research Council, UK and collaborating universities. Main areas of interest are non-conventional plant breeding, microbial inoculants and biological control products.

Agricultural Technology Ltd

Sheraton House, Castle Park, Cambridge CB3 0AX. Fax: 0223 460178 Telex: 818436 Tel: 0223 462244

Developing new technologies for the agricultural and food industries through its subsidiaries, Premier Breeders and Biosure Laboratory Technology, and provides agricultural information through Landell Mills.

Agrochemical Evaluation Unit

Department of Biology, Building 44, Southampton University, Southampton SO9 5NH.

Tel: 0703 559122 Telex: 47661

Offers services in the support of specialised areas of research and development in relation to pest control chemicals including both laboratory and field screening, assessment of behavioural and toxic effects on target and other organisms and communities as well as their integration within pest control systems. Develops custom culturing regimes and novel . bioassays.

AI Scientific

London Road, Pampisford, Cambridge CB2 4EF. Tel: (0223) 834 420

Supplies chromatography systems and equipment including capillary column gas chromatographs, as well as image analyzers. A division of Analytical Instruments Ltd.

Air Products Ltd

Hersham Place, Molesey Rd, Hersham, Walton on Thames, Surrey KT12

Tel: 0932 249200 Telex: 36511

Member of the Air Products and Chemical Group, US.

Akzo Chemie UK Ltd

Pier Road, Gillingham, Kent ME7 1RL. Tel: (0634) 51141 Telex: 96159

Manufactures fatty acids and derivatives as well as surfactants and other products of Akzo NV, Netherlands.

Alcon Biotechnology Ltd

1 Buckingham Street, Portsmouth, Hants PO1 1HN.

Tel: (0705) 822300 Telex: 267586

Supplies systems for production of ethanol by continuous fermentation.

Aldrich Chemical Co Ltd

The Old Brickyard, New Rd, Gillingham, Dorset SP8 4JL. Tel: 0747 822211/0800 71 71 81 Telex: 417238 aldre Fax: 0747 Telex: 417238 aldrch 823779

Suppliers of 24000 items including fine organic and inorganic chemicals, biochemicals, stains and dyes, HPLC and anhydrous solvents, ion exchange resins and adsorption media, atomic absorption standards, deuterated compounds, polymers, pure elements, laboratory equipment, scientific glassware and books. Subsidiary of Aldrich Chemical Co, US.

Alembic Products Ltd

Produce essential oils, pharmaceutical chemicals and related products. Also act as agents for overseas companies as import/export merchants.

Alfa Laval

Great West Road, Brentford, Middx TW8 9BT. Tel: 01 560 1221 Telex: 22769 Fax: 01 Fax: 01 568 7015

Agent for Chemap fermentation equipment (see Chemap, Switzerland).

Alfa-Laval Agri Ltd

Oakfield, Cwmbran, Gwent NP44 7XE.

Telex: 498233 Tel: 06333 2071

Produce agricultural equipment as well as additives for use in farm slurry treatment and silage production.

Alginate Industries Ltd

22 Henrietta Street, London WC2E 8NB.

Tel: (01) 240 5161 Telex: 23815

Manufactures alginates and xanthan gum. Subsidiary of Merck & Co Inc,

Part III UNITED KINGDOM

Algological Products Co

Greatbridge Road Estate, Romsey, Hants. Tel: (0794) 515595 Telex: 477534 Tel: (0794) 515595

Distributes alginates and other seaweed products.

Allied Breweries Engineering Services Ltd

107 Station Street, Burton-on-Trent, Staffs DE14 1BZ. Telex: 341211 Tel: 0283 45320

Offers consultancy and project management to the brewing industries.

Allied Breweries Ltd

Allied House, 156 St John Street, London EC1P 1AR.

Tel: (01) 253 9911 Telex: 267605

Manufactures beer, cider, wines, spirits, etc. Also distributes food and non-alcoholic beverages. Carries out related research in microbiology, fermentation etc. Has joint venture with Constructors John Brown, UK, which has developed a continuous ethanol fermentation system for the production of fuel.

Allied Breweries Technology International Ltd

Norman House, Friargate, Derby DE1 1NJ.

Tel: (0332) 360505 Telex: 378277

Offers engineering for brewery developments, process aids, brewing and malting services, training and trouble shooting as well as international brand franchises.

Allied Instrumentation Lab

Kelvin Close, Birchwood Science Park, Warrington, Cheshire WA3 7PB. Tel: (0925) 810 141

The biomedical division supplies clinical analyzers, blood gas analyzers and coagulometers. The analytical instruments division supplies automatic titration equipment and systems for moisture determination.

Alpha Laboratories Ltd

40 Parham Drive, Eastleigh, Hants SO5 4NU.

Tel: 0703 610911 Telex: 477087 Fax: 0703 643701

Suppliers of instrumentation, laboratory disposables and liquid handling products.

Alpha Technical Services Ltd

Altec House, Aintree Rd, Greenford, Middx UB6 7PL. Fax: 01 991 5246

Tel: 01 991 2626 Telex: 8814139

Manufacture heavy duty peristaltic pumps for use in manual and automatic sludge pumping systems as well as other pumps suitable for industrial metering and dosing including small magnetic drive, glandless, centrifugal and positive displacement gear pumps.

Alrad Instruments Ltd

Turnpike Road, Industrial Estate, Newbury, Berks RG13 2NS. Tel: (0635) 30345 Telex: 847413

Manufactures radioactivity counting systems.

Alta Berkeley Associates

25 Berkeley Square, London W1X 5HB. *Tel*: 01 629 1550 *Telex*: 297893

Telex: 297893 Fax: 01 491 2143

Venure capital investment company with interests in biotechnology.

Alwatech UK Ltd

33a Park Parade, Hazlemere, High Wycombe, Bucks HP15 7AA. Telex: 837420 Tel: (0494) 716326

Provides: complete design and supply service for effluent and water treatment; treatment of abattoir, poultry and fish-processing wastes for protein recovery by lignosulphonate treatment followed by dissolved air flotation; air flotation treatments for sludge thickening and potable water. Subsidiary of Alwatech AS, Norway.

Alwitt Ltd

Zelide House, 2-4 Mount Ephraim, Tunbridge Wells, Kent. Tel: (0892) 36111 Telex: 95146

Supplies raw materials for pharmaceuticals, fine chemicals, starches, sugars and their derivatives.

AM Systems

Block 1 Unit 1, Queenslie Industrial Estate, Glasgow G33 4JD. Tel: 041 774 2042 Telex: 776505

Manufacture bacterial screening instrumentation and research biotechnological techniques for bacterial detection in liquids.

American Hospital Supply (UK) Ltd

Station Road, Didcot, Oxfordshire. Telex: 837127 Tel: (0235) 813501

Supplies instruments and diagnostics for clinical purposes in particular. Subsidiary of American Hospital Supply Corp, US.

American Monitor International Ltd

Kennedy Way, Belfast BT11 9AP.

Tel: (0232) 6111 Telex: 747009

Supplies instruments and reagents for diagnostic laboratories. Subsidiary of American Monitor Corp, US.

Amersham International plc

Amersham Place, Little Chalfont, Bucks HP7 9NA. Tel: 02404 4444 Telex: 838818 Activl G

Telex: 838818 Activl G Fax: 02404 4008

Research and development: Pollards Wood Laboratories, Nightingales Lane, Chalfont St Giles, Bucks HP8 4SP Tel: 02404 4400 Fax: 02404 5271

Development and manufacture: Amersham Laboratories, White Lion Road, Amersham, Bucks HP7 9LL

Tel: 02404 4488 Tx: 83141 Activa G Fax: 02404 4488 ext 3588

Development and manufacture: Cardiff Laboratories, Forest Farm Estate, Whitchurch, Cardiff CF4 7YT

Tel: 0222 615858 Tx: 498260 Active G Fax: 0222 61749

UK Sales Office: Lincoln Place, Green End, Aylesbury, Bucks HP20 2TP. Tel: (0296) 395222 Tx: 838085 Activy G Fax: 0296 85910

Develop, manufacture and market a wide range of products which facilitate research in many different branches of life sciences and biotechnology including cancer studies, genetics, biochemistry, microbiology, endocrinology and immunology. These products cover synthesis and analysis of DNA, RNA and proteins and many are designed for genetic engineering with applications in medicine, agriculture and industry. Biomedical products for research application include cellular chemicals, growth factors, enzymes, peptides and monoclonals and polyclonal antibodies. Many of the company's products can be designed for specific research programmes and include radioactive and non-radioactive compounds. Customer compounds can also be radio-labelled for research purposes.

Ames Crosta Babcock Ltd

Heywood, Lancs OL10 2DX.

Tel: (0706) 67555 Telex: 63410 ames

Specialises in sludge digestion systems in a wide range of configurations, including floating gas bell roof tanks, fixed roof tanks with separate gas holder, combined heating and mixing, separate heating and mixing by mechanical means with use of coolant from dual fuel engines driving electricity generating plant. Provides process design and contracting services for all aspects of fresh and waste water treatment. A Babcock International (UK) company.

Amicon Ltd

Upper Mill, Stonehouse, Gloucester GL10 2BJ. Tel: 045 382 5181 Telex: 43532

Supplies a wide range of chromatography and ultrafiltration products for clinical and biochemical laboratory use as well as for industrial scale production of vaccines, proteins and drugs.

AMS

Analytical Measuring Systems Ltd Shire Hill, Saffron Walden, Essex CB11 3AQ. Tel: 0799 24080 Telex: 817824

Supply particle counting systems.

Anachem Ltd

20 Charles Street, Luton, Beds LU2 0EB.

Tel: 0582 456666 Fax: 0582 391768 Telex: 825275

Specializes in liquid and high performance liquid chromatography. Supplies complete systems, fluorescent and spectrophotometric detectors, fraction collectors, drop counters, columns, resins and packing materials.

Analysis Automation Ltd

Southfield House, Eynsham, Oxford OX8 1JD. Tel: (0865) 881888 Telex: 837509

Supplies air-sampling and analysis equipment as well as advanced ion-selective electrodes.

UNITED KINGDOM Part III

Analytical International

PO Box 234, Cambridge, CB2 1PE.

Supplies sample preparation products including extraction columns. Subsidiary of Varian Associates, US.

Analytical Measuring Systems Ltd

London Road, Pampisford, Cambridge CB2 4EF.

Telex: 817824 Tel: 0223 836001 Fax: 0223 837417

Manufactures image analyzers, colony counters, gas chromatography and particle analysis equipment. Supplies confocal scanning microscopes and other TV microscopy accessories.

Analytical Supplies Ltd

Duffield Road, Little Eaton, Derby, Derbyshire DE2 5DR. Tel: (0332) 831671

Supplies accessories for gas, liquid and thin layer chromatography, including columns, fraction collectors, sheets, plates, streakers, absorbents,

Analytichem International

PO Box 234, Cambridge, CB1 2PE.

Tel: 0223 328177

Supplies sample preparation products including extraction columns and thin layer chromatography sheets. Subsidiary of Varian Associates, US.

Andard-Mount Co Ltd

West Africa House, Ashbourne Rd, Ealing, London W5 3QP. Tel: 01 991 5150 Telex: 923423 Fax: 01 991 5001

Manufactures enzymes, steroid hormones, blood products, alkaloids and phytochemicals, food additives, magnetizable particles and diagnostic tests as well as carrying out research in related areas.

Anderman and Co Ltd

Central Avenue, East Molesey, Surrey KT8 0QZ. Tel: (01) 979 8112 Telex: 928569

Supplies products for chromatography and filtration, fine chemicals etc. Agents for Schleicher and Schuell GmbH, Germany.

Anderson Water Equipment Ltd

Cardiff Workshops, Lewis Road, Cardiff CF1 5EG. Telex: 497810 Tel: 0222 492848

Engineering company; design, manufacture and install industrial water treatment plant. Products include filters, ion-exchangers, reverse osmosis plant and ultra-violet lamp radiation systems.

Anglian Biotec Ltd

Whitehall Road, Colchester, Essex CO2 8HA.

Telex: 987181 biotec Fax: 0206 860518 Tel: 0206 866007

Markets enzymes for genetic enginering and cloning vectors. Products include reverse transcriptase, purified from avian myeloblastosis virus, that is free from contamination by RNAase activity, and Taq (thermus aquaticus) DNA polymerase, as well as probes, restriction enzymes, linkers, primers and vectors.

Anglian Water Authority

Ambury Road, Huntingdon, Cambs PE18 6NZ. Tel: (0480) 56181

Developing systems for gas scrubbing, compression and use of methane derived from biogas, produced by anaerobic digestion of sewage sludge, in vehicle engines.

Anglicon Instruments Ltd

14 South Road, Newhaven BN9 9O.J.

Tel: 0273 515696/515563 Telex: 877196 Fax: 0273 512431

Laboratory and pilot plant suppliers of fermentation control systems for vessels from 1 to 5000 litres.

Animal Biotechnology Cambridge Ltd

Animal Research Station, University of Cambridge, 307 Huntingdon Road, Cambridge CB3 0JQ. Tel: 0223 277222 Telex

Telex: 94013403 abca

Fax: 0223 277605

Established to undertake technology transfer based on the pioneering work of the Animal Research Station in areas of semen freezing, non-surgical embryo recovery and transfer in cattle, frozen embryos and the first animal clones and transgenic animals. Also provides training courses covering embryo collection, transfer and preservation, advanced animal breeding and the associated techniques of micromanipulation of embryos, in vitro fertilization, gene insertion, nuclear transfer and cryobiology in collaboration with the School of Veterinary Medicine.

Animal Virus Research Institute

Pirbright, Surrey GU24 0NF.

Tel: (048 631) 2441

Carrying out large-scale preparation of virus antigens, analysis of purified virus antigens, growth and separation of cultured animal cells at the industrial scale, growth of cells on microcarriers, growth of animal cells in monolayers, foot and mouth disease vaccine, herpes simplex vaccine, interferon etc.

Anotec Separations Ltd

Wildmere Road, Daventry Road Industrial Estate, Banbury, Oxon OX16

Tel: 0295 272323 Telex: 838997 Fax: 0295 272372

Supply membrane filtration equipment including disposable syringe filters with incorporated prefilter.

API-bioMerieux (UK) Ltd

Unit D2, Grafton Way, Basingstoke, Hants RG22 6HY.

Tel: 0256 461881 Telex: 858055 apiuk

Markets kits for identification of bacteria and the study of their biochemical activity. Also dehydrated and ready-to-use culture media.

Apin Chemicals Ltd

Unit 29D Milton Park, Abingdon, Oxon OX14 4RS.

Tel: 0235 832515 Telex: 837653 apin Fax: 0235 832000

Supplies research chemicals and natural products including flavonoids, coumarins, terpenoids and iridoids.

Aplin & Barrett Ltd

Trowbridge, Wilts BA14 8TR.

Tel: 02214 68406 Telex: 44161 Fax: 02214 64834

Manufacture enzymes and food additives by fermentation.

Applied Biosystems Ltd

Kelvin Close, Birchwood Science Park, Warrington, Cheshire WA3 7PB. Tel: 0925 825650 Telex: 629611 Fax: 0925 82196

Offers technical support and services, reagents and equipment for protein sequencing, peptide synthesis and DNA synthesis. Subsidiary of Applied Biosystems Inc, US.

Applied Chromatography Systems Ltd

The Arsenal, Heapy St, Macclesfield, Cheshire SK11 7JB. Tel: 0625 34575505 Telex: 668005 hplc Fax: 062 Fax: 0625 616916

Manufacture high performance chromatographic systems controlled by microcomputer, as well as supplying accessories.

Applied Horticulture Ltd

Billinghurst, West Sussex RH14 9EH.

Tel: (040 381) 3535 Telex: 923423

Manufactures and sells biological pest control systems based on insects or

Applied Photophysics Ltd

20 Albemarle Street, London W1X 3HA.

Tel: (01) 493 4194 Telex: 263641 photon

203/205 Kingston Road, Leatherhead, Surrey KT22 7PB. Tel: 0372 386537 Tx: 263641 photon

Manufactures and supplies products for photochemistry including light measurement, light sources, computer software analysis data training, luminescence and ultraviolet/visible spectrometry equipment.

Part III UNITED KINGDOM

April Biotechnology Ltd

Chestnut Farm, Tarvin Rd, Frodsham, Cheshire WA6 6XN. Tel: 0928 35679 Fax: 0928 35352

Developing bioprocess technology for agricultural applications. Areas of interest include silage additives and farm pollution reduction.

April Computing Executive Ltd

Chestnut Farm, Tarvin Rd, Frodsham, Cheshire WA6 6XN. Tel. 0928 35868 Fax: 0928 35352

Supply computer software for biotechnical applications.

APV Barnetta Rolfe Ltd

Commissioners Road, Strood, Kent ME2 4EJ.

Tel: 0634 77888 Telex: 96405

Manufactures stainless steel industrial scale fermenters and storage vessels, yeast propagation plant etc.

APV Chemical Machinery Ltd

Cooper St, Hanley, Stoke-on-Trent, Staffs ST1 4DW. Tel: 0782 289711 Telex: 36130 Fax: 0782 25478

Designs and supplies biochemical processes and related machinery including fermenters, centrifugal separators and chromatographic systems.

APV Hall International Ltd

PO Box 555, Hythe St, Dartford, Kent DA1 1EP.

Tel: 0322 27222 Telex: 896573

Supplies engineering equipment and plant including systems for recovery and liquefaction of carbon dioxide from fermentation systems as well as industrial refrigeration plant.

APV Baker

2 Lygon Place, London SW1W 0JR. Tel: 01 730 7244 Tx: 925465 Fax: 01 730 26660

Supplies deep-culture fermentation plant, surface-lay tissue culture apparatus, microprocessor systems for fermentation control and data loggers. Also apparatus for enzyme recovery, reverse osmosis, ultrafiltration, drying and sterilization by plate and spiral heat exchangers. (formerly APV International, UK).

Aquaculture Vaccines Ltd

24-26 Gold St, Saffron Walden, Essex CB10 1EJ. Tel: 0799 28167 Telex: 818727 atcuk Fax: 0799 25546

Produce vaccines against fish diseases

Aquatreat Limited

Albany House, North Dock, Llanelli, Dyfed. Tel: 0554 775236

Supply speciality water treatment chemicals as well as biocides for control of biological contaminants (including products effective against Legionella) in open and closed recirculating systems.

Armour Pharmaceutical Co Ltd (UK)

St Leonards House, St Leonards Rd, Eastbourne, E Sussex BN21 3YG. Tel: 0323 410200 Telex: 878536 Fax: 0323 410306

Supplies products derived from human plasma including human albumin. Subsidiary of Armour Pharmaceutical Co, US.

Arnold R Horwell Ltd

73 Maygrove Road, West Hampstead, London NW6 2BP. Tel: 01 328 1551 Telex: 28501 Fax: 01 372 5259

Supplies a wide range of biotechnology equipment including tissue culture roller apparatus, plate pouring systems, autoclaves, cell counters, shakers, incubators, automatic pipetters, stirrers etc, as well as glass and plastic ware, haematology equipment and centrifuges.

ARP Ltd

Unit 5, Haigh Rd, Parkgate Industrial Estate, Knutsford, Cheshire WA16 8LL.

Tel: 0565 53199

Engineering company supplying equipment for biological research to universities and pharmaceutical industries; carrying out research on aspects of biological pest control.

Arthur White Process Plant Ltd

Boulters Barn, House Churchill, Chipping Norton, Oxon OX7 5UT. Tel: (0608) 2895

Manufactures industrial dewatering and drying equipment, including fluidized-bed systems.

Arthur Young Technology Group

7 Rolls Building, Fetter Lane, London EC4 1NH. Tel: 01 831 7130

Business consultants offering advice in raising finance, business planning, patenting and licensing, technology transfer and related aspects of forming new companies including those operating in areas of biotechnology.

Ashact Ltd

11 Wycombe Rd, Prestwood, Great Missenden, Bucks HP16 0NG. Tel: 02406 6014

Consultants in environmental management and effluent treatment.

Ashe Laboratories Ltd

Ashetree Works, Kingston Road, Leatherhead, Surrey KT22 7JZ. Tel: (0372) 376151

Manufactures and markets a wide range of veterinary pet-care, pharmaceutical and dietary products.

Aspinwall & Co

5 Swan Hill Court, Shrewsbury, Shropshire SY1 1NP. Tel: (0743) 241391

Developing systems for landfill gas production and monitoring.

Assab Ltd

32 St Andrews Road, Glasgow, G41 1ST. Fax: 041 636 1076 Tel: 041 429 8181

Has available a range of modular laboratory furniture and fume cupboards.

Associated Biolabs Ltd

The Novo Centre, 9-11 London Lane, London E8 3PR. Tel: (01) 986 4717 Telex: 896746

Supplies laboratory materials for use in biochemical and chemical applications. Products include immunodiagnostics based on radioimmunoassay, as well as material for tissue culture, chromatography, water purification and veterinary diagnostics.

ASTEC Environmental Systems Ltd

30/31 Lynx Crescent, Weston-super-Mare, Avon BS24 9BP. Tel: 0934 418685 Fax: 0934 419033

Supply operator, environmental and product protection systems including filtration, ducted fume cupboards, scrubbing systems, clean air cabinets and clean rooms.

Aston University

Applied Hydrology Unit

Aston Triangle, Birmingham B4 7ET.

Tel: (021) 359 3611

Studying growth of filamentous fungi (Fusarium and Geotrichum) on dairy industry wastes under aerobic conditions, as a means of protein recovery.

Aston University

Department of Chemical Engineering Chemical & Biochemical Processes

Aston Triangle, Birmingham B4 7ET.

Tel: (021) 359 3611

Working on waste treatment using fermentation methods and the design of fermenters and bioreactors as well as the production and use of microbial polysaccharides.

Atlas Bioscan Ltd

Town Cross Ave, Bognor Regis, West Sussex PO21 2DR. Tel: 0243 86840 Telex: 86126 atlas Fax: 0243 824859

Produces reagents and undertakes contract testing services for the LAL test for bacterial endotoxins, and other diagnostics.

UNITED KINGDOM Part III

Fax: 0908 665312

The Austin Co UK Ltd

35 Ballards Lane, London N3 1XW Telex: 923337 Tel: (01) 346 9351

Offers regulatory compliance and validation services of facilities and processes in both the pharmaceutical and biotechnology industries as well as design, engineering and construction of 'state of the art' facilities and remodelling of existing facilities through 47 offices worldwide.

Automated Microscopy Systems Ltd

40 Coltness St, Queenslie Industrial Estate, Glasgow G33 4JD. Tel: 041 7742042

Manufacture an automated flow through fluorescence microscope for enumeration of bacteria in fluids such as fermentation liquors, effluents, wash waters, food stuffs and equipment.

Aveley Methane Ltd

Sandy Lane, Aveley, Essex. Tel: (040 26) 4072

Developing methods for the management of landfill waste disposal site for the production of methane gas. Supplies gas to Thames Board Mills.

Axxiom Chromatography Inc

36 Brunswick Road, Gloucester GL1 1JJ. Tel: 0452 504294

Supplies microcomputer-based chromatography data systems (see Axxiom Chromatography, US).

B Braun Medical Ltd

Braun House, 13-14 Farmborough Close, Aylesbury Vale Industrial Park, Stocklake, Aylesbury, Bucks HP20 1DQ.

Tel: 0296 393900 Telex: 837086 bbmuk Fax: 0296 435714

Supply fermenters, software and biotechnology laboratory equipment, consumables and disposables. Subsidiary of B Braun Melsungen, Germany.

B & P Biotechnology Ltd

24 Blacklands Way, Abingdon, Oxon OX14 1DY. Fax: 0235 35466 Tel: 0235 27217 Telex: 838806

Offers contract research services and equipment for bioprocessing and membrane technology including membrane bioreactors and filtration systems as well as accessory instrumentation.

Babcock Contractors Ltd

11 The Boulevard, Crawley, W Sussex RH10 1UX. Tel: 0293 28755 Telex: 87317 Fax: 0293 28755

Engineering contractors offering services in areas of aerobic and anaerobic waste treatment as well as the production of fuel alcohol by fermentation.

69 High Street, Saffron Walden, Essex CB10 1AA. Tel: 0799 26465 Telex: 817205 Fax: 0799 Fax: 0799 26351

Markets biologically active peptides, products of Bachem Fine Chemicals,

Baird & Tatlock (London) Ltd

PO Box 1, Romford, Essex RM1 1HA. Tel: (01) 590 7700 Telex: 24225 baihop

Manufactures centrifuges, incubators, safety cabinets and laboratory fixtures and supplies a wide range of laboratory equipment.

Baker Instruments Ltd

Rusham Park, Whitehall Lane, Egham, Surrey TW20 9NW. Tel: (0784) 31482

Supplies laboratory and chemical equipment including discrete chemical analyzers capable of 320 tests per hour with RS232 interface for all computer link ups with over 100 programmable routines available.

Balzers High Vacuum Ltd

Northbridge Road, Berkhamsted, Herts HP4 1EN. Tel: 0442 862181 Telex: 82209 Fax: 0442 871727

Supply gas monitoring equipment for fermentation processes with computer control and data recording software.

Barretts of Croydon

1 Mayo Road, Croydon, Surrey CR0 2QP. Tel: (01) 684 9917

Manufactures glove boxes of class III standard for handling of toxic, dangerous or sensitive materials in both research and industrial applications.

BASE International

Midsummer House, 443 Midsummer Blvd, Central Milton Keynes, Bucks MK9 3BN Tel: 0908 664315

Telex: 265871 monref

Biotechnology consultants.

BASF UK Ltd

PO Box 4, Earl Road, Cheadle Hulme, Cheadle, Cheshire SK8 6QC. Tel: (061) 485 6222 Telex: 669211

Distributes products of BASF AG, Germany.

Bass plc

Research Department

137 High Street, Burton-on-Trent DE14 1JZ.

Tel: (0283) 45301 Telex: 341871

Major brewer, using methods of recombinant DNA technology and carrying out studies of yeast physiology and metabolism aimed at process optimisation.

Bassaire Ltd

Duncan Road, Swanwick, Southampton SO3 7ZS Telex: 477605 basair Tel: 0489 885111 Fax: 0489 885211 Supplies laminar air flow equipment.

Battelle Institute Ltd

15 Hanover Square, London W1R 9AJ.

Tel: 01 493 0184 Telex: 23773 Fax: 01 629 9705

Contract research and consultancy group offering single and multi-client studies in most areas of science and technology, including assessments of prospects of biotechnology in the following areas: chemicals, fine chemicals, food, animal feed, pharmaceuticals and fuel industries.

Bayer UK Ltd

Strawberry Hill, Newbury, Berks. Tel: (0635) 39000

Manufactures and distributes pharmaceuticals, fine chemicals, agrochemicals and veterinary products, as well as rubber, plastic and photochemical and phototechnical products in other divisions. Subsidiary of Bayer AG, Germany.

BDH Diagnostics Ltd

Broom Road, Poole, Dorset BH12 4NN.

Tel: 0202 745520 Telex: 41186 tetra Fax: 0202 738 299

Apparatus Division: PO Box 8, Dagenham, Essex RM8 1RY

Supplies a very wide range of fine chemicals and biochemical reagents for use in techniques such as electrophoresis, amino acid analysis and enzyme assays. Distributes enzymes manufactured by E Merck, Germany. Produces a range of coloured pH isoelectric point markers. Division of BDH Ltd.

Bean Products Ltd

42 Telford Road, East Lenziemill, Cumbernauld G67 2AX. Tel: (023 67) 38310

Produces soy sauce by fermentation. Carrying out related research. Subsidiary of Nestle (UK) Ltd.

Beatson Institute For Cancer Research

Garscube Estate, Switchback Road, Bearsden, Glasgow G61 1BD. Carrying out research on nucleic acid metabolism, biochemistry and molecular biology in relation to cancer.

Bechtel Great Britain Ltd

Betchtel House, 245 Hammersmith Road, Hammersmith, London W6 8DP.

Tel: (01) 846 5363 Telex: 934151

Engineering contractors offering services in the areas which include the design and construction of plant for single-cell protein and waste treatment, including the production of fuel alcohol and methane by anaerobic digestion.

Part III UNITED KINGDOM

Beckman Instruments (United Kingdom) Ltd

Progress Road, Sands Industrial Estate, High Wycombe, Bucks HP12 4JL. Tel: 0494 441181 Telex: 837511 Fax: 0494 447558

Viewfield Rd, Viewfield Industrial Estate, Glenrothes, Fife KY6 2RD. Tel: 0592 771234 Tx: 72532

Undertake sales and services for a wide range of analytical instruments, centrifuges, gamma and scintillation radioactivity counters etc (see SmithKline Beckman, US). Also supply restriction enzymes including Taq polymerase, DNA synthesizers and sequencers and DNA reagent, solvent and column system.

Becton Dickinson UK Ltd

Between Towns Road, Cowley, Oxford OX4 3LY. Tel: 0865 777722 Telex: 837438

Supplies disposable tissue culture plastics and related products including disposable filter units, multi-well plates, tubes, roller bottles and pipettes. Diagnostic Systems Division supplies monoclonal antibody reagents and kits for cell analysis and immune monitoring. Subsidiary of Becton Dickinson Co, US.

Beecham Pharmaceuticals Co Ltd

Great Burgh, Epsom, Surrey KT18 5XQ. *Tel*: (025) 53344 *Telex*: 8814695

Research Division: Brookham Park, Surrey RH3 7AJ

Carries out manufacturing, research and development of animal and human health-care products, including research on therapeutic uses of monoclonal antibodies. Parent company Beecham plc recently merged with SmithKline, US.

Belasis Hall Technology Park Ltd

c/o ICI, PO Box 1, Billingham, Cleveland TS23 1LB. Tel: 0642 522111

Joint venture between ICI and the Universities of Durham and Newcastle, Newcastle Polytechnic and the North East Biotechnology Centre, to link the academic resources of the region through HESIN (Higher Educational Support for Industry in the North) to provide a wide range of biotechnological and other services for the benefit of start-up and established high tech industry at a new 167 acre site.

Bellco Europe

Sterilin House, Clockhouse Lane, Feltham, Middx TW14 8QS. Tel: (07842) 51155

Manufacture specialized glassware including apparatus for biotechnology as follows: spinner flasks for suspension cultures and microcarriers; electrical stirrers with low rates of heat transfer; roller apparatus and incubators; glassware and pipettes. Also produce specialized products in response to customers' requirements.

Beneden Chest Hospital

RAST Allergy Unit, Cranbrook, Kent TN17 4AX. Tel: (0580) 82495

Supplies antibodies for research purposes, including immobilized systems for radioimmunoassay raised in sheep, donkeys, etc.

Benezech-Simpson & Co

25 Paget Rd, Langley, Slough SL3 7QP. Tel: 0753 40995 Fax: 0753 40995

Biotechnology consultants.

Benzon Pharma Ltd

Kings Lodge, 194 Kings Road, Reading, Berks RG1 4NH. Tel: 0734 599220 Fax: 0734 504666

Developing processes for large scale expression and processing of recombinant proteins and polypeptides by genetic engineering and the use of runaway replication plasmid technology (RAPT), replicon stabilization technology (RST) and proprietary industrial endonuclease of Alfred Benzon Inc, a subsidiary of Benzon Pharma, Denmark.

Berk Ltd

Offer a full marketing service as chemical distributors for overseas companies as well as supplying imported products to UK biotechnology companies. Interests include bulk and speciality enzymes, microbially derived products, proteins for use by the pharmaceutical, animal feed and food industries. These include a range of enzymes, hormones and monoclonal antibodies for use in diagnostic kits and for research purposes.

Berthold Instruments (UK) Ltd

35 High St, Sandridge, St Albans, Herts AL4 9DD.

*Tel: 0727 41999 Telex: 557192 Fax: 0727 41624

Supplies analytical instrumentation including microplate readers for radioimmunoassay, luminescence immunoassay and diagnostic tests.

Bidstone Methane Ltd

Eastwood Hall, Mansfield Rd, Eastwood, Nottingham NG16 3EB. Tel: 0773 763331

Company established to exploit landfill gas produced at Bidstone Moss, Merseyside, landfill site.

Bigneat Ltd

64 Solent Rd, Havant, Hants PO9 1JH. Tel: 0705 476831

Manufacture a wide range of safety equipment, containment facilities, clothing and accessories as well as ovens and furnaces. Products include ductless portable fume cabinets, microbiological safety cabinets, laminar flow cabinets and modules as well as clean room clothing.

Binding Site Ltd

97 Vincent Drive, Edgbaston, Birmingham B15 2SQ. Tel: 021 4714197 Telex: 333044

Supplies immunological and biological reagents including monoclonal and polyclonal antibodies as well as custom immunization.

Binnie and Partners

Grosvenor House, 69 London Road, Redhill, Surrey RH1 1LQ. Tel: 0737 774155 Telex: 24552 Fax: 0737 772767

Consulting engineering company offering services in the areas of water and wastewater treatment and solid waste disposal including single-cell protein or methane by anaerobic digestion.

Bio-Fish Ltd

2 Gurnick Street, Mousehole, Cornwall. Tel: (0736) 731722

Developing new strain of shellfish by techniques which include genetic manipulation.

Bio-Nuclear Services Ltd

24 Westleigh Drive, Sonning Common, Reading RG4 9LB.

Tel: 0734 722458

Telex: 847423 bio-nuclear

Fax: 0734 724543

Supply a range of biotinylated DNA probes and kits together with an extensive range of primary monoclonal and polyclonal antibodies (enzymatic, fluorescent and gold conjugated) and diagnostic slides. UK representatives for Euro-Diagnostics BV, Netherlands, Southern Biotechnology Associates Inc, US and Boterdael & Zonen, Belgium.

Bio-Rad Laboratories Ltd

Caxton Way, Watford Business Park, Watford, Herts WD1 8RP. Tel: 0923 40322 Telex: 8813192

Digilab Division: Greenhill Crescent, Watford Business Park, Watford, Herts.

Tel: 0923 37144 Tx: 922080

Specializes in: HPLC systems, including the MAPS preparative system for high capacity purification of monoclonal antibodies; horizontal and vertical electrophoresis systems and immunology products biased towards hybridoma technology. Also available are molecular biology products such as a superior quality AMV reverse transcriptase. Bio-Rad's Clinical Division supplies a wide range of diagnostic kits and instruments, backed up by a full panel of quality control serums. Subsidiary of Bio-Rad Inc,

Bio-Rad Lasersharp Ltd

7 Suffolk Way, Drayton Rd, Abingdon Oxon OX14 5JX. Manufacture a scanning optical microscope.

Bio-Services

Kings' College, London University, Campden Hill Rd, London W8 7AH. Tel: (01) 937 5411 Telex: 299968

Provides consultancy service and undertakes research in the areas of bioproductivity and conversion technology for production of fuels and chemicals from biological raw materials. Also undertakes project management and conference organization and provides training courses.

UNITED KINGDOM Part III

Biocatalysts Ltd

Main Avenue, Treforest Industrial Estate, Pontypridd, Mid Glamorgan CF37 51/T

Tel: 044 385 3712

Telex: 497126 biocat

Specializes in industrial enzymes for the chemical, food and pharmaceutical industry. Developing a range for biotransformations which includes 18 microbial lipases and amino acylase. Other enzymes include deaminase, dextranase, phospholipase and trypsin. All enzymes are available in kilogram quantities. A full enzyme consultancy is offered including sourcing, cost-effectiveness studies, process development and modification.

Bioclinical Services Ltd

PO Box 129, Cardiff CF4 4YU.

Tel: 0222 756346

Telex: 497538

Fax: 0222 752645

Supplies immunological and biological reagents including monoclonal and polyclonal antibodies and hormones as well as immunoassays and DNA probes.

Biocompatibles Ltd

Brunel Science Park, Kingston Lane, Uxbridge, Middx UB8 3PQ. Tel: 0895 74481 Telex: 8950511 Fax: 0895 74120

Carrying out research and development in areas of liposome technology and biomembrane mimetic technology for medical and veterinary products including artificial organs, artificial blood containing liposome encapsulated haemoglobin and delivery systems for nutrients in fish and shrimp farming.

Biocon (UK) Ltd

Upper Moor End Farm, Mamble, Nr Kidderminster, Worcs DY14 9JD. Tel: 029 922 701 Fax: 029 922 788

Supplies industrial enzymes to brewing, distilling, food, baking, dairy, starch-processing and pharmaceutical industries. Supplies natural colours and stabilisers to the food and beverage producers. Also supply silage inoculants.

Biodata Ltd

10 Stocks St, Manchester, M8 8QG.

Supply modular data acquisition systems to link laboratory instrumentation to computers.

Biodegradable Technology

8 Fairbairn Rd, Livingston, West Lothian. Tel: 05006 415880 Fax: 0506 412840

Supplies selected adapted bacterial cultures and chemicals for waste treatment.

Bioengineering UK Ltd

New Roman House, 10 East Road, London N1 6BQ.

Tel: 01 490 2255 Telex: 8811725 bio Fax: 01 253 3197

Supplies microbiological culture plant, laboratory and industrial fermenters, and other bioreactors with microprocessor systems available for data logging and process control. Subsidiary of Bioengineering AG, Switzerland.

Bioflow (Environmental Cultures) Ltd

Unit 18, Raleigh Industrial Estate, Eccleshall, Stafford ST21 6JL. Tel: 0785 851573 Telex: 36136

Distributes mixed bacterial cultures blended for environmental application.

Bioflux

c/o Biochemistry Department, University of Glasgow, Glasgow G12 8QQ. Tel: 041 339 8855

Developing technology for mass culture for fermentation products.

Biogenesis Ltd

12 Yeoman's Park, Yeoman's Way, Bournmouth BH8 0BJ. Tel: 0202 522895

Supplies immunological and biological reagents. Distributor for Immunon/Lipshaw, US.

Bioisolates (Holdings) plc

10 Adelaide Street, Swansea, W Glamorgan SA1 ISE. Tel: (0792) 466049 Telex: 48524

Developing methods for separation and recovery of proteins from cheese whey to be used as a food supplement, as well as separation of other proteins for use in enzyme manufacture. Have interests in the use of recombinant DNA technology for production of such proteins.

Biological Control Systems Ltd

Produce systems for control of insect pests based on behaviour modifying chemicals such as pheromones in micro-encapsulated form for use in agriculture, forestry or with stored products. Carrying out research on liquid and polymer controlled release systems. Joint venture with University of Cardiff.

Biological Industries Ltd

56 Telford Rd, Lenziemill Industrial Estate, Cumbernauld, Glasgow G67

Tel: 0236 728700

Telex: 778923

Fax: 0236 738001

Supply media, serums, serum free media, nutrients and additives, buffers and coated products for use in tissue culture as well as a range of diagnostics including ELISA kits for the determination of auto-antibodies to nuclear antigens and indirect immunoperoxidase assays for antibodies to chlamydia. Also supply a series of chromogen hydrogen peroxide solutions.

Biomechanics Environmental Ltd

1 Station Road, Four Ashes Wolverhampton, West Midlands WV10 7DQ. Tel: 0902 791616 Telex: 335684 lepoll Fax: 0902 791772

Offers design, construction and financing services for anaerobic treatment plants.

Biopharm (UK) Ltd

Produces pharmaceutical products and naturally occurring biochemicals for medical and scientific use. Products include hirudin, collagenase, hyaluronidase and anticoagulants derived from leeches.

Bioprocessing Ltd

No 1 Industrial Estate, Consett, Co Durham DH8 6TJ. Tel: 0207 590565 Fax: 0207 500944

Undertake contract manufacture and production of affinity matrices as well as protein purification.

BIOS (Consultancy and Contract Research) Ltd

Pinewood College Ride, Bagshot, Surrey GU19 5ER. Tel: (0276) 73363 Telex: 265871

Contract research and consultancy organisation offering services in areas of health care products including safety trials, clinical trials, regulatory affairs and analytical development as well as aspects of commercialization of new products.

Bioscot Ltd

Kings Buildings, West Mains Rd, Edinburgh EH9 3JF.

Tel: 031 662 4551 Telex: 728131 Fax: 031 662 4279

4 Fleming Rd, Kirkton Campus, Livingston EH4 7BN. Tel: 0506 415253 Tx: 72582

Specialises in the development and manufacture of monoclonal antibody based diagnostic products. Has developed and now manufactures several diagnostic test kits for other companies as well as producing a range of blood typing reagents and a series of monoclonal antibodies to haemostasis associated antigens. Licensed by FDA in the US.

Bioseparation Associates Ltd

2a Shiel House, Craigshill, Livingston EH54 5EH. Tel: 0506 32871 Fax: 0506 35482

Carry out the recovery of products from abattoir blood for use in the veterinary and pharmaceutical industries with applications in tissue culture.

Part III UNITED KINGDOM

Biosoft

PO Box 98, 22 Hills Rd, Cambridge, CB2 1JP. Tel: 0223 68622

Supply a wide range of software with applications in biotechnology including programs for recombinant DNA, radioimmunoassay and ELISA techniques etc.

Biospecia Ltd

Develops and produces materials for immunoassay, diagnostic tests and protein engineering including magnetizable particles and proteins. Part of the Andard-Mount group.

Biosure Laboratory Technology Ltd

Lavender Mill, Manea, March, Cambs PE15 0LU.

Tel: 035478 711 Telex: 32642 Fax: 035478 269

Supply specialist animal feeds and offer services in detection of residues in food and marketing of veterinary products. Part of Agricultural Technology group, UK.

Biotal Ltd

formerly BioTechnica Ltd

5 Chiltern Close, Cardiff CF4 5DL.

Tel: 0222 766716 Telex: 497244

Fax: 0222 766945

Exploits naturally occurring microrganisms to develop microbial technology, products and services for the agricultural and environmental biotechnology sectors. Supplies microbial inoculants for use in plant and animal agriculture. Also provides DNA-fingerprinting service and unique anticounterfeit labelling systems. Undertakes contract research.

The Biotech Group of Companies

Established to market the products and services of the member companies, covering most areas of the biotechnology process industries, and to collaborate in providing research, development and production facilities.

Biotech Instruments

183 Camford Way, Luton, Beds LU3 3AN.

Tel: 0582 502388 Telex: 8950511 Fax: 0582 597091

Supply laboratory equipment including a refrigerated dual injection autosampler for HPLC, and instruments for DNA and peptide synthesis and sequencing.

Biotech Ltd

Unit 12, 40 Occam Rd, Surrey Technology Centre, Guildford GU2 5YH. Tel: 0483 502003

Carrying out research on plant products. Member of The Biotech Group of Companies, UK.

Biotechna Ltd

81 Wimpole St, London W1M 7DB.

Tel: (01) 486 5140 Telex: 8951182

Contract research organisation with interests in areas of algal products, azeotropic separations and waste treatment.

Biotechnology Computer Systems Ltd

Cleveland House, Church Path, Acton Green, Chiswick, London W4 5HR. Tel: 01 995 3625 Telex: 946240 Fax: 01 995 8610

Manufacture control equipment and produce software for use in biotechnical processes. Part of the Porton International Ltd group, UK.

Biotechnology Consultants Ltd

33 London St, Reading, Berkshire RG1 4PS.

International management consultancy specialising in agriculture and biotechnology worldwide.

Biotechnology Investments Ltd

Advised by N M Rothschild Asset Management Ltd

PO Box 528 Five Arrows House, St Swithin's Lane, London EC4N 8NR. Tel: 01 280 5000

Publicly quoted company based in the Channel Islands, which invests in biotechnology/healthcare quoted and unquoted companies worldwide and concentrates on start-ups and early rounds of financing.

Biotechnology South West

Reed Hall, Streatham Water, Exeter EX4 4QR. Tel: 0392 214085

Regional biotechnology centre established in 1988 to promote investment and activity in biotechnology in the south west of England. Offers companies and organisations, whether or not they are located in the region, consultancy, contract R&D, quality control, in-service training and education in microbial fermentation and biotransformation, recombinant DNA technology, diagnostics and therapeutics particularly relating to fish farming, agricultural, food and environmental biotechnology, plant and animal germ plasm preservation and biochemical engineering. Membership comprises biotechnologists in Exeter University, Seale Hayne College, Plymouth Polytechnic, Camborne School of Mines, Cornwall College, Exeter Enterprises Ltd, PEP Ltd and Camborne Associates Ltd, together with representatives of the Devon and Cornwall Development Bureau. Also closely linked with the National Biotransformation Centre and with the South Western Regional Technology Centre.

Biotest (UK) Ltd

Unit 21A, Monkspath Business Park, Highlands Rd, Shirley, Solihull, West Midlands B90 4NZ.

Supplies blood-grouping and tissue-typing reagents, immunological reagents and microbiology products. Subsidiary of Biotest AG, Germany.

Biotics Ltd

27 Abbotswood, Guidford, Surrey GU1 1UY. Tel: 0483 505252/60331

Consultants on screening, evaluation and possible exploitation of biological resurces of developing countries, particularly plant products.

Biotrans

Biology Laboratory, Kent University, Canterbury, Kent CT2 7NZ. Tel: 0227 66822

Developing systems and biocatalysts for use in biotransformations. An association between the University of Kent and the Laboratory of the Government Chemist, UK.

Biotreatment Ltd

5 Chiltern Close, Cardiff, CF4 5DL

Provides comprehensive service based on microbial and conventional technology for: reclamation of contaminated land; treatment of industrial waste; landfill management; treatment of effluent and leachate. Joint venture, Treatek Ltd handles business outside UK. Subsidiary of Biotal Ltd, UK.

Biozyme Laboratories Ltd

Unit 6, Gilchrist-Thomas Estate, Blaenavon, Gwent NP4 9RL. Tel: 0495 790678 Telex: 497731 biozm

Supplies a wide range of analytical and research enzymes and related biochemicals for the diagnostic and pharmaceutical industries including alpha- and beta- glucosidases, glucose oxidase, urease, dehydrogenases, horseradish peroxidase, aminotransferase, etc.

Birchover Instruments Ltd

The Spirella Bldg, Bridge Rd, Letchworth, Herts SG6 4ET. Tel: (046 26) 73097

Manufacture electrophoresis apparatus, chromatography detectors and constant temperature chambers.

Birmingham University

Department of Chemical Engineering

PO Box 263, Birmingham B15 2TT.

Tel: (021) 472 1301

Working on aspects of fermentation in systems which are not oxygen-transfer limited, extraction processes using critical fluids, growth of hybridomas and suspended mammalian cells, gel entrapment of cells and surface interactions in anaerobic reactors.

Birmingham University

Department of Genetics

PO Box 363, Birmingham B15 2TT.

Tel: (021) 472 1301

Investigating genetic organisation of plasmids and their replication. Isolating lamda transducing phage. Determining nature and control of bacterial spore generation.

UNITED KINGDOM Part III

Birmingham University

Department of Biochemistry PO Box 363, Birmingham B15 2TT. Tel: (021) 472 1301

Investigating the following topics: stability of plasmids of natural occurrence or constructed through recombinant DNA technology; biochemistry of nitrate reduction; structure and function of biological membranes; mechanism of ribosome breakdown; transcription of cloned yeast ribosomal RNA genes; pharmacogenetics of drug metabolism; glycoproteins of lymphocytes; structure and composition of mycovirus from killer yeasts.

Birmingham University

Biotechnology Management Group PO Box 263, Birmingham B15 2TT. Tel: (021)472 1301

Working on biological pest control, production of new plant varieties through selective transfer of pollen genes, aspects of the structure of extracellular polysaccharides in relation to properties of sewage sludge, and the expression of genes for resistance to plant pathogens.

Birmingham University

Research Laboratory for the Chemistry of Bioactive Carbohydrates and

Department of Chemistry, PO Box 363, Birmingham B15 2TT. Tel: 021 472 1301

Produce a range of polymer based supports for use in immobilization of cells or enzymes for industrial use. The supports are characterized by physical properties which make them noncompressible, robust, nonbiodegradable, tolerant to some solvents and with a structure which will not suffer from blockage of pores. Available in a granular form for use in fluidized bed reactors as well as in the form of reactor-wall coated tubular reactors or as a polymer coated stainless steel grid. Also produce polymer coated supports for use in packed bed reactors. Have been used with enzymes such as amylases and with cells such as yeast.

Biwater Group

PO Box 9 Milltown Street, Radcliffe, Manchester M26 9NU. Tel: 061 723 3821 Telex: 669834 Fax: 061 724 5605

Offer engineering consultancy, turnkey contracts and equipment for sewage and effluent treatment as well as specializing in production of potable water. Formed by amalgamation of Whitehead & Poole Ltd and Farrar Sewage Ltd, UK

Blenheim Online Ltd

Blenheim House, Ash Hill Drive, Pinner, Middx HA5 2AE. Tel: 01 868 4466 Telex: 923498 online Fax: 01 868 9933

London Online Inc, New York NY 10017, US.

Tel: 212 692 9003

Organizes conferences and exhibitions, mainly in electronics and computers, but including biotechnology. Member of the Blenheim Exhibitions Group plc, UK.

Blood Group Reference Laboratory

Harkness Building, Radcliffe Infirmary, Woodstock Rd, Oxford OX2

Produces blood group reagents and develops methods for detection of platelet and granulocyte antibodies. A central laboratory for the National Blood Transfusion Service. Organizes the National External Quality Assessment Scheme in Blood Group Serology and carries out final assessment of conventional and monoclonal products from the public and private sector.

Blood Products Laboratory

Dagger Lane, Elstree, Herts WD6 3BX. Tel: 01 953 6191 Telex: 8814267

Process blood plasma proteins. Part of the Central Blood Laboratories Authority of the Department of Health and Social Security, UK.

Blue Circle Industries plc

Effluent Treatment Division

2 Hassell Street, Newcastle under Lyme, Staffs ST5 1AG. Tel: 0782 618668 Telex: 367119

Produce chemicals and plant for treatment of effluents and sewage. Processes include upward flow sludge blanket systems for efficient removal of BOD.

BOC Ltd

15-17 Northgate, Baildon Shipley, Yorks BD17 6JZ. *Tel:* (0274) 599911 *Telex:* 517336

Supplies gases as well as offering waste treatment systems based on aerobic processes including deep tanks. Also involved in methods of preservation of living material by low-temperature techniques (cryopreservation).

Boehringer Corp (London) Ltd

Biochemicals Division

Bell Lane, Lewes, E Sussex BN7 1LG. Tel: 0273 480444

Fax: 0273 480266

Supplies a wide range of fine chemicals and reagents for research and analysis (see Boehringer Mannheim GmbH, Germany).

Bofors (Great Britain) Co Ltd

Ramsden Heath, Billericay, Essex. Tel: (0268) 71031

Distributes organic intermediates for pharmaceutical and agrochemical production. Subsidiary of Bofors Nobel Kemi, Sweden.

Bogart Delafield Ferrier (Europe) Ltd

7A Howe Street, Edinburgh, EH3 6TE. Fax: 031 557 2851 Tel: 031 557 0700

International management consultancy company specializing in the fields of healthcare and biotechnology. Services include technology assessment, market research and corporate partnering.

Boots Celltech Diagnostics Ltd

240 Bath Road, Slough, Berks SL1 4ET. Tel: 0753 821221 Telex: 847805

Fax: 0753 24757

Supplies diagnostic kits including those for assay of alpha-foetoprotein as well as monoclonal antibodies for detection of alpha-interferon. Developing diagnostics for clinical and veterinary use. Supplies bulk blood-grouping reagents, based on monoclonal antibodies to Ortho Diagnostic Systems. Products under development include a one-phase, rapid diagnostic, enzyme-linked immunoassay immunostrip. Joint venture between The Boots Co and Celltech, UK.

The Boots Company plc

1 Thane Road West, Nottingham NG2 3AA. Tel: 0602 506111 Telex: 37128

Manufactures and retails pharmaceuticals, other health care products and fine chemicals, as well as agrochemicals in a joint company FBC Ltd, UK with Fisons Ltd, UK.

Boots MicroCheck

1 Thane Rd West, Nottingham NG2 3AA.

Telex: 377811 Fax: 0602 483889

Produces biocides and offers contract services in microbiological detection including test kits for the detection of Legionella and Listeria. Part of The Boots Company plc.

Border Research Ltd

Talkin, Brampton, Cumbria CA8 1LE. Tel: 06977 3404 Fax: 06977 2163

Undertakes contract research and development for the veterinary industry in the production of vaccines, veterinary treatments, drugs against parasitic diseases and feed additives.

Bradford University

School of Biomedical Sciences Bradford, West Yorks BD7 1DP. Tel: 0274 733466 Telex: 51309

Carrying out research on production of antibiotics by actinomycetes as well as other metabolites including enzymes and pharmacologically active compounds. Also working on the nutrition and health of farmed fish.

Bradford University

Food Policy Research Group

School of Biomedical Science, Bradford, West Yorks BD7 1DP.

Tel: 0274 733466 Telex: 51309

Carrying out studies on changes in food consumption and its impact on future aspects of agricultural demand, food additive manufacturers etc.

Part III **UNITED KINGDOM**

Bradford University

School of Chemical Engineering Bradford, West Yorks BD7 1DP. Tel: 0274 733466 Telex: 51309

Developing improved oxygen transfer devices for use in aerobic fermentations as well as characterizing large scale bioreactor fluid dynamics, mass transfer reactions etc, and studying the effects of shear stress on microbial physiology.

Bradford University

Industrial Liaison Office Bradford, W Yorks BD7 1DP.

Telex: 51309 Tel: (0274) 33466

Supplies contract research to industry in engineering in particular.

Bradsure Biologicals

65 Park Lane, Sutton Bonnington, Loughborough, Leics LE12 5NQ. Telex: 341995 Tel: 050 972683

Supplies immunological and biological reagents. Distributor for Sanbio, Netherlands.

Brewing Research Foundation

Lyttel Hall, Nuffield, Redhill, Surrey RH1 4HY. Tel: (0737 82) 2272

Developing brewing technologies. Studying yeast biochemistry and developing techniques for in vitro transfer of genetic material in yeasts.

Bristol-Myers Ltd

Station Road, Langley Slough, Berks SL3 6EB. Tel: (0753) 44266 Telex: 847535

Produces pharmaceuticals. Subsidiary of Brostol-Myers Co, US.

Bristol Pneumatic Ltd

Lodge Causeway, Fishponds, Bristol BS16 3JS. Tel: (0272) 657511 Telex: 44641

Designs and manufactures air and gas compressors with working pressures of up to 414 bar, including a natural gas package to charge vehicle cylinders which has been adapted for use (in association with the Anglian Water Authority, UK) to clean and compress biogas from sewage treatment. Commercial packages of compressor, biogas scrubber, bulk storage cylinders and vehicle filling points available.

Bristol Polytechnic

Department of Science

Coldharbour Lane, Frenchay, Bristol BS16 1QY.

Tel: 0272 656261

Carrying out research in a number of areas organized under the following group headings: Animal Nutrition Group; investigating food additives and the role of trace elements in animal nutrition. Plant Sciences Group; developing new plant varieties using plant tissue culture for propagation as well as studying secondary product formation by immobilized plant cell systems and the use of plant tissue culture as a means of storing germplasm. Organic Semiconductor Group; developing sensors for the detection of toxic gases based on the use of porphins and model porphins.

Bristol University

Department of Microbiology Bristol BS8 1TH. Tel: (0272) 24161

Studying plasmid-borne multiple drug resistance and immunological aspects of herpes virus infection.

Bristol University

Department of Biochemistry Bristol BS8 1TH.

Tel: (0272) 24161

Studying the use of ammonia and methane monooxygenase to insert oxygen molecules into organic molecules. Investigating the mechanism of action of insulin, regulation by hormones and neuroactive peptides Preparing cDNA clone banks for erythrocyte membrane proteins. Studying mechanism of action of restriction endonucleases.

Bristol University

Fungal Genetics Group Department of Microbiology Medical School, University Walk, Bristol BS8 1TD. Tel: 0272 303030 Telex: 449174

Developing cloning and expression vectors for use with filamentous fungi of industrial importance for use in production of antibiotics and enzymes.

Bristol University

Department of Botany Bristol BS8 1UG. Tel: 0272 24161

Carrying out research on restriction enzymes from cyanobacteria as well as aspects of biological control of fungal disease and the uptake and recovery of heavy metals by microorganisms

Bristol University

Department of Biochemistry

Medical School, University Walk, Bristol BS8 1DT. Tel: 0272 303030 Telex: 449174

Isolating new restriction endonucleases and other enzymes modifying nucleic acids including methylases as well as studying gene expression in Streptomyces.

BritCair Ltd

Heads of the Valleys Industrial Estate, Rhymney, Gwent NP2 5RL. Tel: 0685 842599 Telex: 859879 Fax: 0685 844068

Manufacture wound dressings based on alginates.

British Bio-technology Ltd

Watlington Rd, Cowley, Oxford OX4 5LY. Tel: 0865 748747 Telex: 838083 biotec

Fax: 0865 717598

Market synthetic genes coding for immunomodulators, growth factors viral proteins and other biologically important proteins. Also market DNA probes for interleukins, immuno-detection reagents and ranges of purified and recombinant proteins, including cytokines, and antibodies for these molecules. The Research Division undertakes collaborative research projects in various areas of health care.

The British Ceca Co Ltd

17-27 Garrat Lane, London SW18 4AE. Tel: (01) 874 7272 Telex: 928041

Produces alginates, carrageenans, other biopolymers, filter aids, activated carbon, molecular sieves and other products, including insulating materials.

British Charcoals & McDonalds

21 Dellingburn St. Greenock, PA15 4TP.

Tel: 0475 20273/4 Telex: 778002 Fax: 0475 20016

Manufacture immobilized amyloglucosidase.

British Earthworm Technology

Harding Way, St Ives, Huntingdon, Camb PE17 4WR. Tel: (0480) 300144 Telex: 817213

Developing systems for the treatment of agricultural residues and the production of compost using worm culture.

British Fermentation Products Ltd

11 Appold Street, London EC2 2AP. Telex: 987201 Tel: (01) 247 1066

Produces fresh yeast, dried yeast and bakers' sundries. Subsidiary of Gist-brocades NV, Netherlands.

British Filters Ltd

Thames Industrial Estate, Fieldhouse Lane, Marlow, Bucks SL7 1TD. Tel: (062 84) 73131

Manufactures filtration equipment.

British Gas Corporation

London Research Station

Michael Rd, London SW6 2A.

Tel: 01 736 3344

Carrying out research on the use of microorganisms in recovery of oil and minerals as well as in waste treatment.

UNITED KINGDOM Part III

British Nuclear Fuels plc

Springfield Works, Salwick, Preston, Lancs PR4 0XJ. Tel: 0772 728262 Fax: 67526

Interested in aspects of the biological treatment of solid, liquid and gaseous effluents including the removal of heavy metal ions from raffinate streams using biological systems.

The British Petroleum Company plc

BP Research Centre

Chertsey Road, Sunbury on Thames, Middx TW16 7LN. Tel: (093 27) 62334 Telex: 928231

Pioneers in the production of protein from petroleum. Developed a technically advanced continuous fermentation process that produced yeast containing 65% protein for use in animal feeds. This was scaled-up and a 100000 tonnes per annum plant built in Sardinia, but this subsequently closed for economic reasons, after providing considerable experience of large-scale continuous fermentation, harvesting, product handling and formulation. This information is available for sale. Current technological research and development activities include microbial enhanced oil recovery and preventative and corrective microbiology in oil extraction.

The British Petroleum Company plc

Britannic House, Moor Lane, London EC2Y 9BU. Tel. (01) 920 8000 Telex: 888811

Principal activities relate to all phases of oil and natural gas industries, including exploration, shipping, refining and marketing. Also produces fine chemicals, agricultural products and pharmaceuticals, directly or through

British Sugar Corporation plc

PO Box 26, Oundle Rd, Peterborough PE2 9QU. Tel: 0733 63171 Fax: 0733 63068

British Sugar Technical Centre: Colney Lane, Colney, Norwich. Tel: 0603 250000 Fax: 0603 55874

Beet sugar manufacturer with increasing and diverse experience in agri-business and biotechnology processes. Aerobic and anaerobic digestion are utilised for waste treatment. Interests include utilisation of straw, plant genetic engineering (especially of sugar beet), fermentation, separation and novel technologies.

British Tar Products

Hayes Road, Cadishead, Manchester M30 5BX. Tel: (061) 775 3945 Telex: 66938

Manufactures intermediates for preparation of pharmaceuticals, as well as biocides and antioxidants.

British Technology Group

101 Newington Causeway, London SE1 6BU.

Tel: 01 403 6666 Telex: 894397 Fax: 01 403 7586

Licenses new scientific and engineering products to industry worldwide and provides finance for the development of new technology.

British Vinegars Ltd

42 Telford Road, East Lenziemill, Cumbernauld G67 2AX. Tel: 0236 38310

Produce food products by fermentation.

Brocades (Great Britain) Ltd

Brocades House, Pyrford Road, West Byfleet, Weybridge, Surrey KT14 6RA.

Tel: (093 23) 42291 Telex: 917301

Supplies antibiotics including penicillin and its derivatives, spectinomycin, amoxicillin, kanamycin sulphate, natamycin etc, as well as steroids and enzymes. Also supplies diagnostics and other kits and reagents for clinical chemistry, radioimmunoassay, seroimmunology bloodgroup serology, haematology, bacteriology, virology and immunochemistry. The UK representative of the pharmaceutical division of Gist-brocades NV, Netherlands.

Brunel Industrial Services Bureau

Brunel University

Kingston Lane, Uxbridge, Middx. Tel: (0895) 39234

Arranges consultancy and contract work by members of Brunel University for industry.

BS Flocor Ltd

37 High St, Bridgnorth, Shropshire WV16 4DB. *Tel*: 07462 61431 *Telex*: 335000

Manufacture biofiltration medium in sheet or modular form and as random packings in various grades for use in treatment of sewage and other effluents, and mat aerators suitable for use in fish farming, sewage treatment, aerated lagoons and activated sludge processes. Also supply ozone sterilization units, multimedia filters and ion exchange units for use in water and effluent purification.

BS & S (Scotland) Ltd

5 West Telferton, Portobello Industrial Estate, Edinburgh EH7 6UL. Tel: 031 669 2282

Manufacture laboratory supplies and offer histopathology services.

Buckley Scientific Ltd

Unit 9 Stafford Close, Fairwood Industrial Park, Ashford, Kent TN23 2TT.

Tel: 0233 43783 Telex: 83686 botran

Supply a range of micropipettes, tips and spares in the range 1-5000 microlitres.

Burkard Scientific (Sales) Ltd

175a High St, PO Box 55 Uxbridge, Middx UB8 2RT.

Tel: 0895 30056/7/8 Telex: 83247

Manufactures programmable centrifuges with and without refrigeration.

Butterworth Laboratories Ltd

54-56 Waldegrave Rd, Teddington, Middx TW11 8LG. *Tel*: 01 977 0750 *Fax*: 01 943 2624

Offer services and environmental and pollution analysis.

BYK Mallinckrodt (UK) Ltd

129G Building, 521 Southampton Road, Heathrow Airport, Hounslow, Middx TW6 3JX.

Tel: (01) 897 2425/8 Telex: 935343

Supplies a wide range of fine chemicals, reagents, enzymes and clinical diagnostics (see Mallinckrodt Inc, US).

C A Greiner u Soehne GmbH & Co KG

Postfach 1320, D-7440 Nuertingen.

Telex: 7267349 Tel: 07022 501 0 Fax: 07022 501 311

Supply tissue culture apparatus.

C W Pittard and Co Ltd

Sherborne Road, Yeovil, Somerset. Tel: (0935) 74321 Telex: 76141

Produce leather using enzyme and chemical based processes; carrying out research on enzyme treatment of animal skins.

CAB International

Institute of Biological Control

Imperial College, Silwood Park, Ascot Berks SL5 7PY.

Tel: 0990 28426/28108 Telex: 26587

Carrying out research into the use of biological control agents based on fungal pathogens with particular reference to tropical ecosystems including aspects of weed control using mycoherbicides, control of plant pathogens (mainly rusts) using hyperparasites and the collection of new fungal pathogens. Also supporting work overseas.

Cadbury Schweppes Ltd

1-10 Connaught Place, London W2 2EX. Tel: (01) 262 6411 Telex: 261077

Lord Zuckerman Research Labs, White Knights Park, University of Reading, Reading Berks.

Tel: 0734 868541 Tx: 849707

Principal activities are the manufacture of confectionery, soft drinks and food products.

Cambridge Biomedical Consultants

21 Mill St, Cambridge CB1 2HP.

Tel: 0223 61624

Offer services in contract research and consultancy.

Part III UNITED KINGDOM

Cambridge Biomedical Ltd

Lanwades Business Park, Kennett, Newmarket CB8 7PW. Telex: 817585 Tel: 0638 751212 Fax: 0638 751851

Manufactures or designs diagnostics and other health care products including monoclonal antibodies and blood products.

Cambridge BioScience

42 Devonshire Rd, Cambridge CB1 2BL. Tel: 0223 316855 Telex: 81304

Fax: 0223 460396

Supply monoclonal antibodies, including antibodies to gonadotropins, as well as a selection of biotin conjugated mouse monoclonal antibodies, staining and screening kits etc. Distributor for: cDNA libraries, gene fusion system and ultrapure reagents for molecular biology of Clontech Laboratories Inc, US; Worthington enzymes; biochemicals and immunochemicals of Calbiochem, US; sequenase for DNA sequencing of US Biochemicals; cell and tissue adhesive of Biopolymers, US; monoclonal antibodies of Sanbio, Netherlands.

Cambridge Consultants Ltd

Science Park, Milton Road, Cambridge CB4 4DW. Tel: 0223 358855 Telex: 81481 ccl Fax: 0 Fax: 0223 861 373

Applying expertise in applied physics, engineering and computing to commercialisation of biotechnology discoveries in areas of biosensors, toxic effect monitoring, automation of biochemical analysis, fermentation process control and immobilized biocatalyst systems. Member of the Arthur D Little Consultancy Group.

Cambridge Instruments Ltd

Viking Way, Bar Hill, Cambridge CB3 8EL. Tel: (0954) 82020 Telex: 81494 Fax: (0954) 82415

Rustat Rd, Cambridge CB1 3QH.

Tel: 0223 242021 Tx: 81162 Fax: 0223 210692

Manufactures scanning electron microscopes as well as epitaxy systems and electron beam lithography and pattern inspection systems.

Cambridge Life Sciences plc

Cambridge Science Park, Milton Road, Cambridge CB4 4GN. Tel: 0223 354144 Telex: 818713 Fax: 0223 862942

Manufacturing and developing medical and veterinary diagnostic systems as well as enzymes and biosensors.

Cambridge Mass Spectrometry

Science Park, Milton Rd, Cambridge CB4 4FX.

Tel: 0223 350252 Telex: 818776 camtec Fax: 0223 863217

Manufacture laser ionization mass analyzers.

Cambridge Research Biochemicals Ltd

Button End Industrial Estate, Harston, Cambridge CB2 5NX. Tel: 0223 871674/0800 585396 Fax: 0223 Telex: 817694 crbltd 872381

Manufacture biologically active peptides and provide custom services and contract research services in the area of peptide synthesis. Also supply epitope scanning and mimotope design kits under licence from Commonwealth Serum Laboratories, Australia.

Cambridge University

Department of Chemical Engineering Pembroke St, Cambridge CB2 3RA. Tel: 0223 358231 Telex: 81240

Carrying out research in production of equipment and processes for agricultural, environmental protection, chemical and pharmaceutical

Cambridge University

Wolfson Industrial Unit

20 Trumpington Street, Cambridge CB2 1QA. Tel: (0223) 64568

Assists industrial companies in obtaining consultancy and in placing research contracts in the University of Cambridge. Also offers training facilities for advanced techniques. Particular strengths exist in chemical engineering and biological sciences.

Cambridge University

The Biotechnology Centre

Downing Street, Cambridge CB2 3EF. Tel: (0223) 334705 Telex: 81240

Established to foster closer links between Cambridge University and industry, to aid technology transfer and to train graduates from biological and physical sciences. Carrying out basic and applied research in areas which include downstream processing, biosensors and bioelectronics as well as immobilized biocatalysts.

Cambridge University

Department of Genetics

Hills Road, Cambridge CB2 1QT.

Studying nucleic acid structure and sequence in alcohol dehydrogenase of Drosophila using recombinant DNA technology.

Cambridge University

Department of Clinical Biochemistry

Addenbrooke's Hospital, Cambridge CB2 2QR.

Investigating the mechanism of insulin secretion.

Cambridge University

Department of Biochemistry

Tennis Court Road, Cambridge CB2 1QW. Tel: (0223) 333643

Undertaking research into the following topics: regulation of plant cell differentiation, structure of insecticidal bacterial endotoxins, regulation of protein synthesis, herpes virus and control of replication by prostaglandins, and assembly of filamentous bacteriophage.

Cambridge University

Department of Pathology

Tennis Court Road, Cambridge CB2 1QP. Tel: 0223 64631

Researching into the localization of immune complexes in synovial tissue, production of monoclonal antibodies towards human cell surface molecules, mechanism of antibody-disease interaction, genetic recombination in Trypanosoma, synthesis of RNA in avian and canine virus-infected cells, expression of influenza virus in tissue culture cells and chromosomal changes induced by herpes virus.

Camlab Ltd

Trinity Hall Farm Industrial Estate, Nuffield Rd, Cambridge CB4 1TH. Tel: 0223 62222 Telex: 817664

Distributes chromatographic equipment and materials as well as general laboratory supplies and a range of bench and refrigerated centrifuges.

Canberra Packard

Brook House, 14 Station Road, Pangbourne, Berks RG8 7DT. Tel: (07357) 4981/3899 Telex: 847173 Fax: 07357 4059

Supplies a wide range of chromatographic and radioactivity-counting equipment and accessories: gas chromatograph (analytical and preparative) packing materials, columns, combined gas chromatograph/mass spectrometer systems, scintillation and gamma counters, and fraction collectors. Range covers simple to multi-user, microprocessor-controlled systems. Wholly owned subsidiary of Canberra Industries Inc, US formed by the merging of Canberra Instruments Ltd and Packard Instruments Ltd, both UK.

Cancer Research Campaign

2 Carlton House Terrace, London SW1Y 5AR. Tel: 01 930 8972 Fax: 01 930 8884

A registered charity which provides funds for research in areas of recombinant DNA technology, hormones, interferons, monoclonal antibodies, blood products, diagnostics, vaccines and anti-cancer drugs. Grants are provided to Universities, Medical Schools and Research Institutes with over 500 projects being funded.

Cantab Ltd

Cambridge Science Park, Cambridge CB4 4GD. Tel: (0223) 861216 Telex: 817980

Contract research organisation offering services in areas of safety, efficacy and registration of new products.

UNITED KINGDOM Part III

CAP Scientific

20-26 Lambs Conduit Street, London, WC1N 3LF. Telex: 28863 capsch Tel: 01 404 0911 Fax: 01 405 9469

Specialist systems company offering services in general software development in the area of environmental impact assessment for probabilistic risk assessment and best practicable environmental option practice in waste management and disposal strategies.

Capital HPLC Specialists

Unit 13D Waverly Industrial Estate, Bathgate EH8 4JA. Tel: 0506 631002 Telex: 72165

Manufacture and test filter columns for HPLC.

Cardiff Laboratories for Energy and Resources Ltd

Lewis Road, East Moors, Cardiff CF1 5EG.

Tel: 0222 481877 Telex: 497480 clear Fax: 0222 493233

Independent organization applying anaerobic digestion to problems of pollution control and energy production. Offering a range of liquid waste handling processing and distribution equipment associated with the use of anaerobic digestion in high-rate, plug-flow, anaerobic filter or upflow sludge blanket-type systems as well as computer-controlled combined heat and power unit and luminescence analyzer for rapid testing in medicine and commerce.

Cardiff University College of Wales

Department of Microbiology

PO Box 78, Cardiff CF1 1XL.

Tel: (0222) 44211

Researching into: microbial degradation of chemical compounds found in industrial trade effluents; microbiology of activated sludge and anaerobic waste treatment processes; role of degradative plasmids in bacterial breakdown of organic compounds; genetic control of membrane-bound enzymes; experimental anaerobic digesters (plug-flow, contact, anaerobic filter and hydraulic); investigations on lymphocyte behaviour using immunological labelling.

Cardiff University Industry Centre

Biotechnology Group

University College, 57 Park Place - PO Box 78, Cardiff CF1 1XL. Tel: (0222) 874000

Supplies consultancy to industry. Undertakes contract research, analysis and testing as well as industrial short courses on topics such as applied microbiology, microbiological aspects of effluent treatment and waste utilization.

Carl Zeiss Jena Ltd

CZ Science Instruments

2 Elstree Way, Borehamwood, Herts WD6 1NH.

Tel: 01 953 1688 Telex: 923059

Manufacture microscopes and accessories.

Carl Zeiss (Oberkochen) Ltd

PO Box 78 Woodfield Rd, Welwyn Garden City, Herts AL7 1LU. Tel: 0707 331144 Telex: 24300

Manufacture optical equipment; microscopes and related instrumentation including microinjection workstations incorporating an Eppendorf microinjector for the picolitre injection of individual living cells incorporating an audio signal to indicate the end of the injection, and laser scan microscopes.

Carlton Medical Products Ltd

2 Carlton House Terrace, London SW1Y 5AR. Tel: 01 930 8972

Administers patent royalties and handles all business matters arising from the commercial exploitation of inventions derived from the work of the registered charity 'Cancer Research Campaign' UK.

Carri-Med Ltd

Interpet House, Vincent Lane, Dorking, Surrey RH4 3YX. Tel: 0306 886 180 Telex: 859115 carin

Manufactures red blood cell filtrometers and computerised rheometers.

Castrol Research Laboratories

Whitchurch Hill, Pangbourne, Reading Berks.

Manufacture chemicals and additives for use in lubricants. Developing biological routes to new products which cannot be produced by chemical means, as well as carrying out research on the natural biodegradation of lubricant spills, as well as biological methods of reducing environmental damage arising from accidental release of lubricants and related products.

Catalytic International Inc

48 Leicester Square, London WC2H 7LZ. Tel: (01) 839 4377 Telex: 23200

Engineers and contractors offering services in the area of design and construction of research and manufacturing facilities for agricultural, food, chemical, health care, waste treatment and energy industries.

Cecil Instruments Ltd

Milton Industrial Estate, Cambridge CB4 4AZ. Tel: 0223 420821 Telex: 817479

Manufactures ultra-violet and visible spectrophotometers including both single beam and double beam systems fitted with computer interfaces with capability for automated sampling, gel scanning, HPLC monitoring and microcomputer programming.

Cell Systems Ltd

Orwell House, Cowley Rd, Cambridge CB4 4WY.

Tel: 0223 423036 Telex: 81222 celsys Fax: 0223 420901

Developing algal culture systems for production of natural food colours. Carrying out research on biological cryoprotectants for cells and tissues.

Celltech Ltd

Culture Products Division

216 Bath Rd, Slough, Berks SL1 4EN. Tel: 0753 34655

Telex: 848473 celtec

Fax: 0753 36632

Offer large scale manufacture of therapeutic recombinant proteins and monoclonal antibodies to customer requirements in terms of purity and quantity, development of customized immunopurification systems, antibody engineering to produce humanized antibodies or novel antibody constructs, contract hybridoma raising and recombinant cell line construction for use in industrial scale processes. Developing own biopharmaceutical products for future marketing. Areas of interest include shock, cardiovascular, thrombolysis and antiicancer.

Central London Polytechnic

School of Biotechnology

115 New Cavendish Street, London W1M 8JS. *Tel*: (01) 486 5811

Working on biocatalysis including fermenter and bioreactor design as well as aspects of pollution control and waste treatment, production of food additives, and plant cell tissue culture.

Central London Polytechnic

Institute for Biotechnology Studies

115 New Cavendish St, London W1M 8JS.

Tel: (01) 486 5811

Provide 15 places on a one year post graduate course leading to a Diploma in Biotechnology. Training takes place at University College London, Central London Polytechnic and Kent University at Canterbury by whom the diploma is validated.

Central London Polytechnic

School of Engineering & Science

115 New Cavendish Street, London W1M 8JS.

Studies include the use of liposomes as a means of delivering encapsulated materials into protoplasts, with uses in genetic engineering for delivery of plasmids and bacteriophage, genetics of antibiotic production and ultra-violet and chemically induced mutations in fungi producing antibiotics.

Central Public Health Laboratories

Colindale, London. Tel: (01) 205 7041

Developing HLA tissue typing and viral antiserums using monoclonal antibodies in relation to cytomegalovirus in particular.

Part III UNITED KINGDOM

Centrilah

Kingsbury House, Fridays Cross Mews, Christchurch Rd, Ringwood, Hants BH24 1DG

Tel: 0425 480455 Fax: 0425 480366

Supply laboratory equipment including centrifuges.

Ceramic Substrates & Components Ltd

The Broadway, Farnham Common, Bucks. Tel: (028 14) 2466

Manufactures dissolved oxygen electrodes.

Cerestar UK Ltd

Trafford Park, Manchester M17 1PA.

Tel: 061 872 5959 Telex: 667022 cstar Fax: 061 848 9034

Manufactures and distributes starch, glucose syrup and glucose for food and industrial use. (formerly CPC, UK).

Chapel Laboratories

Cliff Road, Hythe, Kent. Tel: (0303) 69511

Contract research organization offering services in the areas of health care. Developing monoclonal antibodies for use in diagnostics of antibiotics and similar compounds.

Charles River Biotechnical Services Limited

Manston Road, Margate, Kent CT9 4LT.

Fax: 0843 823497 Tel: 0843 823603 Telex: 96429

Offer full services in large scale production of monoclonal antibodies and other biomolecules from mammalian cell culture using in vivo and in vitro procedures. Manufactures range of automated scalable bioreactors for high density immobilised cell culture on ceramic matrices. Provides full range of safety evaluation tests for cell lines and products for use in human therapy to comply with EEC, US FDA and Japanese regulations. Part of Bausch & Lomb, US.

Chemapol (UK) Ltd

43-51 New North Rd, London N1 6JD.

Tel: 01 253 6406 Telex: 265629 Fax: 01 251 6587

Manufacture fine chemicals, agrochemicals, raw materials and intermediates as well as biological preparations for the pharmaceutical, chemical and agricultural industries. Products include insect trapping systems based on pheromones, and microbial pesticides based on Bacillus thuringiensis.

Chembiotech Ltd

Institute of Research & Development, University of Birmingham Research Park, Vincent Drive, Edgbaston, Birmingham B15 25Q.
Tel: 021 472 6370 Telex: 338938 spaphy Fax:

Fax: 021 414 3907

Provide analytical and laboratory equipment and services for chemistry, biochemistry and biotechnology. Offer analytical methods with applications in areas of industrial and pharmaceutical biopolymers such as polysaccharides, proteins, glycoproteins, enzymes and antibodies, high performance chromatographic columns and supports, modular analytical units and complete systems including computerized data stations as well as consultancy and contract research facilities.

Chemical Design Ltd

7 West Way Unit 12, Oxford, OX2 0JB.

Telex: 837359 Tel: 0865 251483 Fax: 0865 250270

Supply systems for computer-aided molecular modelling and protein engineering.

Chemical Exchange (UK) Ltd

11 Sunderland Road, Forest Hill, London SE23.

Tel: (01) 699 0466 Telex: 897706

Produces tartaric acid, pectin, citrus derivatives and other food additives.

Chemineer Ltd

Cranmer Road, West Meadows, Derby DE2 6XT.

Tel: (0332) 363175 Telex: 377159

Manfactures and designs process equipment including scale-mixers and agitators for use in fermentations for the pharmaceutical and food industries.

Chemlah Instruments Ltd

Construction House, Grenfell Ave, Hornchurch, Essex RM12 4EH. Telex: 9419785 Tel: 040 24 76162

Produces modular automatic continuous-flow analysis equipment: automated samplers, peristaltic pumps, heating baths, multi-channel colorimeters, recorders and data processors, electrophoretic equipment, freeze driers, ultrafiltration equipment, dissolved oxygen meter radioimmunoassay equipment, refractometers and polarimeters.

Chemquip Ltd

Turntable Works, Station Approach, Chinley, Stockport, Cheshire SK12

Tel: 0663 50000 Telex: 668312 Fax: 0663 50953

Designs and manufactures fermenters and other bioreactors as well as monitoring and filtration equipment applicable to the pharmaceutical and chemical industries.

Cherwell Laboratories

114 Churchill Road, Bicester, Oxon. Tel: 0869 241 911 Fax: 0869 253337

Supplies automatic equipment for media and agar preparation as well as petri dish filling equipment, bacteriological air samplers, heaters and incubators, and laboratory disposables.

Chr Hansen's Laboratory Ltd

476 Basingstoke Rd, Reading, Berks RG2 0QL.

Tel: 0734 861056 Telex: 847003 Fax: 0734 312937

Manufactures rennet. Products also include bacterial starter cultures for the dairy industry and the production of fermented foods as well as natural flavours and food colourings.

Christison (Scientific Equipment) Ltd

Albany Road, East Gateshead Industrial Estate, Gateshead, Tyne and Wear NE8 3AT.

Tel: 091 477 4261

Supplies sieve shakers, mills, homogenizers and micronizers. Agents for Fritsch & Co, Germany; Biotechnology Corp.

Chromatography Services Ltd

Carr Lane Industrial Estate, Hoylake Wirral, Merseyside. Supply Whatman Partisphere HPLC Cartridges.

Chrompack UK Ltd

Unit 4 Indescon Court, Millharbour, London E14 9TN. Tel: 01 515 8080 Fax: 01 538 0908 Telex: 8951172

Specializes in equipment and accessories for gas/liquid and high performance liquid chromatography columns (packing materials, valves, connectors, etc).

Ciba-Corning Diagnostics Ltd

Mitchell Hall, Main St, Kinglassie, Fife KY5 0XA. Tel: 059 282 319

Analytical Division: Colchester Rd, Halstead, Essex CO9 2DX. Tel: 0787 474742 Tx: 98204 Fax: 0787 475088

Manufacture pH glass reference and metal electrodes and conductivity cells etc, colorimeters, UV/VIS spectrophotometers, carbon dioxide and chloride analyzers, and supply immunological and biological reagents, products of Ciba-Corning Diagnostics, US.

Ciba-Geigy

Pharmaceutical Division

Wimblehurst Road, Horsham, W Sussex RH12 4AB.

Telex: 87430 Tel: (0403) 50101

Produces and markets pharmaceuticals (see Ciba-Geigy AG, Switzerland).

Citifluor Ltd

The City University Chemistry Department

Northampton Square, London EC1V 0HB.

Tel: 01 253 4399 Telex: 263896 Fax: 01 250 0837

Developing fluorescent labels for use with monoclonal antibodies in diagnostics. Also carry out contract research. Supply mountant solutions for use in fluorescence microscopy which alleviate the problems associated with photo-fading of fluorescein-labelled materials.

UNITED KINGDOM Part III

CJB Developments Ltd

Airport Service Road, Portsmouth, Hants PO3 5PG.

Tel: (0705) 664911 Telex: 86351 Fax: 0705 697864

Supplies separation equipment, including apparatus for continuous flow electrophoresis for large scale production plant operation, but also suitable for use at laboratory or pilot plant scale. Subsidiary of John Brown plc.

Clandon Scientific Ltd

Analytical and Medical Division

Lysons Avenue, Ash Vale, Aldershot, Hants GU12 5QR.

Tel: 0252 514711/5 Telex: 858210 Fax: 0252 511855

Suppliers of stat systems for the measurement of glucose, L-lactate, osmolality and haemoglobin as well as a complete range of substrates, enzymes and enzyme immunoassays for clinical biochemistry and immunology.

Clean Room Construction (London) Ltd

Westminster Industrial Estate, Woolwich Rd, London SE18 5TA. Tel: 01 855 2321 Telex: 8951761

Manufacture laminar flow workstations as well as offering a comprehensive service in design, construction and commissioning of turn key or re-modelled clean, sterile or containment rooms or suites for the pharmaceutical or associated biotechnology industries.

Cleanaway Ltd

The Drive, Warley, Brentford, Essex CM13 3BE. Tel: (0277) 234567 Telex: 629122

Developing techniques of landfill management and treatment of leachate in particular, including aspects of microbiology of gas production.

Clin-Tech Ltd

1-2 Faraday Way, Westminster Industrial Estate, London SE18 5TR. Tel: (01) 855 7981 Telex: 896148

Manufactures a wide range of laboratory reagents, assay kits, stains, dyes and chemicals for research and medical diagnosis.

Coal Processing Consultants

PO Box 16, Mill Lane, Wingerworth, Chesterfield S42 6JT. Tel: (0246) 77001 Telex: 547061

Developing methods for the management of landfill waste disposal sites for the production of methane gas and offers engineering and consultancy services in this area as well as in relation to other aspects of gas handling and use.

Comber & Son

Supplies fine chemicals and research products, in particular for use in bioluminescence and chemiluminescence. Products include firefly luciferase.

Commonwealth Mycological Institute

Culture Collection & Industrial Services

Ferry Lane, Kew Richmond, Surrey TW9 3AF. Tel: (01) 940 4086

Holds a collection of over 11,000 strains of fungi including species of industrial importance. Incorporates the UK National Collection of Fungus Cultures and is supported by the 29 member Governments of the Commonwealth Agricultural Bureaux. Recognized as an international depository authority under article 7 of the Budapest Treaty.

Constructors John Brown Ltd

CJB House, Eastbourne Terrace, London W2 6LE. Tel: (01) 262 8080 Telex: 263521

CJB House, Buckingham Street, Portsmouth, Hants PO1 1HN. Tel: 0705 22300 Tx: 86136

An international engineering and contracting organization providing a comprehensive service for the design, engineering and supply of plant or construction of turn-key products in petrochemicals, fine chemicals, agrochemicals etc, as well as for waste treatment, pharmaceuticals and food industries. Projects include large-scale fermentation for microbial protein built for Imperial Chemical Industries plc, UK. Has joint venture with Allied Breweries Ltd, UK to develop continuous fermentation processes for fuel ethanol production.

Contraves Industrial Products Ltd

Times House, Station Approach, Ruislip, Middx HA4 8LH. Tel: 865 630196 Telex: 935129 Fax: 895 679108

Market a wide range of viscometers including a rheology measurement system, as well as computer controlled laboratory reactors (see Contraves, Switzerland).

Controlled Therapeutics (Scotland) Ltd

1 Redwood Place, Peel Park Campus, East Kilbride G74 5PB. Tel: 03552 63641 Fax: 03552 63661

Manufacture programmed drug release systems.

Cooper MacDonald & Partners

Loxford House, East Street, Epsom, Surrey KT17 1HG. Tel: (037 27) 28511 Telex: 928439

Provides consultancy services in most branches of civil and structural engineering, including sewage and water supply by, for instance, screening, anaerobic digestion, heat treatment, filter pressing and flash drying to give a dried and treated sludge suitable for horticultural applications.

Coopers Animal Health Ltd

Crewe Hall, Crewe CW1 1UB. *Tel:* 0270 580131

Kelvindale Works, 255 Lochburn Road, Glasgow G20 0Qj. Tel: 041 946 1105 Tx: 778279 Fax: 041 946 1706

Manufacture and distribute animal health care products including vaccines, antibiotics and diagnostics. A joint company formed between the Wellcome Foundation and Imperial Chemical Industries plc, UK.

Coralab Research

Huntingdon Rd, Cambridge CB3 0DJ. Tel: 0223 277077 Telex: 817583 coralab

Manufacture monoclonal antibodies. Supported by Murex, US.

Cornelius Chemical Group Ltd

St James's House, 27-43 Eastern Rd, Romford, Essex RM1 3NN. Tel: 0708 22300

Supply a wide range of cationic, anionic and non-ionic flocculants in liquid, solid and emulsion form. Also offer consultancy in water treatment and complete packages for combined chemical and mechanical treatment for sludge disposal.

Corning Ltd

Wear Glass Works, Sunderland, Tyne & Wear SR4 6EJ. Tel: (0783) 76222 Telex: 53146

Designs, manufactures and markets glassware, and biological processing systems, including immobilized enzymes. Subsidiary of Corning International Corp, US.

Corning Medical Division

Corning Ltd

Colchester Road, Halstead, Essex CO9 2DX. Tel: (0787) 472461 Telex: 98204

Manufactures a wide range of laboratory instruments and radioimmunoassay reagents. Developing monoclonal antibody systems for hormones and thyroid tests.

Cortecs Group Ltd

Old Blue School, Lower Square, Isleworth, Middx TW7 6RL. Tel: 01 568 7071 Fax: 01 847 2373

Undertake contract research and consulting services. Supply diagnostics, enzymes, reagents and veterinary products through subsidiaries.

Cory Waste Management

Crown House, Mucking Wharf Road, Mucking, Stanford-le-Hope Essex SS17 0RN.

Tel: 0375 671227

Waste disposal company abstracting landfill gas using novel horizontal well system intended for transmission to a local consumer for steam raising in shell boilers, sand drying and shrink wrapping.

Part III UNITED KINGDOM

Coulter Electronics Ltd

Northwell Drive, Luton, Beds LU3 3RH. Tel: 0582 491414 Telex: 825074 Fax: 0582 490390

Manufacture and distribute equipment for counting and sorting cell types using light scattering or fluorescence tecniques. Using a laser light source and multi-channel data acquisition, sorting and analysis (based on any 6 of 16 possible parameters) can sort up to 5000 cells per second displaying the results using a high-resolution module. Comprehensive data-handling facilities are provided using Pascal routines for statistical and graphic data representation. Also supply monoclonal antibodies of high specificity.

Courtaulds plc

Research Centre, Lockhurst Lane, Coventry CV6 5RS. Tel: 0203 688771 Telex: 312171

Carrying out research on the biological treatment of effluents, techniques for the recovery of valuable products at low concentration from large volumes of water as well as the use of polymeric absorbents in the isolation of biochemicals or as support media for the immobilization or entrappment of enzymes.

Coventry (Lanchester) Polytechnic

Biotechnology and Cell Culture Group

Department of Biological Sciences, Priory Street, Coventry CV1 5FB. Tel: 0203 24166

Carrying out research on cell culture systems including the use of immobilized systems and suspension cultures in microfermenters with advanced monitoring and control applied to animal, plant and bacterial cells. Also working on biosensor electrodes.

CP Laboratories Ltd

PO Box 22, Bishop's Stortford, Herts CM22 7RQ. Tel: 0279 56081 Telex: 817508 colpar

Supplies enzymes and reagents for use in genetic manipulation and molecular biology, including enzymes involved in nucleic acid metabolism, restriction endonucleases. Also markets fine chemicals including nucleic acids and primers and linkers for synthesis of macromolecules (see New England Biolabs Inc, US).

CP Pharmaceuticals Ltd

Red Willow Road, Wrexham Industrial Estate, Wrexham Clwyd LL13 9PX.

Tel: 0978 661261 Telex: 661507

Manufactures pharmaceuticals, including insulin.

CPL Scientific Ltd

Science House, Winchcombe Rd, Newbury RG14 5QX.

Tel: 0635 524064 Telex: 846229 space Fax: 0635 529322

Provide information services and consultancy in agricultural and food biotechnology including use of wastes and residues for fuel and chemicals. Also offer permanent and temporary employment services in biotechnology.

Cranfield Institute of Technology

Biotechnology Centre

Cranfield, Bedford MK43 0AL. Tel: 0234 750111 Telex: 825072

Carries out basic and strategic research into a wide range of aspects of biotechnology. Offers services to industry on a contract basis.

Croda Bowmans Chemicals Ltd

Gorsey Lane, Moss Bank, Widnes, Cheshire WA8 0RS. Tel: (051) 424 5566 Telex: 627381

Produces lactic acid, malic acid and other salts, for use as food acidulants. Subsidiary of Croda International Ltd, UK.

Croda Chemicals Ltd

Cowick Hill, Snaith Goole, N Humberside DN14 9AA.

Tel: 0405 860551 Telex: 57601 Fax: 0405 860205

Manufactures fatty acids and derivatives and speciality chemicals.

Croft-Greiner Instruments Ltd

Technorth, Harrogate Rd, Leeds LS7 3NB. *Tel*: 0532 624805 *Fax*: 0532 626446

Supplies high performance clinical analysers as well as low cost clinical analysis data handling systems.

Crown Chemical Co Ltd

Lamberhurst, Kent TN3 8DJ. Tel: (0892) 890491 Telex: 95331

Manufactures veterinary pharmaceuticals.

Cruachem Ltd

Acre Road, Todd Campus, West of Scotland Science Park, Glasgow G20

Produce a fully automated DNA synthesizer which gives the options of either using existing programmes or creating novel procedures using from one to four variable volume reaction columns preprogrammed for either phosphotriester or phosphoramidite chemistry.

Culture Centre of Algae and Protozoa

Institute of Terrestrial Ecology

36 Storeys Way, Cambridge CB3 0DT.

Holds culture collection of algae, protozoa and Rotifera for general microbiology and cryobiology research. Offer identification services.

Culture Collection of Algae and Protozoa

Institute of Fresh Water Biology

The Ferry House, Far Sawrey, Ambleside, Cumbria LA22 0LP. Tel: 096 62 2468 Fax: 096 62 6914

Supplies cultures of algae, other than large seaweeds, free-living protozoa, parasitic protozoa not pathogenic to man or domestic animals etc, which can be maintained by in vitro culture. An international depository authority under article 7 of the Budapest Treaty on the international recognition of the deposit of microorganisms for the purpose of patent procedure.

Custom Research & Development Ltd

10 Storey's Gate, Westminster, London SW1P 3AY.

Tel: 01 222 9272 Telex: 24955 Fax: 01 222 3791

Offers consultancy in establishing research contracts between universities and industries and commissions research in universities and research institutions as well as managing such joint projects. Also undertakes licensing of advanced technology from research teams in the EEC, USA and Australia. Operates in the fields of biotechnology, chemistry and engineering.

Cutest Systems Ltd

178 Whitchurch Road, Heath, Cardiff CF4 3NB. Tel: 0222 625686

Carries out safety and efficacy tests on cosmetic and dermatological products.

Cyanamid of Great Britain Ltd

Bowling Park Drive, Bradford, W Yorks BD4 7ES.

Tel: 0274 33891 Tx: 51295

Produces organic chemicals, as well as speciality products for use in paper manufacture, water treatment, etc. Subsidiary of American Cyanamid Co,

Cymbus Bioscience Ltd

2 Venture Road, Chilworth Research Centre, Chilworth, Southampton SO1 7NP.

Manufacture monoclonal antibodies and undertake research and development in hybridoma technology and immunoassays particularly relating to cancer.

Cytological Consultancy Unit

Department of Botany, University of Leicester, University Road, Leicester LEI 7RH.

Tel: 0533 523386

Offers cytological services including Giemsa C-banding, fluorescent banding, karytope construction, chromosome counts and ploidy screening as well as tissue culture services including tests for in vitro pollen germination, pollen viability and in vitro self-incompatibility, in vitro fertilization, embryo rescue and colchicine induced polyploids. Also carry out seed germination trials.

UNITED KINGDOM Part III

Cytotechnics Ltd

Senate House, Stag Hill, Guildford GU2 5XH. Tel: 0483 571281 Fax: 0483 300374

Undertake large-scale animal cell culture for the custom production of monoclonal antibodies, recombinant proteins and other cell products as well as developing and marketing cell culture equipment and accessories. Based at the University of Surrey.

Cytozyme UK Ltd

20 Stapleton Rd, Orton Southgate, Peterborough, Cambs PE2 0TD. Tel: 0733 238595 Telex: 817936 Fax: 0733 239849

Distributor for Cytozyme, US enzyme-based plant and animal growth products, probiotics and feed additives as well as waste treatment and soil inoculants.

D J Neil Ltd

88 Great King St, Macclesfield, Cheshire SK11 6PW. Tel: 0625 613666 Fax: 0625 619620

Consultants specialising in licence application and arrangements for joint ventures. Offer a full range of related market and financial analysis services. Strong background in food and allied industries and biomass as fuel. Recent work in bio-informatics and pharmaceuticals.

DAFS Rowett Research Institute

Greenburn Road, Bucksburn, Aberdeen AB2 9SB. Tel: (0224) 712751

Carrying out research on animal physiology as well as aspects of lignocellulose breakdown and cellulose hydrolysis by fungi and bacteria including rumen organisms.

Dairy Crest Foods

Dairy Crest House, Portsmouth Rd, Surbiton, Surrey KT6 5QL. Tel: 01 398 4155 Fax: 01 398 0705 Telex: 8956671

Produces hydrolyzed whey products using immobilized enzyme technology including milk proteins and hydrolyzed lactose for the food industries.

Dakopatts Ltd

Fax: 0494 41846

Supplies reagents and diagnostic kits for immunological purposes.

Dalgety

19 Hanover Square, London W1R 9DA. Tel: 01 499 7712 Telex: 21148

International commodity traders and food producers, processors and distributors. Also animal breeders and rearers, and maltsters.

Damon/IEC (UK) Ltd

Unit 7 Lawrence Way, Brewer's Hill Road, Dunstable, Beds LU6 1BD. Tel: 0582 604669 Telex: 825942 icc Fax: 0582 609257

Supplies centrifuges for laboratory use and research applications, including blood-separation, and microprocesssor-controlled high speed models. Also supplies accessories.

Davy-Mckee (London) Ltd

Davy-Nickee (London,).

68 Hammersmith Rd, London W14 8YW.

Telex: 920632 Fax: 01 872 9871/2

Major international engineering and construction company serving the process industries with extensive specialist experience in food, biotechnology and pharmaceutical projects. A full range of services includes feasibility studies and process development as well as project execution and validation up to the turnkey level. R&D and pilot plant facilities are available for commercial development work.

Decon Laboratories Ltd

Conway St. Hove, E Sussex BN3 3LY. Telex: 87443 Tel: (0273) 739 241

Manufacture surfactants for laboratory cleaning and decontamination as well as ultrasonic baths for cleaning, degassing and dissolving solids.

Degremont Laing

Aquazur House, Manor Way, Borehamwood, Herts WD6 1WF. Tel: 01 207 0222

Major water treatment plant contractor offering services over the complete range of water, sewage and effluent treatment supported by an extensive research and development programme. Services include design, supply, erection and commissioning for projects of any size from small problems to erection of large turn key contracts in areas of potable water and industrial effluent treatment.

Delta Biotechnology Ltd

Castle Court 59, Castle Boulevard, Nottingham NG7 1FD. Tel: 0602 413200 Telex: 474970 Fax: 0602 47497 Fax: 0602 474970

Research and development company, applying rDNA techniques, primarily yeast, for the production of therapeutic proteins. Major interests include human serum albumin, haemoglobin and fibronectin. Subsidiary of Bass plc.

Delta Controls Ltd

Island Farm Avenue, East Molesey, Surrey. Tel: (01) 941 5166 Telex: 27109

Developing systems for use with fermenters and bioreactors.

Delta-T Devices Ltd

128 Low Rd, Burwell, Cambridge CB5 0EJ. Telex: 817670 Tel: 0638 742922

Manufacture instruments for use in plant physiology, micrometeorology and data recording. Products include leaf area meters, automatic porometers, tube solarimeters, psychrometers, integrators etc, as well as silicon cell quantum and energy sensors, net radiometers, temperature sensors and transducers.

Deltanine Research Ltd

Brunel Science Park, Brunel University, Uxbridge, Middlesex UB8 3PQ. Tel: 0895 52446

Carrying out research in areas of lipid chemistry, tissue culture and virology.

Demco Ltd

11 Chiltern Crescent, Wallingford, Oxon OX10 0PE.

Supplies chemicals and instruments for biochemical applications. Agents for Analytical Luminescence Laboratories, US.

Denley Instruments Ltd

Natts Road, Billinghurst, W Sussex RH14 9SJ.
Tol. (0403) 813441 Telex: 87173

Supplies clinical laboratory instrumentation including blood grouping systems.

Dewplan Ltd

Beechwood Hall, Kingsmead Rd, High Wycombe, Bucks HP11 1LA. Tel: 0494 35671 Telex: 837139 dewpln Fax: 0494 465489

Offer services in design and construction of water and effluent treatment plants.

Diamed Diagnostics Ltd

Mast House, Derby Road, Bootle, Merseyside L20 1EA. Tel: (051) 933 7277 Telex: 628178

Supplies a wide range of clinical and research diagnostics and accessories, including antibiotic susceptability-testing products, culture media, immunological kits, blood-grouping products, clinical chemistry reagents, prepared thin layer chromatography plates, etc.

Diamond Scientific Ltd

Low Rd, Gainford, Darlington DL2 3DW. Telex: 58500 Tel: 0325 730547

Offers consultancy and validation service in relation to clean room technology as well as providing monitoring and analytical services.

Difco Laboratories

PO Box 14B Central Avenue, East Molesey, Surrey KT8 0SE. Fax: 01 979 2506 Telex: 892412 difco

Supplies a wide range of culture media, antisera, reagents and freeze dried microorganisms for microbiological and clinical laboratory procedures.

Part III UNITED KINGDOM

Digithurst Ltd

Leaden Hill, Orwell Royston, Herts SG8 5QH. Tel: 0223 208926

Produce automated systems for particle sizing and image analysis.

Dionex (UK) Ltd

4 Albany Court, Camberley, Surrey GU15 2PL. Tel: 0276 691722 Fax: 0276 691837

Supplies equipment for ion chromatography, carbohydrate and amino acid analysis. Subsidiary of Dionex, US.

Diosynth Ltd

Intervet House Science Park, Milton Road, Cambridge CB4 4BH. Tel: (0223) 521611 Telex: 81691

Supplies both steroids and protein hormone preparations. Subsidiary of Diosynth BV, Netherlands.

Dista Products Ltd

Fleming Road, Speke, Liverpool L24 9LN. *Tel*: (051) 486 3939 *Telex*: 627178

Manufactures antibiotics and ethical pharmaceuticals. Subsidiary of Eli Lilly & Co, US.

The Distillers Company (Yeast) Ltd

Menstrie, Clackmannanshire, FK11 7ES. Tel: 0259 61408 Telex: 778380

Manufacturer of a wide range of yeast products. Developing new yeast strains using rDNA technology. Subsidiary of Guinness, UK.

Diversey (Europe) Ltd

1-11 Hay Hill, London W1X 7LF. Tel: (01) 493 6512

Supplies bacterial inoculants for use in silage production, control of odour in slurry, waste treatment and other agricultural uses including biological control.

Dixon Instrumentation Ltd

Unit 5 Pilot Trading Estate, West Wycombe Rd, High Wycombe, Bucks HP12 3AR

Tel: (0494) 448331

Supplies valves and fittings for high-integrity liquid and gas handling, designed for toxic, corrosive, flammable or reactive liquids or gases.

Dnastar Inc Europe

Link House, 565-569 Chiswick High Rd, London W4 3AY.

Tel: 01 994 0619/01 747 4748 Telex: 291432 Fax: 01 994 5578

Supplies computer software for nucleic acid and protein sequencing, as well as database management software and copies of protein and nucleic acid databases of off-line use. Subsidiary of Dnastar Inc, US.

Domnick Hunter Filters Ltd

Durham Road, Birtley, Co Durham DH3 2SF.

Tel: 091 410 5121/0800 591 336 Telex: 537282 Fax: 091 410 7621

Produces on-line air filters for bacteriological purposes as well as filters for liquid sterilization, cell concentration and solids/liquid separation including prefiltration and general clarification.

Don Whitely Scientific Ltd

14 Otley Road, Shipley, W Yorks BD17 5BR.

Supplies a full range of equipment for anaerobic microbiology, including anaerobic cabinets and disposable glass and plastic ware, as well as other laboratory equipment.

Donmarn

8 Kirk Crescent South, Aberdeen AB1 9RR. Tel: 0224 867967

Developing techniques of polysaccharide modification.

Dorand Electronics Ltd

Scientific Instrument Division

8-9 Allens Lane, Hamworthy, Poole, Dorset BH16 5DA. Tel: (0202) 622006

Supplies gas chromatographs as well as complete GC mass spectrometer systems, pyrolysis systems, computing integrators and GC/MS data systems.

Dow Corning Ltd

Cardiff Road, Barry, S Glamorgan. Tel: (0446) 732350 Telex: 498445

Supplies antifoams for use in fermentation as well as intermediates for the production of semi-synthetic penicillins and cephalosporins. Subsidiary of Dow Chemical Co, US.

Drake Laboratories Ltd

Highfield, Tynford, Winchester, Hants. Tel: 0962 712325 Telex: 47388

Manufactures additives for use in fermentation and cell culture.

Drew Scientific Ltd

12 Barley Mow Passage, Chiswick, London W4 4PH. Tel: 01-995 9382 Fax: 01 995 3845

Manufacture a comprehensive range of chromatography data management products including workstations for HPLC, GC, GPC and amino acid analysis. In addition, design control equipment for all aspects of bioprocessing, including preparative and process scale chromatography.

Drug Development (Scotland) Ltd

Offers contract research services in clinical testing for drug development from preclinical investigations, through phase I studies to the identification of therapeutic efficacy in phase II/III. Advises on drug development strategy, protocol design and drug regulatory affairs.

Drug Development (Scotland) Ltd

Ninewells Hospital & Medical School, Dundee, DD1 9SY. Tel: 0382 646317 Telex: 76520

Offer services in contract clinical research.

Du Pont (UK) Ltd

Biotechnology Division

Comprises: NEN Department manufacturing and distributing radiolabelled compounds, molecular biology systems, RIA kits, monoclonal antibodies, modifying enzymes, a wide range of LSC cocktails, fluorography reagents and HPLC columns of both analytical and process scale; Sorvall Department manufacturing and distributing a complete range of centrifuges, rotors and molecular genetics instruments.

The Duckworth Group

Chester Road, Manchester M16 9HJ. Tel: 061 872 0225 Fax: 061 848 7331

Manufactures food flavours. Developing new products using fermentation and enzymic methods. (formerly Clayton & Jowett, prior to acquisition).

Dulas Engineering Ltd

Llwyngwern Quarry, Machynlleth, Powys SY20 9AZ. Tel: 0654 2782

Have developed and market instrumentation for real-time estimation of cellular biomass in fermenters suitable for laboratory and production applications in collaboration with ICI Biological Products and the University College of Wales, Aberystwyth.

Dumas Chemicals (Tunbridge Wells) Ltd

Pantiles House, Nevill Street, Tunbridge Wells, Kent. Tel: (089) 38981 Telex: 957224 dumas

Supplies clinical diagnostics and pharmaceutical specialities. Agent for Rohm GmbH, Germany.

Dundee Biotech

University of Dundee, Dundee DD1 4HN.

Tel: 0382 23181 Telex: 76293 Fax: 0382 201604

Provides consultancy and contract research in large scale fermentation process development to produce pharmaceuticals. Joint venture between the University and Scotia Pharmaceuticals.

UNITED KINGDOM Part III

Dundee University

Department of Biochemistry

Dundee DD1 4HN.

Telex: 76293 Tel: (0382) 23181

Studying structure and expression of genes of nitrate reductase using recombinant DNA techniques and DNA sequencing. Investigating the hydrogen formate lyase systems in E coli, using immunochemical and recombinant DNA technologies. Cloning and characterizing genes from E coli and Salmonella typhimurium related to peptide transport and regulation in prokaryotic operons. Examining DNA structure and supercoiling and role in transcription.

Durham University

Plant Biotechnology Group

Department of Botany, Old Shire Hall, Durham DH1 3HP. Tel: 0385 64466

Carrying out research on aspects of crop improvement using recombinant DNA and related technologies such as plant tissue culture. Also investigating biological pest control.

Dynatech Laboratories Ltd

Daux Road, Billingshurst, W Sussex RH14 9SJ. Tel: (0403 81) 3381/2 Telex: 877132 F

Fax: 040381 4397

Supplies instruments and diagnostic reagents for medical and research application (see Dynatech Diagnostics Inc, US).

Dyson Instruments

Sunderland House, Station Road, Hetton, Houghton-le-Spring, Tyne and

Wear DH5 0AT. Tel: (0783) 260452 Telex: 53689

Supplies instruments and accessories for gas and liquid chromatography as well as computer instrumentation, data loggers and accessories.

E Leitz (Instruments) Ltd

48 Park Street, Luton, Beds LU1 3HP. Tel: (0582) 413811 Telex: 825475

Supplies optical and other scientific equipment.

East Anglia Chemicals Ltd

Lady Lane Estate, Hadleigh, Ipswich, Suffolk IP7 6BQ. Tel: (0473) 823083 Telex: 987068

Manufactures and supplies fine chemicals and general laboratory chemicals and reagents.

Eastman Kodak Co

Research Products

Acornfield Rd, Knowsley Industrial Park North, Liverpool L33 7UF. Tel: 051 548 6560/051 548 6565 Telex: 629640

Supplies laboratory and research products in six areas: general organic chemicals, electrophoresis accessories, chromatography products, dyes and stains, analytical standards and biological probes. Products include contact plates for production of copies of gels, acrylamide, BIS and other products for electrophoresis, ion-pairing reagents for chromatography and fluorescent dyes.

ECC International Ltd

John Keay House, St Austell, Cornwall PL25 4DJ. Fax: 0726 623019 Tel: 0726 74482 Telex: 45526 eccsau

Produces whole cell and enzyme porous supports based on kaolin-derived, inert, high-strength ceramic type materials.

Echa Microbiology Ltd

Units M22/24/25 Cardiff Workshops, Lewis Road, East Moors, Cardiff CFI 5EG.

Telex: 497618 Tel: 0222 495321 Fax: 0222 492622

Offer consultancy and microbiological testing services to chemical, oil, engineering and medical industries.

Edinburgh Instruments Ltd

Research Park Riccarton, Currie, Edinburgh EH14 4AP. Tel: 031 449 5844 Telex: 72553 Fax: 031 449 5 Fax: 031 449 5848

Manufacture equipment for environmental monitoring (carbon dioxide and hydrocarbon sensors). Also produces carbon dioxide lasers for use in health

Edinburgh University

Department of Microbiology

King's Buildings, West Mains Rd, Edinburgh EH9 3JG. Tel: (031) 667 1041 Telex: 727617

Working on areas of microbiology related to silage inoculants, food technology (including production of polysaccharides) and recovery of oil and/or heavy metals

Edinburgh University

Department of Molecular Biology

King's Buildings, Mayfield Rd, Edinburgh EH9 3JR. Tel: (031) 667 1081

Working on recombinant DNA and monoclonal antibodies in the areas of diagnostics and enzymes as well as molecular genetics of both prokaryotic and eukaryotic cells, including functional elements of plant mitochondrial

Edinburgh University Medical School

Department of Surgery

Teviot Place, Edinburgh EH8 9AG. Tel: (031) 667 1011 Telex: 727

Telex: 727442

Working in the areas of hormone production, monoclonal antibodies, blood products and diagnostics to polypeptide hormones, blood components and bacterial and viral antigens.

Edme Ltd

Mistley, Manningtree, Essex. *Tel*: 020 639 2232

Supplies malt products and extracts, malt flours and barley syrups, for bakery and food industries.

EDT Analytical Ltd

14 Trading Estate Road, London NW10 7LU.

Tel: 01 961 1477 Telex: 8811955 Fax: 01 961 9210

Supply a wide range of biotechnology and pharmaceutical products including: macroporous microcarriers for mammalian cell culture; recombinant Protein G products; high performance liquid affinity columns; chiral columns; hollow fibre ultrafiltration systems; preparative/process scale liquid chromatography; flow injection analysis systems; electrochemical detector systems for HPLC and FIA; aquaphase PPT -aqueous two-phase polymer extraction of proteins, nucleic acids, membranes and cells.

EDT Research

14 Trading Estate Road, London NW10 7LU. *Tel*: (01) 961 1477 *Telex*: 8811955

Manufactures ion-specific electrodes.

EDV Engineering Ltd

15 Cotswold Street, West Norwood, London SE27 0DP.

Supplies pressure strainers for particles down to 75 micrometers suitable for slurries and viscous fluids for use in process industries including food, pharmaceutical and chemical.

Edwards and Jones Ltd

Whittle Road, Meir, Stoke-on-Trent, Staffs ST3 7QU. Fax: 0782 599001 Tel: 0782 599000 Telex: 36397

Specializes in industrial process filtration equipment.

Edwards High Vacuum International

Manor Royal, Crawley, West Sussex RH10 2LW. Tel: 0293 28844 Telex: 87123 Fax: 0293 Fax: 0293 33453

Manufacture freeze dryers and accessories.

EEC International Ltd

Household Products Division

John Keay House, St Austell, Cornwall PL25 4DJ.

Fax: 0726 623019 Tel: 0726 74482 Telex: 45526 eccsau

Manufacture macro-porous ceramic supports for whole cell immobilisation.

Efamol Holdings plc

Woodbridge Meadows, Guildford, Surrey GU1 1BA.
Tel: 0483 578060 Telex: 859289 Fax: 0483 506682

Developing production of gamma linoleic acid from fungi as well as other pharmaceuticals from natural sources including selected plant breeds. Has fermentation facilities at the University of Dundee.

Effluent Management Advisory Services Ltd

7 East Hamilton Street, Wishaw, Strathclyde. Tel: (0698) 357901

Provides consultancy services in biotechnology and in relation to effluent and waste treatment in particular.

EG & G Instruments (Europe) Ltd

Doncastle House, Doncastle Rd, Bracknell, Berks RG12 4PG. Tel: (0344) 423931 Telex: 847164

Supply optical spectroscopy equipment as well as polarographic analyzers including fully automated systems for analyzing organic solutions.

EKATO Mixing Technology Ltd

41 West St, Marlow, Bucks SL7 2LS. Fax: 0628 890605 Tel: 0628 890604

Supply fluid industrial agitators and plant; products of EKATO, Germany.

ELE International Ltd

Environmental Division

Eastman Way, Hemel Hempstead, Herts HP2 7HB. Tel: 0442 218355 Telex: 825239 Fax: 0442 52474

Produce a portable kit for field testing of water and effluents which contains all items required for analysis of the key microbiological and physico/chemical indicators of water quality as specified by the World Health Organisation. Components include a sterilisable field filtration unit, incubation unit for faecal and total coliform analysis, chlorine photometer, turbidimeter, and a combined pH conductivity and temperature meter as well as AC transformer, media packs, report sheets, filter disc dispenser and aluminium petri dishes.

Elga Ltd

Lane End, High Wycombe, Bucks HP14 3JH. Tel. 0494 881393 Telex: 83516 Fax: 01 379 4980

Manufactures and supplies water purification equipment including reverse osmosis, deionization and ultrafiltration.

Elkay Laboratory Products (UK)

Unit 2 Crockford Lane, Basingstoke, Hants RG24 0NA. Tel: 0256 475727 Telex: 858377 elkay

Offers a large range of sterile culture tubes and other disposable labware (see Elkay Products Inc, US).

Eltex of Sweden Ltd

Wifug Division

Lane Close Mills, Bartle Lane, Great Horton, Bradford, W Yorks BD7

Tel: 0274 571071

Telex: 517258 eltex

Supply a wide range of bench and laboratory centrifuges, products of Eltex, Sweden.

Endotronics

1st floor, 110/111 Strand, London WC2R 0AA. Represents interests of Endotronics, US

Energy & Waste Systems Ltd

E & WS Ltd

Bridge House, Westbury, Wilts BA13 4HS. Tel: 0373 864444 Telex: 44308 Fa

Fax: 0373 827269

Specializes in advanced systems for recovery of energy and fertilizer from organic wastes, including aerobic and anaerobic biological systems as well as electroflotation, catalytic oxidation, ion exchange, reverse osmosis, desalination and carbon filtration. Supplies anaerobic digestion equipment and plant from small package units to large (20,000 pig) scale.

Envair (UK) Ltd

York Avenue, Haslingden, Rossendale, Lancs BB4 4HX Tel: 0706 228416 Telex: 63107 Fax: 0706 211165

Manufactures and supplies clean air equipment and microbiological safety cabinets as well as isolators and air filtration products

Environmental Engineering Ltd

Little London, Spalding, Lincs PE11 2UE. Tel: (0775) 68964 Telex: 629195

Offers engineering and design services in areas of pollution control and waste conversion including anaerobic digestion as well as consultancy in related areas.

Environmental Resources Ltd

106 Gloucester Place, London W1H 3DB.

Tel: 01 486 1211 Telex: 296359 erl Fax: 01 935 8355

Provides biotechnology marketing research services.

Enzymatix Ltd

The Daly Research Laboratories, Babraham, Cambridge CB2 4AT. Tel: 0223 837074 Fax: 0223 837315

Carrying out research and production of speciality and industrial enzymes as well as diagnostic systems and microbial and tissue products.

6 Esterbrooke St, Hyde Place, Westminster, London SW1. Tel: 01 630 6493

Developing a microbial bioreactor system for removal of excess selenium from water.

ERA Technology Ltd

Cleeve Rd, Leatherhead, Surrey KT22 7SA.

Tel: 0372 374151 Telex: 26045 Fax: 0372 374496

Carries out market research in the area of sensors, producing reports in areas such as process control and environment monitoring including those aimed at biotechnology markets such as process plant sensors, bioelectronics and biosensors and medical instrumentation.

ESI Panax

Rotheroe & Mitchell Ltd

Victoria Road, Ruislip, Middx HA4 0YL.

Tel: (01) 422 9711 Telex: 924159

Specializes in radioactivity detectors for use in chromatographic separation (high performance liquid, thin layer and gas liquid chromatography), including systems for 3H and 14C with low background and high sensitivity, and an automatic scanner for thin layer chromatograms. Also provides a range of computing integrators based on the Commodore microcomputer. Nuclear division of Rotheroe & Mitchell Ltd.

Essex University

Department of Biology, Wivenhoe Park, Colchester C04 3SQ. Tel: 0206 870966 Telex: 9844

Carrying out studies on basic mechanisms of photosynthesis as well as aspects of biomass production from C4 grasses. Also carries out contract research, through the Industrial and Applied Biology Group, in plant breeding, land restoration, cultivar development and pollution assessment and control.

Eur-Control GB Ltd

26 Breakfield, Coulsdon, Surrey CR3 2XW. Tel: 01 668 5287

Supplies instruments for automation, control and monitoring of water and sewage treatment including systems for turbidity and solids measurement as well as liquor monitoring. Also supply equipment for level monitoring of sludge blankets and manufacture gamma density measuring systems.

Euromatic Flowmeters Ltd

31 Cross Lances Road, Hounslow, Middx. Tel: (01) 570 2381 Telex: 897077

Supplies industrial flow meters.

European Collection of Animal Cell Cultures

PHLS Centre for Applied Microbiology & Research

Porton Down, Salisbury, Wilts SP4 0JG. Tel: (0980) 610391 Telex: 47683

Fax: 0980 611096

Offers the following services to users: a patent depository; a safe deposit back-up storage facility; a collection of readily available cell lines; storage for individual collections of specialized cell types; a facility for the distribution and cataloguing of cells; an information service; preservation, characterisation and quality control service; a research programme to improve procedures of cell culture and storage. Supported by the Department of Trade and Industry in association with the PHLS board as part of the UK government biotechnology programme. Recognised under the Budapest Treaty as culture depository for patent proceedure.

European Instruments

Old Road Trading Estate, Headington, Oxford OX3 8TA.

Supplies electronic balances from most of the world's leading manufacturers.

Europroteins

Hinton House, Hinton Brackly, Northants NN13 5NF. Tel: 0280 703071

Market silage inoculants based on L plantarum and S thermophilus.

Eurotherm Ltd

Faraday Close, Durrington, Worthing, West Sussex BN13 3PL.
Tel: 0903 68500 Telex: 06 986766 Fax: 0903 65982 Tel: 0903 68500

Supply temperature monitors, controllers and alarm systems for process

Evans Biologicals Ltd

Gaskill Rd, Speke, Liverpool L24 9GR.

Tel: 051 486 1866 Telex: 628421 Fax: 051 486 5033

Manufactures pharmaceuticals and vaccines.

Everest Frozen Foods Ltd

Heath Mill Rd, Wombourne, W Midlands WV5 8AE.

Tel: 0902 894022 Telex: 337557

Developing methods of treating potato wastes using anaerobic digestion.

Ewbank Preece Ltd

Prudential House, North Street, Brighton, Sussex BN1 1RZ. Tel: 0273 724533 Telex: 878102

Contractor for the Energy Efficiency Demonstration Scheme monitoring the degree of corrosion of engine parts caused by halocarbons or mercaptans present in landfill gas, gas quality, quantity and security of supply, as well as engine emissions and oil quality, during electricity generation using landfill gas at the Stewartby site of Shanks & McEwan (Southern) Ltd.

Exogen Ltd

Beardmore St, Clydebank Industrial Estate, Clydebank G81 4SA. Tel: 041 952 0956 Telex: 777967

Manufacture laboratory disposables and sterile specimen containers.

Express Dairy UK Ltd

Victoria Road, South Ruislip, Middx HA4 0HF. Tel: (01) 845 2345 Telex: 934569

Produces milk and dairy products as well as amino acids, chemicals and vitamins including chemicals derived from whey and milk proteins.

F Teather & Associates Ltd

145 Swanshurst Lane, Moseley, Birmingham B13 0AS.

Supply Compactazyme biocatalytic enzyme additive for controlled compaction of soils, Purazyme organic effluent activator and Soil Life enzymic soil conditioner claimed to promote organic activity and aid in leaching of salts and deep water penetration of soil.

Fairey Engineering Ltd

PO Box 41, Heaton Chaple, Stockport, Cheshire. Tel: (061) 432 0281 Telex: 667866

Manufactures fermenters and bioreactors.

Fairey Filtration Division

Fareham Industrial Park, Fareham, Hants PO16 8XG. Fax: 0329 822442 Tel: 0392 220654 Telex: 86671

Produce stainless steel filter membranes, tubular and flat sheet, in a range of pore sizes, suited for use in electrically enhanced separation processes.

Farm Gas Ltd

Industrial Estate, Bishop's Castle, Shropshire SY9 5AQ. Tel: 0588 638577 Fax: 0588 638887

Offer complete design, erection and commissioning services in anaerobic treatment of sewage sludges, farm wastes and solid by-products from agricultural product processing such as abattoir wastes including systems aimed at pollution control as well as installations for recovery of energy as biogas or in combined heat and power facilities.

Farmkey Ltd

Universal House, Riverside, Banbury, Oxon OX16 8TF.

Tel: 0295 52544 Telex: 83392

Developing antibiotics and monoclonal antibodies for veterinary use.

FRG Trident

Temple Cloud, Bristol, Avon BS18 5BY. Tel: (0762) 52551

Manufacture and supply laboratory glassware including blood collection bottles and containers for scintillation counting, virology and cell washing.

Fermentech Ltd

Research Avenue South,, Riccarton Campus, Edinburgh EH14 4AP. Tel: 031 449 5055 Telex: 727498 Fax: 031 449 7676 Fax: 031 449 7676

Developing immunodiagnostics and therapeutic materials using methods of continuous fermentation as well as being involved in equipment design and the production of protein A by continuous fermentation from Staphylococcus aureus, in both free and bound form in bulk quantities.

Filtered Air Systems (FAS) Ltd

Unit 6 Buckley Road Industrial Estate, Rochdale, Greater Manchester OL10.

Tel: 0706 525 265

Supply laminar air flow equipment.

PO Box 90, Wellsbourne, Warks CV35 9TP. Tel: 0789 841319

Manufacture a wide range of membrane filters including ultrafiltration polysulphone membranes as well as disposable laboratory scale cell systems of 10 ml capacity. Also produce pilot and industrial scale equipment ranging from small cassette systems to spiral wound cartridges with a surface area of about 1.5 square metres.

Fisons Instrumentation Services

Fisons plc Scientific Equipment Division

41 Gatwick Road, Crawley, Sussex RH10 2UL.

Telex: 877855 Tel. (0293) 518011

Registered Office:, Fisons House, Princes Street, Ipswich IP1 1QH

Offers product support options for an extremely wide range of instrumentation used in biotechnology research and production.

Fisons plc Pharmaceutical Division

12 Derby Road, Loughborough, Leics LE11 0BB.

Tel: (0509) 263113 Telex: 341055

Produces health care products including vaccines, blood products etc, using new technologies including recombinant DNA technology, immobilised cells and tissue culture applicable to new product development including microbial polysaccharides and dextran-based products.

Fletcher Filtration Ltd

Britannia Mill, Station Rd, Mirfield, West Yorks WF14 8PT. Tel: 0924 496811

Manufacture filter press systems which utilize flexible, abrasion resistant rubber membranes.

Fletcher & Stewart Ltd

Masson Works, Litchurch Lane, Derby DE2 8AB.

Tel: (0332) 40261 Telex: 37514

Engineering and construction company offering complete turn-key project services or plant for waste treatment, chemical engineering etc.

Flexibox Ltd

Nash Rd, Trafford Park, Manchester M17 1SS.

Tel: 061 872 2484 Telex: 667281

Manufactures flexible seals for use with fermenters and pumps.

Floranova Ltd

Norwich Rd, Foxley, Derham, Norfolk NR20 4SS. Tel: 0362 88622 Telex: 975655 Fax: 0362

Fax: 0362 88654

Developing new plant varieties of agricultural and horticultural crops as well as ornamentals. Carries out contract research.

Flow Laboratories Ltd

Woodlock Hill, Harefield Road, Rickmansworth, Herts WD3 1PQ. Tel: (0923) 774666 Telex: 922083

PO Box 17, Second Avenue Industrial Estate, Irvine KA12 8NB. Tel: 0294 74242 Tx: 77231 Fax: 0294 311415

Supply media for cell culture, serums, chemicals and diagnostics for immunological work, digital multi-channel pipettes, membrane filters and enzyme immunoassay readers (see Flow Laboratories Inc, US).

Flowgen Instruments

Broad Oak Enterprise Village, Broad Oak Rd, Sittingbourne, Kent ME9

Tel: 0795 29737

Products include a UV transilluminator with applications in electrophoresis and DNA fixation and hybridisation.

Fluka Chemicals Ltd

Peakdale Rd, Glossop, Derbyshire SK13 9XE. Tel: 04574 62518/0800 262300 Telex: 669960 fluka Fax: 04574

Supplies a wide range of fine chemicals including neutral ionophores for ion-selecting electrodes, silanizing agents and cocktails for ion-selective liquid membranes (see Fluka AG, Switzerland).

Fluor Daniel Ltd

Broadway Buildings, 50-64 Broadway, Westminster, London SW1H 0DB. Tel: 01 222 7717

Engineering contractor to the pharmaceutical, biotechnology and petrochemical industries.

Fluorochem Ltd

Dinting Vale Trading Estate, Dinting Vale, Glossop SK13 9NU. Tel: (045 74) 4917 Telex: 669960

Supplies fine chemicals and reagents for diagnostic and laboratory use. Agent for Fluka AG (Switzerland).

Fogarty plc

Porous Element Heating Division

Havenside, Boston, Lincs.

Tel: 0205 61122 Telex: 37156

Manufactures support systems for immobilized enzymes and other catalysts as well as carrying out contract research.

Forestry Commission

Forest Research Station

Alice Holt Lodge, Wrecclesham, Farnham, Surrey GU10 4LH. Tel: 04204 2255

Carrying out trials on fast growing coppice or short rotation forestry systems for biomass energy production as well as research on the use of tissue culture and micropropagation in production of coniferous trees.

Foster Wheeler Energy Ltd

180 West George Street, Glasgow G2 2NR.

Telex: 778262 Tel: (041) 332 9888

Foster Wheeler House, Station Rd, Reading, Berks RG1 1LX. Tel: 0734 585211 Tx: 849171

Offer a complete design, fabrication and construction service for chemical plant in the following biotechnically based industries: food technology, single-cell protein, microbial polysaccharides, vitamins, food additives, fuel and energy, antibiotics, hormones, waste treatment and pollution control.

Foxborough Yoxall

Division of Foxboro Great Britain Ltd

Redhill, Surrey RH1 2HL.

Tel: (0737) 65000

Supplies chromatographic accessories and supplies, environmental air monitoring equipment and laboratory analysis equipment including liquid chromatography detector systems (see The Foxboro Co, US).

Freshwater Biological Association

Department of Bacteriology

Ambleside, Cumbria LA22 0LP.

Tel: (096 62) 2468

Studying aquatic micro-organisms involved in fresh water processes including the isolation and study of previously uncharacterised aquatic bacteria, gene transfer and evolution of plasmids. (NERC-aided institute).

Frost and Sullivan

Sullivan House, 4 Grosvenor gardens, London SW1W 0DH. Tel: 01 730 3438 Telex: 261671 Fax: 01 730 3343

Carries out technical assessment studies.

FSL Bells

Hartham, Corsham, Wilts SN13 0QU.

Tel: 0249 712051

Supply silage inoculants based on mixed bacterial and enzyme

FT Applikon Ltd

FT Scientific Instruments

Station Drive, Bredon, Tewkesbury, Glos GL20 7HH.

Tel: 0684 72425 Telex: 437182 ftscil

UK distributor of laboratory pilot scale fermenters manufactured by Applikon DI, Netherlands. Also supply large range of supporting laboratory equipment.

Fulmer Research Institute Ltd

Hollybush Hill, Stoke Poges, Slough SL2 4QD. Tel: (028 16) 2181 Telex: 848314

Tel: (028 16) 2181

Covers the technology of all materials (metallic, organic, inorganic and fibrous) in respect to their engineering applications.

Fulmer Yarsley Ltd

Trowers Way, Redhill Surrey RH1 2JN.

Tel: 0737 765070 Telex: 8951511

Produces specialized materials for biotechnical applications including plastic membranes for use in biosensors.

G A Platon Ltd

Wella Road, Basingstoke RG22 4AQ.

Tel: (0256) 26661 Telex: 858107

Supplies flow control equipment, valves, alarms and meters for research and industrial use.

G Fiske & Co Ltd

64 Sheen Road, Richmond, Surrey TW9 1UK.

Tel: 01 948 5811 Fax: 01 948 7059

Distributors for Marine Biochemicals; fish peptones and protein hydrolyzates.

GS Ross Ltd

Unit 13, Fence Avenue Industrial Estate, Macclesfield, Cheshire SK10

H.T. Tel: 0625 610077

Telex: 668438 Fax: 0625 619877

Supplies blood-typing reagents, cell washer centrifuges and plastic disposable products for pathology laboratories.

Gallagher Ltd

65 Kingsway, London WC2B 6TG. Tel: (01) 242 1290

Virginia House, Henry St, Belfast BT15 1JE.

Tel: 0232 744722 Tx: 74444

Principal activities are in tobacco products. Has investment interests in the Leicester University Biocentre, UK.

Gallenkamp

Belton Road West, Loughborough, Leics LE11 0TR.

Tel: 0509 237 371 Telex: 34391 Fax: 0509 231893

Offices in: London (Tel: 01 247 3211), Manchester (Tel: 061 902 9021), Stockton-on-Tees (Tel: 0642 63441), Glasgow (Tel: 035 52 22281)

Supplies a wide range of laboratory equipment, including microbial culture apparatus and related products, water baths, incubators and modular fermentation equipment.

GB Biomedical Products Ltd

38 Northgate, Sleaford, Lincs NG34 7DA.

Tel: 0529 305584 Telex: 37610

Produces blood products including microfiltation systems.

GB Biotechnology Ltd

4 Beaconsfield Court, Sketty, Swansea SA2 9JU. Tel: 0792 208190

Offers: research and development consultancy in enzymes, biotechnology products and equipment; the assessment of biotechnology ventures; national conference, exhibition and industrial seminars; magazine development and publication; industry/education liaison. Developing biotechnology resources for schools.

GEC Research Laboratories

Hirst Research Centre, East Lane, Wembley, Middx HA9 7PP. Telex: 9234429 Tel: (01) 904 1262

Marconi Research Centre, West Hanningfield Rd, Great Baddow, Chelmsford Essex CM2 8HN. Tel: 0245 734331 Tx: 995016

Developing biosensors for use in medical and food applications.

Gelman Sciences Ltd

10 Harrowden Road, Brackmills, Northampton NN4 0EZ. Tel: 0604 765141 Telex: 311871 gelawk Fax: 060 Fax: 0604 761383

Supplies a wide range of filters, hardware and accessories for research and industrial use with air, other gases and liquid systems including tissue culture procedures.

Gemu Valves Ltd

Unit 9 Grosvenor Business Park, Grosvenor Grange, Woolston, Warrington WA1 4SF.

Tel: 0925 812622 Telex: 628314 Fax: 0925 828002

Manufacture aseptically clean diaphragm valves for the biotechnology, pharmaceutical and food process industries in manual, actuated and motorized designs from 0.2-4.0 inches.

Genencor Europe

Sandford lane, Hurst, berks RG10 0SU.

Tel: 0734 342328

Distributor for Genencor, US industrial enzyme products.

Genetic Research Instrumentation Ltd

Gene House, Dunmow Rd, Felsted, Nr Dunmow, Essex CM6 3LD. Tel: (0371) 821082 Telex: 9374000 Fax: 0371 820131

Manufactures and supplies instruments, chemicals and agents for genetic engineering research, electrophoresis and cell culture.

Genetic Testing Ltd

216 Bath Rd, Slough, Berks SL1 4EN.

Tel: 0753 34655 Telex: 846701 Fax: 0753 36632

Start up company funded by venture capital and Celltech for the application of DNA analysis to the diagnosis of human diseases.

Genzyme (UK) Ltd

Biochemicals Division

Springfield Mill, Sanding Road, Maidstone, Kent ME14 2LE. Tel: 0622 673841 Telex: 966150

37 Hollands Hill, Haverhill, Suffolk CB9 8PU. Tel: 0440 703522 Tx: 813330 Fax: 0440 707783

Manufactures enzymes for use in diagnostic reagents, substrates and fermentation products. Subsidiary of Genzyme Corp, US.

Gerhardt Pharmaceuticals Ltd

Thorton House, Hook Road, Surbiton, Surrey KT6 5AR. Tel: 01 397 9478 Telex: 928253 gerhdt

Manufacturers of insecticides, rodenticides and distributors of waxes and pharmaceuticals.

Gibco Ltd

PO Box 35, Trident House, Renfrew Rd, Paisley, Strathclyde PA3 4EF. Tel: 041 889 6100 Telex: 777968 Fax: 042 887 8036

Washington Rd, Abbotsinch Industrial Estate, Paisley PA3 4EF

Manufactures and distributes products for tissue culture, microbiology and molecular biology including liquid media and plastic ware.

Glasgow University

Department of Biochemistry

Glasgow G12 8QQ Tel: (041) 339 8855

Studying the following topics: transfection of animal cell cultures with insect DNA; interaction between glycoproteins and lectins; expression and function of heat-shock genes in human cell lines; cloning of genes for aromatic amino acid biosynthesis; microbial enzymes; use of SV40, a cloning vector; and herpes virus-infected cells.

Glasgow University

Department of Genetics Biotechnology Unit

Church St, Glasgow G11 5JS.

Tel: (041) 339 8855

Investigating plasmid biology and genetic transposition, as well as the genetics of Aspergillus nidulans and of mammalian glutamine synthetase gene and its amplification.

Glasgow University

Department of Cell Biology

Glasgow G12 8QQ. Tel: (041) 339 8855

Studying cell/cell recognition systems and adhesion in animal cell cultures.

Glasgow University

Department of Microbiology

Glasgow G12 8OO.

Tel: (041) 339 8855

Carrying out studies on adhesion mechanisms in Candida and toxins of Bordetella.

Glasgow University

Department of Botany

Glasgow G12 8QQ.

Tel: (041) 339 8855

Studying structure, function and replication of plant viruses.

Glaxo Group Ltd

6-12 Clarges St, London W1Y 8DH.

Tel: 01 493 4060 Telex: 25456 Cables: 25456

Glaxo Research Group Ltd, Greenford Rd, Greenford, Middx UB6 0HE. Tel: 01 422 3434 Tx: 22134

 $Develops, \, manufactures \, and \, sells \, pharmaceuticals, \, antibiotics, \, vitamins, \,$ foods, veterinary products and hospital equipment. Has programmes in fermentation, microbiology, virology etc, including aspects of recombinant DNA technology etc, and monoclonal antibodies for purification of fermentation products and for therapeutic use. Also has pilot plant production of both plant and animal cell cultures aimed at the manufacture of biologically active substances.

Glaxo Animal Health Ltd

Breakspear Road South, Harefield, Middx UB9 6LS. *Tel:* 0895 630266

Manufactures animal vaccines and other veterinary products.

Glaxo Holdings PLC

6-12 Clarges Street, London W1Y 8DH. Tel: (01) 493 4060 Telex: 25456

Holding company formed to acquire all capital of the Glaxo Group Ltd,

Glaxochem Ltd

Londsdale Road, Ulverston, Cumbria LA12 9DR.

Tel: (0229) 52261 Telex: 65169

Manufactures antibiotics including penicillins cephalosporin and griseofulvin as well as vitamin B12 and beta-glucanase. Has an active strain improvement programme based on mutant selection and recombinant DNA technology.

Glaxochem Ltd

Cobden Street, Montrose, Angus DD10 8EB.

Tel: 0674 72606 Fax: 0674 74558 Telex: 76125

Manufacture bulk active chemicals including steroids and antibiotics for treatment of skin inflamation, asthma etc.

Glen Creston Ltd

16 Dalston Gardens, Stanmore, Middx HA7 1DA.

Tel: (01) 206 0123 Telex: 925791

Supplies scientific and laboratory equipment including a wide range of mills and grinding machines capable of handling most types of materials.

Gordon-Keeble Laboratory Products

Imperial Way, Watford WD2 4XX. Tel: 0923 39791 Telex: 922531

Telex: 922531

Specialize in pipette tip fittings.

Gow-Mac Instrument Co (UK)

PO Box G13, Gow-Mac House, Gillingham, Kent ME27 2NH. Tel: (0634) 575661 Telex: 965181

Supplies chromatographic equipment (gas, liquid and preparative), leak detectors, and oxygen and carbon dioxide metering and controlling devices.

Graesser Laboratories Ltd

Sandycroft, Deeside, Clwyd CH5 2PX. Tel: 0244 531777 Telex: 61128

Manufacture pharmaceutical ingredients, intermediates and finished products as well as fine chemicals.

Green Land Ltd

Natural Resource Development

Unit 12 Workspace, 7 Tobermore Rd, Draperstown, Co Derry BT45 7AG. Tel: 0648 28113 Telex: 265871 monref Fax: 0648 28975

Offers a wide range of natural resource developments, in association with the Industrial Unit of the University of Ulster, including feasibility studies, long term planning, laboratory testing, design, fund raising and full market development in areas such as farm and food industry waste processing, compost manufacturing, peatland development, willow biomass, organic farm soil testing and renewable energy.

Griffin Biotechnology

Gerard Biological Centre, Worthing Rd, East Preston, West Sussex BN16

Tel: (09062) 7207

Supplies a wide range of laboratory equipment, environmental multimeters, plant tissue culture media, biochemical test strips, kits for basic biotechnological techniques and milk testing etc. Subsidiary of Griffin & George, a division of Fisons plc, UK.

Grindsted Products Ltd

Food Systems Division

Northern Way, Bury St Edmunds, Suffolk IP32 6NP. Telex: 81203 Tel: 0284 769631 Fax: 0284 760839

Supplies food additives, including emulsifiers, stabilizers, flavours, enzymes, animal and vegetable proteins, and oxidants (see Grindsted Products AS, Denmark).

Guildhay Antisera Ltd

Unit 6, Riverside Business Center, Walnut Tree Close, Guildford GU1

Tel: 0483 573727

Telex: 859331

Manufactures monoclonal antibodies and diagnostic kits. Offers services in custom cell culture production and contract research. Based at the University of Surrey.

Guinness Brewing Worldwide Ltd

Park Royal Brewery, London NW10 7RR. Tel: (01) 965 7700 Telex: 23498

International brewing company with worldwide distribution.

H Erben Ltd

Hadleigh, Ipswich, Suffolk.

Tel: 0473 823011 Telex: 98332

Supplies industrial filters and other equipment for breweries and distilleries.

H Haeffner & Co Ltd

Nursery Industrial Estate, Station Road, Chepstow, Gwent NP6 5BP. Tel: 02912 5236 Telex: 497241

Produce chemicals and pharmaceutical raw materials as well as offering engineering services.

H P Bulmer Ltd

Tyelands Street, Hereford HR4 0LE. Tel: (0432) 6411 Telex: 35211 Manufactures cider and pectin.

H Rudebeck & Co Ltd

Mercantile House, 39 Perrymount Road, Haywards Heath, W Sussex RH16 3BN.

Tel: 0444 450 672 Telex: 87437

Supplies enzymes for brewing.

Haldane Consultants Ltd

40 Nuffield Road, Poole, Dorset DH17 7RA. Tel: (0202) 678037

Offers research and development services in biotechnology, including feasibility studies, process development from inception to production of clinical or industrial products, process verification, development of methods of extraction and isolation, and assessment of potential uses of raw materials and organic waste materials.

Hamo Gallay Ltd

13 Frogmore Road, Hemel Hempstead, Herts. Tel: 0442 59735

Supply incubators, sterilizers, drying cabinets and laboratory washing machines as well as laboratory safety cabinets.

Hamworthy Engineering Ltd

Combustion Division

Fleets Corner, Poole, Dorset BH17 7LA. Tel: (020 13) 5123 Telex: 41348

Specializes in packaged sewage units for use on ships and in industry. Anaerobic digestion systems have been developed for treatment of farm wastes and milk-processing effluents. Research in this area has been in conjunction with Cardiff University College, UK. Also produces a wide range of ancillary items: pumps, compressors, biogas compressors, biogas engines, biogas boiler systems, incinerators and control systems as well as triple fuel burners modified for landfill/biogas.

Hanna Instruments

Happy Valley Industrial Park, Primrose Hill, Kings Langley, Herts WD4

Tel: 09277 60655

Supply portable analytical instruments for determining pH, dissolved oxygen, conductivity, temperature etc.

Harley Systems Ltd

Cornwall House, Station Approach, Princes Risborough, Bucks HP17 9DN. Fax: 08444 2655

Tel: 08444 2652 Telex: 837587

Supply computer monitoring and data systems for chromatography.

Harvard Apparatus Ltd

Fircroft Way, Edenbridge, Kent TN8 6HE. Tel: 0732 864001 Telex: 95293 Fe

Fax: 0732 863356

Offer engineering services and equipment supplies.

Harwell Environmental Safety Group

AERE Harwell, Oxon OX11 0RA Tel: (0235) 24141 Telex: 83135

Place particular emphasis on biogas production from domestic refuse in landfills and factors influencing production of gas and commercial exploitation of landfill. Services include a complete range of consultancy: site assessment, estimates of gas lifetime, gas production capability etc. Backed by facilities of AERE Harwell, UK and the group's waste management information bureau (a computerized database with over 20,000 entries).

Hattersley Heaton Ltd

Lenton Lane, Nottingham NG7 2SH. Tel: (0602) 700161 Telex: 37515

Manufactures contamination-resistant bellows sealed valves.

Hawksley & Sons Ltd

Marlborough Rd, Lancing, West Sussex BN15 8TN. Tel: 0903 752815/751759 (sales) Telex: 87134 1 Telex: 87134 hawson Fax: 0903 766050

Supplies a wide range of laboratory equipment and apparatus including particle counters for monitoring clean rooms and centrifuges.

Hazleton UK

Otley Road, Harrogate, North Yorks HG3 1PY. Tel: 0432 500011 Telex: 57735

Manufactures vectors and DNA plasmids as well as carrying out contract research in areas of health care, food technology, toxicology and immunoassay in particular. Subsidiary of Corning Laboratory Services.

Helena Laboratories (UK) Ltd

Seventh Ave, Team Valley Trading Estate, Gateshead, Tyne and Wear NELLOLN

Tel: 091 487 8855 Telex: 537247 hel uk Fax: 091 491 0602

Manufacture scanning densitometers, acetate and agarose electrophoresis systems, automated electrophoresis system/slide stainers and haemostasis

Henfrey Engineering

Fermentation Division

Heatherside Lodge, West Drive, Sunningdale, Ascot, Berks. Tel: (0990) 23821

Supplies fermentation equipment, as well as sterilization and hospital equipment.

Heraeus Equipment Ltd

Unit 9 Wates Way, Brentwood, Essex CM15 9TB. Fax: 0277 261856 Tel: 0277 231511 Telex: 995310 tr hse Supply incubators and accessories for cell and tissue culture (see W C Heraeus, Germany).

Heriot Watt University

Department of Brewing and Biological Science

Edinburgh EH1 1HZ.

Tel: (031) 225 8432

Studying degradation of raw starch granules by bacterial enzymes, related to fuel alcohol production. Also investigating uptake of nitrogenous nutrients by use in brewers' wort and aspects of control of cell division in

Heriot Watt University

Unilink

Research Park, Riccarton Currie, Edinburgh EH14 4AS. Tel: (031) 449 5111

Establishes links between the university and industry and other potential clients for consultancy and contract research.

Hewlett Packard Ltd

Winnersh, Wokingham, Berks. Tel: (0734) 784774

Supplies analytical instruments for chromatography (including combined gas chromatographs/mass spectrometers and high performance liquid systems), as well as accessories, columns, packing materials etc, and ultra-violet/visible spectrophotometers.

Heyden Datasystems

Heyden & Sons Ltd

Spectrum House, Hillview Gardens, London NW4 2JQ.

Supplies software for processing analytical data from spectrophotometers as well as associated hardware.

Hi-Tech Scientific Ltd

Brunel Road, Churchfields, Salisbury, Wilts SP2 7PU. Tel: 0722 23643 Telex: 477877 hitech

Specialize in rapid kinetic research instrumentation. Also manufacture microbiological safety cabinets of class specification suitable for the handling of class A pathogens and work in genetic engineering, as well as a range of special cabinets and glove boxes. Some designs are made under licence from the Public Health Laboratory Service and Centre for Applied Microbial Research, Porton, UK.

Hichrom Ltd

1 The Markham Centre, Station Rd, Theale, Reading, Berks RG7 4PE. Fax: 0734 323484 Tel: 0734 303 660

Manufacture HPLC columns suitable for biological analysis and supply Beckman, Du Pont and Whatman columns.

Hickey & Co Ltd

285 Coldharbour Lane, London SW9 8RP. Tel: (01) 733 0818 Telex: 897012

Supply stainless steel industrial fermenters and storage vessels.

Hoechst UK Ltd

Behring Diagnostics

Salisbury Road, Hounslow, Middx TW4 6JH. *Tel*: (01) 570 7712 *Telex*: 23284

Telex: 23284

Supplies fine chemicals, radioimmunoassay kits, reagents for enzyme-linked immunosorbent assay, immunodiffusion and radioimmunoassay and other products for clinical chemistry (see Hoechst AG, Germany).

Houseman (Burnham) Ltd

The Priory, Stomp Road, Burnham, Bucks SL1 7LS. Tel: (062 86) 4488 Telex: 848252

Industrial wastewater-treatment specialists. Provide both plant, accessories and chemicals, as well as domestic and laboratory water-softening equipment.

HPLC Technology Ltd

Wellington House, Waterloo Street West, Macclesfield, Cheshire SK11

Tel: 0625 613848 Telex: 668005 hplc

Supply columns, accessories and solvents for high performance liquid chromatography.

HRS Heat Exchangers Ltd

PO Box 230, Watford, Herts WD1 2DW. Tel: (0923) 32335 Telex: 923326

Supplies industrial heat exchangers.

Hugh Baird & Sons

Station Maltings, Witham, Essex CW8 2DU. Tel: 0376 513566 Telex: 987420 163 West George Street, Glasgow G2 2LE. Tel: 041 221 4811 Tx: 779682

Manufacturers of brewing malt.

Hughes and Hughes Ltd

Elms Industrial Estate, Church Road, Harold Wood Romford, Essex RM3 0HR

Tel: (04023) 49017 Telex: 897798

Supplies laboratory reagents, plastic disposable laboratory ware and enzymes for analytical and research purposes, including cellulases, lipases, esterases, oxidases, catalases and plant-derived proteases. Also supplies enzyme systems and diagnostics for health care.

Hull University

Cell Studies Group

Department of Zoology, Hull HU6 7RX.

Tel: 0482 46311

Carrying out research in relation to animal cell proteins including aspects of monoclonal antibody production and assay as well as protozoan pathogenesis.

Hull University

Department of Plant Biology & Genetics

Hull HU6 7RX. Tel: 0482 465181

Carrying out studies on the transport of non-protein amino acids in bacterial systems at the molecular biology level using recombinant DNA technology. Also working on biological pest control and phytoalexin production.

Hull University

Department of Biochemistry

Hull HU6 7RX.

Tel: 0482 46311

Investigating production of microbial oils, polysaccharides, polyhydroxybutyrate, oleochemicals, fuel alcohol and other chemicals of possible industrial interest.

Humphreys & Glasgow Ltd

A major international process plant contracting and consulting organization with experience in plant for fine chemicals, pharmaceutical, brewing, beverage, food and other process industries using biological raw materials. Also active in the fertilizer and effluent and waste-treatment fields.

Huntingdon Research Centre Ltd

Huntingdon, Cambs PE18 6ES.

Tel: 0480 890431 Telex: 32100 Fax: 0480 890693

Provides a complete service of biological testing to evaluate safety and efficiency of chemicals and compounds with reference to effects on humans, animals and the environment.

Hybaid Ltd

Supply products for nucleic acid blotting procedures and hybridization including a hybridization oven to process blotting membranes for use with either radioactive or non-radioactive probes.

Hybritech UK

Mineva House, Spaniel Row, Nottingham NG1 6EP. Tel: 0602 473300 Telex: 377638 Fax: 0602 473274

Supplies monoclonal antibody based assay kits for both qualitative and quantitative procedures. The range of diagnostic kits includes tumour and cardiac markers, thyroid function, pregnancy management and allergy.

3i Ventures

91 Waterloo Rd, London SE1 8XP. Tel: 01 928 7822 Fax: 01 620 1434

International venture capital firm with investments in biotechnology-related companies. Also invests in start-up and early stage companies in computer hardware, software and services for industrial automation. Biotechnology and healthcare investments include Biocompatibles, British Bio-technology, Medisense, Photo Bioreactors, Plant Science, Pulsetime Holdings, Quatro Biosystems and Shield Diagnostics. Member of the 3i Group plc.

ICI Biological Products

PO Box 1, Billingham, Cleveland TS23 1LB.

Carry out large scale manufacture of fermentation products including enzymes, silage inoculants and biochemicals.

ICI Cellmark Diagnostics

Blacklands Way, Abingdon Business Park, Abingdon, Oxon OX14 1DY. Tel: 0235 28609 Telex: 838805 Fax: 0235 28141

Supply analytical services in medical, legal and forensic genetic fingerprinting.

ICI Diagnostics

Gadbrook Park, Rudheath, Northwich, Cheshire CW9 7RA. Tel: 0606 41100 Telex: 665440 Fax: 0606 49366

ICI subsidiary established to develop and market medical diagnostics.

ICI Pharmaceuticals

Mereside Alderley Park, Macclesfield, Cheshire SK10 4TG. Tel: 0625 515103

Carrying out biotechnology research as part of a programme to design and develop novel drugs.

ICI Seeds

Jealott's Hill Research Station, Bracknell, Berks RG12 6EY. Tel: 0344 424701

Developing new crop varieties with improved agricultural production using advanced techniques of genetic and biochemical research.

ICL Technical Plastics Ltd

Carrying out research on the control of biologically induced corrosion in both metallic and non-metallic materials.

ICN Biomedicals Ltd

Radiochemicals and ImmunoBiologicals Divisions

Lincoln Road, Cressex Industrial Estate, High Wycombe, Bucks HP12 3XJ.

Tel: 0494 443826 Telex: 837969 icnbio Fax: 0494 436048

Supply a wide range of antibodies, antiserums, immunohistological reagents, monoclonal antibodies, growth factor reagents, blotting system reagents, enzymes, peroxidase conjugated lectins, affinity purified antibodies, alkaline phosphatase conjugates and antiserums to drugs. Products include negative control reagents for ELISA and immunohistology, radiochemicals including iodine-labelled products, human IgG subclass kits, antisera to cytoskeletal proteins, monoclonal antibodies to synapse membrane proteins, infectious agents (eg chlamydia and Legionella) as well as universal streptavidin-biotin kits and recombinant protein A for purification and analysis of antibodies. Distributor for immunogold probes and reagents for immunogold silver staining of Janssen Life Sciences Products, Belgium.

IDS Ltd

ImmunoDiagnostic Systems

Supplies isotopic and non-isotopic diagnostic kits and components, together with automated laboratory instrumentation and detection systems as well as biologically active peptides, amino acids and derivatives, iodinated compounds, antiserums and antibodies against albumins, complement components, tissue components, immunoglobulins etc, plus conjugated antibody systems.

Ilacon Ltd

Gilbert House, River Walk, Tonbridge, Kent TN9 1DT. Tel: (0732) 350 407

I.L.S. Ltd. (International Laboratory Services)

Leading suppliers of diagnostic and molecular biology reagents.

- ★ Antisera, derivatives and fluorescent tracers for steroid hormones, therapeutic drugs and drugs of abuse.
- ★ Molecular biology reagents and speciality products for PCR application. Including Taq, AmpliTaq, nucleotides, buffers, primers, blocking agent, and restriction enzymes. Also available — IsogeneTM, a quick and reliable method for DNA purification.
- **★ Contract development** of clinical diagnostic assays a speciality.

To obtain your catalogue contact: I.L.S., 14–15 Newbury Street, London EC1A 7HU. TEL: 01-606 8637. FAX: 01-606 3123. TLX: 8952270 ILS G.

ILS International Laboratory Services Ltd

14-15 Newbury Street, London EC1A 7HU. Tel: 01 606 8637 Telex: 8952270 ils Fax: 01 606 3123

Supplies reagents for analysis, clinical diagnostics, antiserums, antigens, standards, separation media and radioactive compounds.

Imes Ltd

Industrial and Municipal Engineering Services Ltd

The Great Yard, Marridge Hill, Ramsbury, Marlborough, Wilts. Tel: (0672 20) 237 Telex: 449203

Consultancy and engineering company providing services to the water and sewage treatment industries. Also advises on water supply problems and treatment of agricultural and industrial effluents.

Immuno Ltd

Arctic House, Rye Lane, Dunton Green, Sevenoaks, Kent TN14 5HB. Tel: 0732 458101 Telex: 95413 Fax: 0732 455175

Supplies human blood products, albumin and coagulation concentrates, as well as diagnostic kits and reagents for haematology, coagulation, blood transfusion and clinical chemistry.

Imperial Biotechnology Ltd

Imperial College Rd, South Kensington, London SW7 2BT.
Tel: 01 225 2323 Telex: 94012492 Fax: 01 584 1168

Carrying out contract development of fermentation technology, enzymology and bioseparations, based on the facilities at Imperial College, London University, UK. Research projects include aminopeptidases for use in production of natural flavours and debittered protein hydrolysates.

Imperial Cancer Research Fund

Research Laboratories

PO Box 123, Lincoln's Inn Fields, London WC2A 3 PX. Tel: 01 242 0200

Developmental Biology Unit, Department of Zoology University of Oxford, South Parks Rd Oxford OX1 3PS. Tel:0865 59977

Carrying out research in relation to cancer diagnostics and therapeutics.

Imperial Chemical Industries plc

Imperial Chemical House, Millbank, London SW1P INA. Tel: 01 834 4444 Telex: 21324

Agricultural Division:Biological Products Business, PO Box 1 Billingham, Cleveland TS23 1LB.

Tel: 0642 553601 Tx: 587443

Produces agriculture products, fibres, chemicals, explosives, engineering products, organic chemicals and dyes, petrochemicals, plant protection chemicals, pharmaceuticals and diagnostics. Carrying out research on production of gibberellins; hydrolysis of cellulose; single cell fungal protein; the mechanism of electron transport in photosynthesis; recombinant DNA technology; monoclonal antibody production. Has used Methylophilus for production of single cell protein from methanol and ammonia. Investigated production of interferon. Supplies bacterial cultures for use as silage inoculants.

Imperial Chemical Industries plc

Diagnostics Group

Developing medical diagnostics including biosensors, DNA hybridization and monoclonal antibodies.

Imperial Laboratories (Europe) Ltd

West Portway, Andover, Hants SP10 3LF.

Tel: 0264 333311 Telex: 477962 Fax: 0264 332412

Producer and supplier of materials for tissue culture.

Incstar Ltd

Bulldog House, Reading Rd, Winnersh, Berks RG11 5AB. Tel: 0734 772693 Fax: 0734 792061

Supplies immunological and biological reagents as well as specialised RIA kits and components. Distributor for Atlantic Antibodies, US and Incstar,

Institute of Terrestrial Ecology

Monks Wood Experimental Station, Abbots Ripton, Huntingdon PE17 2LS.

Carrying out research on development of analytical techniques based on radioimmunoassay or GLC for detection of environmental pollutants as well as on the use of plant tissue culture and micro-propagation for mass production of hardwood trees. A unit of the Natural Environment Research Council, UK.

Institute of Virology

Mansfield Rd, Oxford OX1 3SR. Tel: 0865 512361 Telex: 83147

Developing virus pathogens for use as biopesticides as well as using techniques of recombinant DNA technology and fermentation for the production of improved biological pest control agents. Also developing techniques for the in vitro cultivation of insect cell cultures. An institute of the Natural Environment Reseach Council.

Interbio (UK) Ltd

Galvin Rd, Slough, SL1 4DL.

Tel: 0753 71551 Telex: 846776 intbio Fax: 0753 694201

Supplies formulations for use in waste treatment.

Interleukin-2 Inc

Whitehall House, 1st Floor, 41 Whitehall, London SW1A 2DA. Tel: 01 930 0851

Developing therapeutics based on lymphokines.

International Biochemicals Ltd

Galvin Rd, Slough, SL1 4DL.

Tel: 0753 71551 Telex: 846776 intbio Fax: 0753 694201

Supplies enzymes and microbial preparations.

International Embryos Ltd

Universal House, Riverside, Banbury, Oxon OX16 8TF. Tel: 0295 52544 Telex: 837675

Developing antibiotics and monoclonal antibodies for agricultural use as a joint venture with American Diagnostics Inc, US.

International Research and Development Co Ltd

Fossway, Newcastle upon Tyne NE6 2YD. Tel: 091 265 04511 Telex: 537086

Carries out contract research. Has an interest in mineral leaching and accumulation of heavy metals using microbial techniques.

Intersci Ltd

21 Symonds Lane, Linton, Cambridge CB1 6HY. Tel: (0223) 892065

Supplies scanning x-ray microscopes for use in medicine, agriculture, biology etc.

Intracel Ltd

Broad Lane, Cottenham, Cambridge CB4 4SW.

Tel: 0954 50957 Telex: 817674 Fax: 0954 51833

Supply computer operating systems and software for scientific instrumentation and data analysis including spectrophotometry equipment and control systems.

Inverclyde Biologicals

Unit 13 Erin Avenue, Righead industrial Estate, Bellshill, Lanarkshire MI 4 3 IU.

Tel: 0698 749368

Produce lectins and other laboratory reagents for medical use.

Inveresk Research International Ltd

Inveresk Gate, Musselburgh EH21 7UB.

Offers contract services in biotechnology (including exploitation of microorganisms for industrial use, recombinant DNA work and ancillary genetic engineering services) as well as custom production of monoclonal antibodies for the food, pharmaceutical, chemical and oil industries. Carrying out research on cloning of microorganisms and mammalian cells.

Ionics (UK) Ltd

16 Endeavour Way, Wimbledon, London SW19 8UH. Fax: 01 879 1911 Tel: 01 879 1474

Supplies electrolytic desalting apparatus for use in gentle treatment of biological solutions with applications in recovery of proteins, nucleic acids and low molecular weight carbohydrates. Systems are available as three different models with capacity from 5ml to 10 litres per hour.

IRE-UK

19 Castle Street, High Wycombe, Bucks HP13 6RU. Tel: (494) 44 86 46 Telex: 837523 ireuk

Supplies diagnostic preparations based on monoclonal antibodies.

Isogas Ltd

Wormingford Road, Fordham, Colchester, Essex CO6 3NS. Telex: 98477 jaycee Tel: 0206 242331 Fax: 0206 242383

Supply stable isotopes for research and industry. Agent for Isotec Inc, US.

J Bibby Science Products Ltd

Tilling Drive, Walton Industrial Estate, Stone, Staff ST15 0SA. Tel: (0785) 812121 Telex: 36226 Fax: 0785 813748

Manufactures scientific equipment and supplies, including single stage laboratory water stills.

J Bibby & Sons plc Industrial Group

Yealand House, Yealand Convers, Carnforth, Lancs LA5 9SF. Tel: (0524) 734858

Supplier of laboratory equipment. Distributes Corning disposable tissue culture glassware and plates through J Bibby Science Products Ltd, UK and microtitration plates and other disposables through Sterilin Ltd, UK.

J T Baker Ltd

Hayes Gate House, PO Box 9, Hayes, Middx UB4 0JB. Telex: 936310 Tel: 01 569 1191

Supply equipment for HPLC, enzymes, chemicals and diagnostic products (see J T Baker Chemical Co, US).

J Young (Scientific Glassware) Ltd

11 Colville Road, Acton, London W3 8BS. Tel: 01 992 0891

Produces a wide range of glassware including gas sampling tubes with septa and ptfe valves. Provides a custom glass blowing service.

James W Turner (Liverpool) Ltd

Fleming Road, Speke, Liverpool L24 9LS. Tel: 051 486 5707 Telex. 628412

Supply a wide range of laboratory equipment including microscopes, autoclaves, meters and analyzers, microtomes, refrigeration cabinets, safety cabinets, incubators, ovens and baths.

Jaytee Biosciences Ltd

Kent R&D Centre, University of Kent, Canterbury CT2 7PD. Tel: 0227 375254 Fax: 0227 365104

Develop and market purification systems. Products include peptide fraction collection and sequencing equipment.

Jencons (Scientific) Ltd

Cherrycourt Way Industrial Estate, Stanbridge Rd, Leighton Buzzard, Beds LU7 8UA

Tel: 0525 372010 Telex: 82164 Fax: 0525 379547

Manufacturers of a range of liquid handling and dispensing products, laboratory glassware and automatic water stills including double-distillation or double-distilled plus deionized water, producing pyrogen-free water of low conductivity.

Jenway Ltd

Gransmore Green, Felsted, Dunmow, Essex CM6 3LB. Tel: 0371 820122 Telex: 817766 Fax: 0371 821036

Manufacture a hand-held digital pH meter which can be used with combined electrodes for measurement of sulphur dioxide, carbon dioxide and nitrous oxide.

Jeol (UK) Ltd

Jeol House, Grove Park, Colindale, London NW9 0JN. Tel: 01 205 6376 Telex: 28350

Products include mass spectrometer systems suitable for analysis of steroids and oligopeptides which can be interfaced with most HPLC and GC systems.

John Brown Engineers & Constructors Ltd

1 Buckingham Street, Portsmouth, Hants PO1 1HN. Tel: (0705) 822300 Telex: 267586

Major engineering company with considerable experience in construction of biotechnology related plant and facilities in areas of production of antibiotics, dextran and other polysaccharides, single cell protein, ethanol and enzymes. Services include consultancy process evaluation and development and project execution (see also Constructors John Brown, UK, CJB Developments, UK, and John Brown Engineering & Constructors Inc,

John Innes Institute

Colney Lane, Norwich, Norfolk NR4 7UH. Tel: (0603) 52571

Carrying out plant tissue culture, anther culture and propagation of plants from tissue cultures. Studying DNA in higher plants. Other studies include ultrastructure of viruses, tumour formation by agrobacteria, fungal viruses and sequence studies on plant viral nucleic acids. Investigating rhizobial nitrogen fixation, with genetic engineering of nitrogen fixation

John Innes Institute Plant Virus Collection

Colney Lane, Norwich, Norfolk NR4 7UH.

Holds culture collection of plant viruses for research and teaching.

John L Seaton & Co Ltd

Bankside, Hull, N Humberside HU5 1RR. Tel: (0482) 41345 Telex: 52207

Refines and processes vegetable seed oils.

John Poulten Ltd

77-93 Tanner Street, Barking, Essex IG11 8QD. Tel: (01) 594 4256 Telex: 897317

Supplies pipette tips, pipettes and pipetters as well as other disposable

John Taylor & Sons

Artillery House, Artillery Row, Westminster, London SW1P 1RY. Tel: (01) 222 7050

Civil engineering company offering services in the area of waste treatment and pollution control in relation to water and sewage treatment.

Johnson Progress Ltd

PO Box 103, Wright St, Altrincham, Cheshire WA14 5EF Tel: 061 941 4031 Telex: 668945 Fax: 061 941 7309

Supplies industrial filter presses for brewery use.

Jones Chromatography Ltd

New Rd, Hengoed, Mid Glamorgan CF8 8AU.

Tel: 0443 816991 Telex: 497331 jchrom Fax: 0443 816552

New Rd, Hengoed, Mid Glamorgan CF8 8AU

Supplies materials and accessories for HPLC and solid-phase sample preparation products. Subsidiary of Jones Chromatography Inc, US.

Jones & Attwood Ltd

Titan Works, Stourbridge, W Midlands DY8 4LR. Tel: 0384 392181 Telex: 338120

Offer complete pretreatment of sewage and anaerobic digestion of sludge. Have developed patented mixing and heating unit (the burper) that uses the principle of a positive displacement pump using a large gas bubble as a piston within a riser tube as a low-powered mixer combined with direct in-tank heat transfer. Mini-burper high-rate systems are available for small sewage works and treatment of agricultural and industrial waste. Pioneered activated sludge sewage process.

Joshua Greaves & Sons Ltd

PO Box 2, Garden St, Ramsbottom, Bury, Lancs BL0 9BA. Tel: (070 682) 4191 Telex: 635265

High-speed mixers for laboratory and industrial applications with high flow rates suitable for use with high viscosity systems.

Jouan Ltd

130 Western Rd, Tring, Herts HP23 4BU. Tel: 0442 890202 Telex: 826155 danico

Fax: 0442 826880

Suppliers of centrifuges, carbon dioxide incubators, freezers, ovens and incubators manufactured by Jouan SA, France.

Jovce Loebl

Dukesway, Team Valley, Gateshead, Tyne & Wear NE11 0PZ. Tel: 091 482 2111 Telex: 53257 Fax: 091 482 5249

Manufactures scanning densitometers which can be used with all types of media up to 210mm square, including gel strips, rods or slabs, TLC and HPLC plates, acetate and paper in the following mode: reflectance, transmittance, fluorescence and quench fluorescence in the visible or ultraviolet range, as well as X-ray diffraction equipment. A Vickers (UK)

K & K Greef Chemicals Ltd

Suffolk House, George Street, Croydon CR9 3QL. Telex: 28386 Fax: 01 686 4792

Distributes chemicals for use in the pharmaceutical, cosmetic, feed, food and other industries.

Kalsep Ltd

Kaldair

Pyrene House, Staines Rd West, Sunbury on Thames, Middx TW16 7AS. Tel: 0932 766131 Telex: 938671 Fax: 0932 761375

Wey House, Langley Quay, Waterside Drive, Langley, Berks SL3 6EX. Tel: 0753 49899 Tx: 848281 Fax: 0753 49592

Developing and marketing advanced separation technologies for the biotechnology, pharmaceutical, beverage and chemical industries. Subsidiary of BP Ventures.

Kanegrade

9 Bowman Estate, Bessemer Drive, Stevenage, Herts SG1 2DL. Tel: 0438 742242 Telex: 826862 natur Fax: 0438 742311

Supply natural food ingredients, flavours and colours to the food industries.

Keele University

Department of Biological Sciences

Keele, Staffs ST5 5BG.

Telex: 36113

Carrying out research on the use of fungi for recovery of heavy metals as well as developing targetable delivery systems for cancer chemotherapy.

Kelco International Ltd

Westminster Tower, 3 Albert Embankment, London SE1 7RZ. Tel: 01 735 0333 Telex: 23815

Manufactures alginates and microbial polysaccharides.

Kellogg Company of Great Britain Ltd

Park Rd, Stretford, Manchester M32 8RA. Tel: 061 8654411

Main activities are related to cereal processing including aspects of use of enzymes in food technology as well as processing cereal by-products as animal feed.

Kemin UK

Waddington, Lincoln, LN5 9NT.

Tel: 0522 720165

Supply microbial inoculants for use in silage production.

Kemtronix (UK) Ltd

High Street, Compton, Berks RG16 0NL. Tel: (0635) 22779 Telex: 848507

Supplies scientific instruments, including products of Spectra-Physics, Tracor, Chemical Data Systems etc, as well as IBM computer systems for laboratory use. Offers service and contract maintenance on all makes of integrators.

Kenda Electronic Systems Ltd

Nutsey Lane, Totton, Southampton SO4 3NB. Tel: 0703 869 922 Telex: 477163

Supplies image processing systems for treatment of inputs from a number of sources including scanning microscopes, video cameras etc, based on a PDP11 computer system.

Kent Industrial Measurements Ltd

Oldends Lane, Stonehouse, Glos GL10 3TA. Tel: 045 382 6661

Telex: 43127 kentfp Fax: 045 382 6358

Manufacture a wide range of electrodes and sensors for laboratory and industrial use.

Kent Life Science Ltd

Kent University Biology Building, Canterbury, Kent. Tel: 0227 470511

Developing techniques for biological pollution control and waste treatment as well as methods for screening pharmaceutical products.

Kent University

Institute for Biotechnological Studies Biological laboratory

Canterbury, Kents CT2 7NJ.

Telex: 965449 Tel: (0227) 66822

Carrying our research in areas of biochemistry, cell biology, microbiology and biotechnology. In biotechnology the emphasis is on product and process aspects of biocatalysis, ranging from long term aspects to production of specific products for commercialization. These products include clinical diagnostic kits based on novel enzymes and microbial protein production from cheap feedstocks. Process research includes the biotreatment of cyanide-containing wastes, heavy metal accumulation and anaerobic fermentation for methane production, as well as aspects of halogenation and dehalogenation and use of immobilised systems.

Kevex Corporation UK

2 The Howard Estate, Chitton Road, Chesham, Bucks HP5 2AU. Tel: 0494 778877 Telex: 837966

Manufacture laboratory X-ray fluorescence spectrometers.

Kilbees Slurry Digesters Ltd

Winkfield, Windsor Forest, Berks SL4 2EU. Tel: 0344 882580

Offer anaerobic digestion systems for treatment of organic slurries, both farm and commercial.

Koch-Light Ltd

Rookwood Way, Haverhill, Suffolk CB9 8PB.

Tel: 0440 702 436 Telex: 817756 Fax: 0440 61507

Supplies research biologicals for molecular biology and immunology which include colony stimulating factor (mouse), colony stimulating factor (human) and ultra-pure human interleukin-2, mouse interleukin-1 and human nerve growth factor for use in applications such as growth of T cells, nerve cells, macrophages and hybridomas. Part of New Brunswick Scientific, US.

Kodak Ltd

Headstone Drive, Harrow, Middx HA1 4TY.

Tel: 01 427 4380 Telex: 21925 Fax: 01 863 6373

Biotechnology related products include analyzers, imaging systems, biochemicals and fermentation products. Has several joint ventures with US companies including Cetus, and with Sterling Drug, Canada which is also part of the Eastman Kodak, US group, to produce diagnostics.

Kone Corp

Instrument Division

Regent House, Heaton Lane, Stockport, Cheshire SK4 1BS. Tel: (061 477) 0662 Telex: 665566

Supplies diagnostic instrumentation for clinical analysis based on a multicell cuvette system using samples of 100 microlitre reaction volume.

Kontron Instruments Ltd

Blackmoor Lane, Croxley Centre, Watford, Herts WD1 8XQ. Tel: 0923 245991/56252 Telex: 922012 Fax: 0923 2 Fax: 0923 220666

One of the leading developers and suppliers of a full range of standard and inert HPLC instrumentation and accessories, visible and fluorescence spectrophotometers, centrifuges, scintillation counters and blood grouping equipment.

Koppert (UK) Ltd

PO Box 43, Tunbridge Wells, Kent. *Tel*: (0892) 36807

Distributes biological insecticides in which the active ingredient is spores of the fungus Cephalosporium lecanii. Separate strains are used to control aphids or to control whitefly as part of integrated pest management schemes in glasshouses. Products were developed by Tate & Lyle plc Group Research and Development, UK, as a result of research carried out with the Glasshouse Crops Research Institute, UK.

Korda & Company Ltd

Charterhouse Walk, 78-80 St John St, London EC1M 4HR. Tel: 01 253 5882 Telex: 28862

Consultants involved in the formation of new biotechnology based businesses

Kratos Analytical

Barton Dock Road, Urmston, Manchester M31 2LD. Tel: 061 865 4466 Telex: 668482

Manufacture mass spectrophotometer systems.

Lab M Ltd

formerly London Analytical and Bacteriological Media Ltd

Topley House, PO Box 19, Bury, Lancs BL9 6AU.

Tel: 061 797 5729 Telex: 669807 Fax: 061 762 9322

Supplies microbial culture media, including dehydrated media, ready poured plates, culture bottles and microbiological reagents.

Lab Systems Furniture Ltd

Tofts Farm Industrial Estate, Brenda Rd, Hartlepool, Cleveland TS25 2BQ.

Tel: 0429 234361

Offer a wide range of laboratory furniture and fittings including designs for use in clean areas and with new technologies.

Labcon Ltd

24 Northfield Way, Aycliffe Industrial Estate, Newton Aycliffe, Co Durham DL5 6EJ.

Tel: 0325 313379 Fax: 0325 311044

Manufactures computer interfaces for laboratory equipment as well as turnkey control packages for fermenters.

Labdata Instrument Services Ltd

54 Cambridge Road, Carshalton, Surrey SM5 3QS. Tel: 01 643 3214

Supply laboratory equipment including a range of peristaltic pumps, piston pumps and gear pumps for use in dosing and metering. Also offer a full service in chart recorder servicing as well as supplying pens and charts for most makes of recorders from stock.

Lablogic Ltd

Petre House, Petre Street, Sheffield S4 8LJ. *Tel*: (0742) 432 933 *Telex*: 54691

Supplies a wide range of equipment for use with radioactive isotopes in pharmaceutical and biological applications. Systems include scanners for gels and thin layer plates, radio HPLC detectors, liquid scintillation and gamma counters, radiation monitors etc, as well as computerised data handling systems.

Laboratory Impex Ltd

111-113 Waldegrave Rd, Teddington, Middx TW11 8LL.

Tel: 01 977 3266 Telex: 8951670 labimp Fax: 01 977 0170

Supplies a wide range of diagnostic products for laboratory use in clinical chemistry, immunology, enzymology, virology, bacteriology etc including affinity purified antibodies available unconjugated or conjugated to fluorochromes, enzymes and biotin, many isotype specific and some Fab2 cleaved for increased specificity. Also markets storage cabinets designed for chromatography, haematology, bacteriology, virology etc, including facilities for flammable materials and ultra-cold storage. Agents for BioMerieux SA, France.

Laboratory Sales (UK) Ltd

Whitworth Rd, Rochdale, Lancs OL12 0JL.

Supply disposable bacteriological loops containing viable microorganisms in various combination in sets of twenty five loops.

Laboratory & Electronic Engineering Co

LEEC

Private Road, No 7 Colwick Industrial Estate, Nottingham NG4 2AJ. Tel: (0602) 616222 Telex: 377441

Manufacture automatic carbon dioxide incubators, plant growth cabinets, biological safety cabinets and drying cabinets.

Labsystems (UK) Ltd

Unit 5, The Ringway Centre, Edison Rd, Basingstoke, Hants RG21 2YH. Tel: 0256 817282 Telex: 859319 labsy Fax: 0256 817292

Supplies monoclonal antibodies, clinical instruments and pipette systems, products of Labsystems OY, Finland.

Laing National Ltd

Ashburton Road, Trafford Park, Manchester M17 1BJ.

Manufactures dextrins and speciality starches.

Lancashire Fittings

County Works, Claro Road, Harrogate, N Yorks HG1 4AF. Tel: 0423 522 355 Telex: 57545

Manufactures HPLC column end fittings.

Lancashire Polytechnic

School of Applied Biology

Corporation St, Preston, Lancs PR1 2TQ.

Tel: 0772 22141

Carrying out work on algal metabolism, photosynthesis, and the use of algae in well as the production of extracellular metabolites. Also working on conversion of paper waste and aspects of biodeterioration.

Lancer UK Ltd

Unit 1 Crane Industrial Estate, Milton, Cambridge CB4 4AZ. Tel: 0223 66664 Telex: 817565

Manufacture a wide range of laboratory glassware washing machines and supply other equipment including balances and water deionisers.

Land Restoration Systems (UK) Ltd

Galvin Rd, Slough, SL1 4DL.

Tel: 0753 71551 Telex: 846776 intbio Fax: 0753 694201

Markets treatment systems for soil and groundwater pollution. Member of The International Biochemicals Group, UK.

Landfill Gas Ltd

3 Cecil Road, Hale, Altrincham, Cheshire WA15 9NY.

Developing methods for the management of landfill waste disposal sites for the production of methane gas. Supplies gas to the Campbell Brick Company for use in brick kilns.

Lansdowne Bodycombe and Partners

88/90 Gower Road, Sketty, Swansea SA2 9BZ. *Tel*: 0792 204059

Consulting and structural engineers offering services to the chemical and biotechnology industries.

Laurence Gould Consultants Ltd

Birmingham Rd, Saltisford, Warwick CV34 4TT.

Tel: 0926 496121 Telex: 31565 Fax: 0926 401882

Offer consultancy in agriculture and the agro-industries including aspects of crop processing and marketing, animal and crop husbandry, soil science and market research including studies on the feasibility of bioethanol production from agricultural crops in Europe.

LDC Analytical

Division of Thermo Electron Ltd

Supplies a wide range of equipment and accessories for chromatography.

Leatherhead Food Research Association

Randalls Rd, Leatherhead, Surrey KT22 7RY.Suspend . resu Tel: 0372 376761 Telex: 929846 Fax: 0372 386 228

Carries out contract research on aspects of food technology including fermentations.

Lee Products Ltd

The Vale, Chalfont St Peter, Gerrards Cross, Bucks SL9 9SU. Fax: 0753 889588 Tel: 0753 886664 Telex: 847638

Manufacture inert miniature solenoid valves suitable for HPLC and microbore fluid handling in general.

Private Rd No 7, Colwick Industrial Estate, Nottingham NG4 2AJ. Tel: 0602 616222 Telex: 377441 Fax: 0602 616680

Manufacturers of carbon dioxide cell culture incubators, roller culture apparatus, microbiological incubators, cooled incubators, plant growth cabinets, Class I microbiological safety cabinets and glassware drying

Leeds and Northrup Ltd

Wharfedale Road, Tyseley, Birmingham B11 2DJ. Tel: (021) 706 6171 Telex: 336577 Fax: (Fax: 021 706 4824

Manufactures a wide range of process control instrumentation for monitoring parameters, such as pH, conductivity, suspended solids, concentration, temperature, pressure, flow etc. Services include complete systems, engineering and commissioning.

Leeds University

Biotechnology Unit

Leeds LS2 9JT.

Studying membrane anchor regions in hybrid enzymes.

Leicester Biocentre

University of Leicester, University Rd, Leicester LE1 7RH. Tel: 0533 554455 Telex: 342318

Carrying out research in areas of gene expression gene replication and protein engineering. Activities include studies of secretion of genetically engineered products by yeast and other applications of recombinant DNA technology as well as control of gene expression in plants and the production of new varieties. Also developing novel diagnostic and therapeutic compounds as well as investigating new plasmid and viral vectors for expression of yeast and higher plant genes.

Leicester Polytechnic

Plant Biology Research Group School of Life Sciences

Scraptoft Campus, Scraptoft, Leicester LE7 9SU. Tel: 0533 431 011

Developing applications of plant cell and tissue culture for the production of medicinal compounds as well as for the clonal cultivation of crop species.

Leicester Polytechnic

School of Mechanical and Production Engineering

PO Box 143, Leicester LE1 9BH.

Tel: (0533) 551551

Studying the production of methane by anaerobic digestion and use of gas in internal combustion engines as a vehicle fuel, as well as for electricity generation. Designing simple pumping systems.

Leigh Pollution Control Ltd

1 Station Road, Four Ashes, Wolverhampton WV10 7DQ Tel: 0902 791616 Telex: 335685 lepoll Fax: 0902 Fax: 0902 791772

Engineering consultants and contractors offering services in waste and water purification, industrial effluent treatment and plating engineering. Company will merge with Biomechanics Ltd to form Bimec Environmental Ltd at the end of 1988.

Leo Laboratories Ltd

Longwick Road, Princes Risborough, Aylesbury, Bucks. Tel: (084 44) 7333

Manufactures health care products for veterinary and medical use. Products include antibiotics, vaccines, hormones, cytotoxins and vitamin D metabolites.

LEP Scientific Ltd

formerly Lea Scientific Ltd

Sunrise Parkway, Linford Wood (East), Milton Keynes, Bucks MK14

Tel: 0908 669555 Fax: 0908 669555

Supplies equipment for laboratory and clinical analysis including microcomputer controlled UV/VIS spectrophotometers, semi-micro HPLC systems, columns and cartridges, platelet aggregation profilers and clinical viscometers.

LH Fermentation Ltd

Bells Hill, Stoke Poges, Slough SL2 4EG.

Tel: 02814 5100 Telex: 848296 Fax: 02814 6622

Design and manufacture fermenter systems, bioprocessing systems and bioreactors. The product range includes fermenters (0.5 litres to 10,000 litre pilot plant) incorporating stirrer tank and airlift technology for batch or continuous culture. Also produce control instrumentation accessories, orbital shakers and incubator shakers.

Life Science Research Ltd

Eye, Suffolk IP23 7PX.

Tel: 0379 4122 Telex: 975389 Fax: 037971 427

Provides a wide ranging product safety evaluation service for new chemicals and biological products including toxicology testing, clinical assessment, product registration and licensing. Studies are conducted to meet the requirements of registration authorities throughout the world.

Life Sciences Laboratories Ltd

Sedgewick Rd, Luton, Beds LU4 9DT.

Tel: 0582 597676 Telex: 826585 Fax: 0582 581495

Supplies laboratory equipment, including fermenters, freeze driers and ultrasonic cleaners (see Biolafitte, France).

Lilly Industries Ltd

Dextra Court, Chapel Hill, Basingstoke, Hants RG21 2SY. Tel: 0256 473241 Telex: 858931 Fax: 0256 485170

Manufactures pharmaceutical and veterinary products of Eli Lilly & Co, US, including human insulin produced using recombinant DNA technology. Research activities include monoclonal antibodies for therapeutic use.

Lion Laboratories Ltd

Ty Verlon Industrial Estate, Cardiff Road, Barry, S Glamorgan CF6 3BE. Tel: 0446 744244 Telex: 498289 Fax: 0446 720937

Supplies alcohol monitoring equipment and carries out contract research.

Lip (Equipment and Services) Ltd

111 Dockfield Road, Shipley, W Yorks BD17 7AS.

Tel: (0274) 593411 Telex: 51451

Supplies prepared culture media and prepoured plates as well as disposable laboratory ware

Lipid Products

Nutfield Nurseries, Crabhill Lane, South Nutfield Redhill, Surrey RH1 5PG

Tel: 0737 823277 Fax: 0737 822561

Produce high-quality lipids for research purposes in a range that includes natural and semi-synthetic lecithins, plant lipids, and liposome mixtures, phosphatidyl lipids of various types, sphingomyelin etc.

Liverpool University

Institute of Medical & Dental Bioengineering

PO Box 147, Liverpool L69 3BX.

Tel: 051 709 6022

Investigating aspects of microbial corrosion and polymer/enzyme interactions

Liverpool University

Wolfson Molecular Genetics Unit Liverpool School of Tropical Medicine Department of Medical Entomology, PO Box 147, Liverpool L69 3BX. Tel: 051 709 6022

Using recombinant DNA technology in the study of disease vectors in areas which include cloning and expression in bacteria of genes coding for surface antigens of human parasites such as malaria and leishmania with the objective of improving diagnosis and possibly producing improved vaccines. Also investigating the mechanisms of resistance in some species of mosquito to organophosphate insecticides and analyzing the genetics of anti-malarial drug resistance in malarial parasites. Other work includes the cloning and analysis of snake venom antigen genes in order to produce high activity anti-toxins.

Liverpool University

Department of Microbiology, PO Box 147, Liverpool L69 3BX. Tel: 051 709 6022

Producing restriction enzymes and other tools for molecular biology in the Molecular Biological Group as well as investigating mechanisms of lignocellulose degradation by actinomycetes.

London Biotechnology Ltd

University College, Gower Street, London WC1E 6BT. Tel: 01 387 7050

Developing commercial biotechnology products derived from research at University College, University of London, UK.

London Centre for Biotechnology

c/o Polytechnic of the South Bank, London SE1 0AA. Tel: (01) 928 8989

LCB is a consortium of polytechnics dedicated to the furtherance of training and research in biotechnology geared towards industry and commerce. Members are the Polytechnics of Central London, South Bank

London Hospital Medical College

Department of Medical Microbiology

Turner St, London E1 2AD.

Tel: 01 377 7000

Carrying out research on mycobacterial antigenic determinants using monoclonal antibodies and recombinant DNA technology in order to produce improved diagnostic tests and safer vaccines for tuberculosis. Also constructing AIDS virus antigens by recombinant and synthetic chemical methods to help basic research into the feasibility of an AIDS virus vaccine.

London University Imperial College of Science and Technology

Department of Biochemistry

Prince Consort Road, London SW7 2AZ. Tel: (01) 589 5111 Telex: 261503

Researching into molecular biology of protein synthesis.

London University Imperial College of Science and Technology

Department of Pure and Applied Biology

Prince Consort Road, London SW7 2AZ. Tel: (01) 589 5111 Telex: 261503

Studying the molecular biology of pathogenicity of plant virus using sequencing techniques, protein synthesis and protoplast systems. The Plant Technology Group: Electrophysiology is studying new plant varieties and the control of growth and callus formation, with respect to electrophysiology in particular.

London University Imperial College of Science and Technology

Centre for Biotechnology

Prince Consort Road, London SW7 2AZ. Tel: (01) 589 5111 Telex: 261503

Studying genetic engineering and development of biosensors as well as studies on microbial metabolism.

London University Imperial College of Science and Technology

Department of Chemical Engineering

South Kensington SW7 2BY.

Tel: (01) 589 5111 Telex: 261503

Studying engineering and technical aspects of production of fuels from biological raw materials, including anaerobic digestion and ethanol fermentation.

London University Imperial College of Science & Technology

Biological Leaching & Ion Exchage Technology Group

Department of Mineral Resources Engineering, London SW7 2AZ. Tel: 01 589 5111

Investigating mineral leaching including aspects of the recovery of gold from sulphidic ores using Thiobacillus ferroxidans as well as studying leaching of metal ions by fungal metabolites such as citric acid and fungal adsorption of metal ions from solution.

London University Imperial College of Science & Technology

Biophysics Group

Department of Physics, London SW7 2AZ. Tel: 01 589 5111

Carrying out investigations on enzyme mechanisms as well as enzyme engineering using structural data to design site-directed inhibitors or drugs or to produce novel or modified enzymes such as glucose isomerase.

London University Imperial College of Science & Technology

Department of Chemistry, London SW7 2AZ. Tel: 01 589 5111

Developing biosensors and enzyme electrodes based on new electrode materials and novel designs.

London University Institute of Ophthalmology

Department of Virology

Judd St, London WC1H 9OS.

Tel: 01 387 9621

Carrying out research on antibiotics, vaccines and monoclonal antibodies in relation to diagnostics and therapeutics for eye disease.

London University King's College

Department of Biology

Campden Hill Rd, London W8 7AH.

Tel: 01 937 5411 Telex: 299968

Carrying out research on plant tissue culture, gene expression in seeds, chloroplast genetics and biological pest control as well as studies on photoproduction of hydrogen and nitrogen fixation by immobilized cell systems. Other work concerns the use of biomass resources for the production of fuels and chemicals.

London University King's College (KQC)

Microbiology & Biotechnology Group Department of Microbiology Kensington Campus, 61-67 Campden Hill Rd, London W8 7AH.

Developing photobioreactors for the production of algal biomass as well as carrying out research on metal recovery using microorganisms, antibiotic production, fermentations to produce food additives and single cell protein and the production of enzymes and chemicals including aspects of anaerobic digestion. Also working on the production of microbial pest control agents and methods of application.

London University King's College (KQC)

Strand, London WC2R 2LS.

Tel: 01 836 5454

Research activities include: production of biological control agents; plant cell culture; development of biosensors and biofuel cells; the production of fuels and chemicals using algae; microbial leaching and metal recovery production of antibiotics, diagnostics, immunoglobulins and other blood products; applications of monoclonal antibodies and investigations on algal photosynthesis.

London University King's College (KQC)

Department of Biology

Campden Hill Rd, London W8 7AH.

Tel: (01) 937 5411

Studying production of hydrogen gas by biophotolysis of water, using chloroplasts, enzymes and artificial catalytic systems including systems stabilised and immobilized by incorporation into alginate gels, polyurethane foams and other similar matrices.

London University London School of Hygiene & Tropical Medicine

Department of Medical Protozoology

Keppel St, London WC1E 7HT.

Tel: 01 636 8636

Developing malaria vaccines.

London University London School of Hygiene & Tropical Medicine

Department of Medical Microbiology

Keppel St, London WC1E 7HT.

Tel: 01 636 8636

Developing diagnostics and vaccines using techniques of molecular biology, recombinant DNA technology and monoclonal antibodies. Activities include the cloning and expression of viral genes for immunologically important genes of the Dengue virus; studies on the immunopathology of viral infections; development of diagnostics for AIDS virus (HTLV3), hepatitis B virus and adenoviruses in general. Also investigating the molecular basis of bacterial infections including aspects of the genetics of cholerae. Developing reagents for diagnosis of chlamydial infections and studying aspects of carcinogenesis.

London University Queen Mary College

School of Biological Sciences

Mile End Road, London E1 4NS.

Tel: (01) 980 4811

Carrying out the following studies: genetic and molecular structure of killer virus particles in yeast; metabolic compartmentation in E coli; microbial enhancement of tertiary recovery of crude oil; genetic regulatory mechanisms in fungi; studies on human immunoglobulins; developmental genetics of Drosophila.

London University Royal Holloway & Bedford New College

Department of Biochemistry

Egham Hill, Egham, Surrey TW20 0EX.

Tel: 0784 34455 Telex: 935504

Carrying out studies on the ecology of water reservoirs and sand filters used in water purification. Also investigating the molecular biology and plant response to fungal infection as well as aspects of herbicide and fungicide metabolism by plant cell cultures. Other studies include aspects of carbohydrate and lectin biosynthesis in leguminous crop seeds and the enzymology of giberellin biosynthesis.

London University University College

Bioelectronic Engineering Group

Department of Electronic and Electrical Engineering, Gower Street, London WC1E 6BT.

Tel: 01 387 7050

Developing biosensors and the use of biological materials in the fabrication of novel electronic devices using immobilized enzymes in transistors as well as antibodies in optoelectronic devices.

London University University College

Department of Biochemistry

Gower St, London WC1E 6BT.

Developing non-radioactive gene probe systems as well as investigating the use of enzymes for production of fine chemicals of industrial interest.

London University University College

Department of Chemical and Biochemical Engineering

Torrington Place, London WC1E 7JE.

Tel: (01) 387 7050

Carrying out studies on immobilized enzyme and cell systems and design of two-phase bioreactors, based on stirred tanks and packed columns.

London University University College

Department of Genetics

Gower Street, London WC1E 6BT.

Tel: (01) 387 7050

Studying gene mapping using somatic cell hybrids, genetics of human cancer, biochemical genetics of human enzymes, histology of foetal mouse gonad tissue culture and gene expression in somatic cell hybrids.

London University University College

Centre for Biochemical Engineering and Biotechnology

Gower St, London WC1E 9BT.

A new centre supported by grants from the University Grants Committee's special allocation, SERC and London University. Studies include the influence of genetic manipulation on both fermentation and downstream recovery, the processing of enzymes and proteins and the action of biocatalysts on water-insoluble reactants. The biochemical engineering section has also obtained support from the Department of Trade and Industry and four UK companies for a collaborative programme on immobilized cell catalysis. catalysis.

London University University College

Department of Zoology

Gower Street, London WC1E 6BT.

Tel: (01) 387 7050

Undertaking research in the following subjects: immune systems; cloning of T-lymphocytes; recombinant DNA studies on antigens; immunovirology of herpes and hepatitis viruses; use of monoclonal antibodies to identify cell types in vertebrate nervous systems.

London University University College

Department of Botany & Microbiology

Gower Street, London WC1E 6BT.

Tel: (01) 387 7050

Researching into control of energy metabolism and photosynthesis in algae and bacteria. Other studies include: cell cycle and cell replication in plant tissue culture; regulation of plasmid replication; biochemical basis of plant resistance to infection; genetics and biochemistry of yeasts; synthesis of mitochondrial proteins.

London University University College

Department of Civil Engineering

Gower St, London WC1E 6BT.

Tel: 01 387 7050

Investigating water treatment and pollution control technology including fluidized beds and sand filters as well as other aspects of the chemical. physical and microbiological purification of water.

London University Wye College

Department of Biological Science

Wye, Ashford, Kent TN25 5AH.

Tel: 0233 812401 Telex: 96118

Carrying out studies on the application of plant tissue culture to the vegetative propagation of traditional crop varieties including systems for microtuber production from crops such as potato and yam. Also investigating use of computer imaging in studies of the spatial relationships of chromosomes in nuclei of Triticale.

Long John International Ltd

1780 London Road, Glasgow G32 8XA.

Tel: (041) 554 8063 Telex: 77401

Manufactures distilled spirits. Has carried out research on the treatment of distillery effluents using anaerobic digestion. Subsidiary of Whitbread plc,

Lorne Diagnostics Ltd

PO Box 6, Twyford, Reading, Berks RG10 9NL. Tel: 0734 342400 Telex: 849008 lorne

Fax: 0734 342788

Distributors of immunochemicals, enzymes and biochemicals.

Loughborough Consultants Ltd

University of Technology, Ashby Road, Loughborough, Leics LE11 3TU. Tel: (0509) 30426 Telex: 34319

Makes the services of analytical and technical staff at Loughborough University available to industry in the areas of chemical engineering, chemistry, management, computing etc. Also has its own staff able to take on projects of any size on a contract basis.

Loughborough University of Technology

Food Engineering & Biotechnology Group

Department of Chemical Engineering, Loughborough, Leics LE11 3TU. Tel: 0509 263171

Carrying out research on food technology including aspects of single cell protein, amino acid, vitamin and alcohol production as well as methods of converting waste to saleable products.

Loughborough University of Technology

Ashby Road, Loughborough, Leics LE11 3TU. Tel: 0509 263171

Carries out contract research in downstream processing. Equipment available includes ultrafiltration and reverse osmosis from laboratory scale to over nine square metres surface as well as microprocessor controlled spray drying and primary separation using filtration or centrifugation.

Other facilities available include fermentation up to 600 litres and a wide range of analytical capabilities; amino acid analysis, particle size analysis and electron microscopy. Also carry out process costing, mathematical modelling, computer simulations and control studies.

Lovesgrove Research (LRI) Ltd

Woodlands, Lovesgrove Estate, Aberystwyth, Dyfed SY23 3HD. Tel: 0970 3771

Research areas include hybrydoma preparation and cytogenic toxicology assays.

Lucas Dawe Ultrasonics Ltd

Concord Rd, Western Ave, London W3 0SD. Telex: 934848 Tel: 01 992 6751

Manufacture ultrasonic systems for use in cell disruption and in cleaning

Luckham Ltd

Victoria Gardens, Burgess Hill, West Sussex RH15 9QN. Tel: (044 46) 5348 Telex: 877952

Manufactures and supplies rotary laboratory shakers and various test and other laboratory equipment.

Ludwig Institute for Cancer Research

Middlesex Hospital/University College Branch

Courtland Building, 91 Riding House St, London W1P 8BT.

Carrying out cancer research in areas of growth regulation and cell proliferation using molecular biology and biochemistry techniques including cDNA cloning and mammalian cell culture.

Lummus Crest Ltd

PO Box 41, Greyfriars House, Lady's Lane, Northampton NN1 3HZ. Tel: (0604) 29622 Telex: 312551

Engineering contractor offering services in areas of waste treatment and fuel alcohol production by fermentation and distillation. Has developed process technology for landfill gas extraction, cleaning and use. Has also constructed plant for pharmaceutical fermentations.

Luxfer Ltd

Colwick, Nottingham NG4 2BH. Telex: 377363 Tel: (0602) 615145

Manufactures light weight high-pressure aluminium alloy gas cylinders for use with methane derived from biogas.

Minnesota 3-M Laboratories Ltd

1 Morely St, Loughborough, Leics LE11 1EP. Tel: 0509 68181 Telex: 34587

Supplies pharmaceuticals and other chemical products of the 3-M Co, US.

M-Scan Ltd

Silwood Park, Sunninghill, Ascot, Berkshire SL5 7PZ. Tel: 0990 27612 Telex: 849337 Fax: 0990 872709

Analysts and consultants in the protein, carbohydrate and glycoprotein area, specializing in the use of fast atom bombardment (FAB) mass spectrometry. Instrumentation includes a VG ZAB 2SE mass spectrometer with 15,000 dalton mass range capability. In addition, services include the full range of conventional organic ionization techniques ie EI, CI, and FD. FAB-MS techniques have been applied to determination of structure of recombinant proteins such as interferons, growth hormones and insulins, studies on glycoproteins/carbohydrates and peptide sequencing and molecular weight confirmation. Offers training courses in FAB-MS biopolymer sequencing (peptides, proteins, carbohydrates and nucleotides. Contract HPLC, amino acid analysis and gas phase sequencing is also carried out.

M W Hardy & Co Ltd

Hardy House, Northbridge Road, Berkhamsted, Herts HP4 1EF. Tel: 0442 863366 Telex: 826886 Fax: 0442 872412

Supplies essential oils and other chemicals for pharmaceutical and industrial use.

Macallan-Glenlivet plc

Macallan Distillery, Craigellachie AB3 9RX. Tel: (034 05) 471 Telex: 739556

Whisky manufacturer, developing methods of anaerobic digestion for treatment of distillery wastes.

Macleod & Miller (Engineers) Ltd

Whistleberry Road, Blantyre, Glasgow G72 0TG. Tel: (0698) 822231 Telex: 777967

Manufactures bioreactors for anaerobic digestion of wastes for pollution

Macphie and Co (Glenbervie) Ltd

Glenbervie, Near Stonehaven, Kincardineshire AB3 2YB. Tel: 056 94 641 Fax: 056 94 677

Manufactures specialised sugar syrups and bakery products.

MAFF Agricultural Science Services

Plant Pathology Laboratory

Hatching Green, Harpenden, Herts AL5 2BD. Tel: (058 27) 5241

Holds national culture collection of plant pathogens. Carries out testing of new agrochemicals and is concerned with development of methods for detection of contamination of agricultural produce and safety aspects of genetic engineering in agriculture.

MAFF Central Veterinary Laboratory

New Haw, Weybridge, Surrey KT15 3NB. Tel: (0327) 41111

Veterinary Laboratory:, Lasswade, Midlothian.

Tel: 031 663 6525

Responsible for establishing reliable diagnostic methods, research into animal and poultry disease, and the manufacture of biological preparations used in the control of animal disease. Undertakes tests on therapeutic substances for animal treatment. Acts as World Brucellosis Centre and as an international laboratory for biological standards. Part on the Ministry of Agriculture, Fisheries and Food.

Malthus Instruments Ltd

The Manor, Manor Royal, Crawley, West Sussex RH10 2PY. Tel: 0293 553538 Telex: 878718 Fax: 0293 31597

Manufactures automated analytical systems based on measurement of particle electrophoretic mobility for continuous monitoring of a wide range of microorganisms, with applications in the food, dairy, water, cosmetic and biomedical industries. Can be used to screen blood or urine cultures quickly, perform antibiotic sensitivity and assay tests, monitor threshold levels for food spoilage, determine original number of organisms and provide precise data which facilitates research on factors affecting rate or patterns of microbial growth.

Malvern Instruments Ltd

Spring Lane South, Malvern, Worcs WR14 1AQ. Tel: 0684 892456 Telex: 339679 Fax: 06 Tel: 0684 892456 Fax: 0684 892789

Manufacture particle size analyzers including laser analyzers capable of measuring particles or droplets in the range 0.003-1800 microns.

Manchester Polytechnic

Dept of Biological Science

Chester St, Manchester M1 5GD. Tel: 061 228 6171 Telex: 667915

Carrying out research on the stability of plasmid carried antibiotic resistance, production of monoclonal antibodies, use of hybridomas and microcarriers, the production of commodity chemicals using immobilized bacteria as biocatalysts and the production of new plant varieties using recombinant DNA technology.

Manchester University

Department of Botany Manchester M13 9PL.

Tel: 061 273 7121

Investigating the production of fungal spores from potential biological control agents in submerged culture as well as studying the factors influencing spore viability.

Manchester University

Monoclonal Antibody Laboratory

Department of Chemical Pathology, Hope Hospital, Eccles Old Road, Salford M6 8HD. Tel: 061 789 7373

Carrying out research on the development of monoclonal antibodies to both steroid and peptide hormones for use in immuno diagnostics as well as on hormone production by human tumours. Using techniques of cell fusion and cell cloning.

Manchester University

Department of Chemistry

Oxford Rd, Manchester M13 9PL. Tel: 061 273 7121

Carrying out research on microbiological and process aspects of anaerobic fermentations for production of methane, alcohol and acetone/butanol including optimization of kinetics and reactor design. Also studying immobilized cell and enzyme systems, thermophilic bacteria and aspects of secondary metabolite production including antibiotics and mycotoxins.

Manchester University

Microbiology Unit

Department of Cell and Structural Biology, Oxford Road, Manchester M13 9PI

Tel: 061 273 7121

Carrying out research on the growth, molecular biology and genetics of fungi (basidiomycetes).

Mandoval Ltd

Technical Centre, Catteshall Lane, Godalming, Surrey GU7 1LB. Tel: 04868 5272 Telex: 858094

Produces vermiculite including grades for use in horticulture and as a support medium for use in fixed film bioreactors.

Marine and Industrial Plastics Ltd

Fort Fareham Industrial Estate, Newgate Lane, Fareham, Hants. Tel: (0329) 280184

Manufactures glove boxes for handling of dangerous and toxic materials.

Marine Ventures Ltd

8 Waterloo Place, London SW1Y 4BE. Tel: 01 930 0515 Telex: 24760

Manufacture cavity pumps suitable for use in biotechnical processes.

Marlborough Biopolymers Ltd

Marlborough Technical Centre, PO Box 1, Billingham, Cleveland. Tel: 0642 523340 Fax: 0642 523363

Developing systems for production of biodegradable polymers by fermentation including thermoplastics, polyhydroxybutyrate and polyhydroxyvalerate. Subsidiary of ICI plc.

Mass Transfer International

Heversham, Cumbria LA7 7EB. Tel: (044 82) 3851 Telex: 65145

Manufactures equipment for fermentation, distillation and waste treatment. Carries out contract research in areas of biofuels (methane and alcohol), gas cleaning, liquid/liquid separation and deodourisation.

Mast Laboratories Ltd

Mast House, Derby Road, Bootle, Merseyside L20 1EA. Tel: (051) 933 7277 Telex: 628178

Supplies culture media, bacterial identification test media and antibiotic susceptibility testing products, including fully automated systems for reading and reporting agar dilution susceptibility tests using a dual disk drive microcomputer with capability of interfacing with existing laboratory computers.

Mathilda and Terence Kennedy Institute of Rheumatology

6 Bute Gardens, London, W6 7DW.

Carrying out research using cell biology and biochemistry techniques for in vitro and in vivo studies of inherited metabolic disorders.

Matthew Hall Engineering Ltd

Southern Division

Frobisher House, Nelson Gate, Commercial Rd, Southampton SO1 0GX. Tel: 0703 634400 Telex: 477305 Fax: 0703 636116

Consulting engineering company, undertakes project management, engineering design, feasibility studies etc within the chemical, pharmaceutical, food, biotechnology and energy industries.

Mattson Instruments Ltd

Green Farm Rd, Newport Pagnell, Bucks MK16 0AL.
Tel: 0908 211414 Telex: 82304 forum Fax: 0908 618292

Supplies Fourier Transform infra-red spectrometers and related software supported by an extensive library of commercial spectra.

May & Baker Diagnostics Ltd

Rhone Poulenc

Montrose House, 187 George St, Glasgow G1 1YT.

Tel: 041 552 7611 Telex: 778182 Fax: 041 552 5005

Manufacture diagnostic kits based on monoclonal antibodies, including rapid tests for detection of aflatoxin and a rapid latex-based test for Salmonella for use by food processing and animal feed industries. Member of Rhone-Poulenc Group.

Mayglothing Waste Disposal Ltd

Tack Barn Farm, Kington, Herts. Tel: (0544) 230364 Telex: 65145

Developing methods of waste disposal based on anaerobic digestion.

MBB Embryo Transfer Services

Vallum Farm, Military Road, Stamfordham, Newcastle-upon-Tyne NE18

Tel: 043 472 331 Telex: 537544 Fax: 043 472 295

Markets bovine embryos and provides an embryo transfer service. Also involved in animal cell culture and micromanipulation of bovine embryos as well as import and export activities. Division of the Milk Marketing Board of England and Wales.

MBR BioReactor (UK) Ltd

North Road, Widmer End, High Wycombe, Bucks HP15 6NE. Tel: (0494) 712 814

Supplies bioreactors and fermentation equipment for laboratory, pilot and industrial use (see MBR Bioreactor AG, Switzerland).

MDA Scientific (UK) Ltd

Ferndown Industrial Estate, Wimborne, Dorset BH21 7RZ. Tel: (0202) 874318 Telex: 418267

Supplies measuring and alarm systems for industrial safety and environmental protection including gas monitoring systems.

MDH Ltd

Walworth Rd, Andover, Hants SP10 5AA.

Tel: 0264 62111 Telex: 47430 mdhand Fax: 0264 56452

Manufacture anaerobic incubators, class I and class II biological safety cabinets, laminar flow workstations, fume hoods, filter systems including bacteriological filters, refrigerators and autoclaves.

Medical Air Technology Ltd

Canto House, Wilton Street, Manchester M34 3LZ. Tel: (061) 320 5652 Telex: 665788 tidlnd

Supplies glove boxes, microbiological hoods, safety cabinets and work stations as well as reverse osmosis equipment.

Medical & Scientific Conferences Ltd

The Studio, 12 High St, Wheathampstead, Herts AL4 8AA.

Tel: 058283 4117/8 Telex: 825562/825353 chacom Fax: 0582
419422

Specialize in organization of conferences for the medical, scientific and financial sectors

Medical and Scientific Structures Ltd

New Lane, Huntington, York YO3 9PT.

Design, construction and facilitization of controlled clean room environments. The range of clean room systems includes complete clean room buildings and clean rooms within a host building.

Medicell International Ltd

239 Liverpool Road, London N1 1LX. *Tel*: (01) 607 2295

Supplies tissue-typing plates, dialysis membranes and related products.

MediSense (UK) Inc

Units 3/4, 13-14 Eyston Way, Abingdon, Oxon OX14 1TR. Tel: 0235 555440 Telex: 83369 Fax: 0235 553462

Products include biosensors and healthcare diagnostics. Subsidiary of MediSense Inc, US.

Mercia Diagnostics Ltd

Mercia House, Broadford Park, Shalford, Guildford GU4 8EW.

Tel: 0483 505255

Telex: 858466 mercia

Fax: 0483 574822

Supply simple clinical diagnostics including ELISAs for viral antigens and STD, monoclonal antibodies, antibody capture and biotin-streptavidin binding systems.

Merck Sharp & Dohme Ltd

Hertford Rd, Hoddesdon, Herts. Tel: 061 67272 Telex: 261915

Manufactures pharmaceuticals. Carries out pharmaceutical research. Subsidiary of Merck & Co Inc, US.

Merieux UK

Clivemont House, Clivemont Rd, Maidenhead, Berks SL6 7BU. Tel: 0628 785291 Telex: 846538 Fax: 0628 71722

Supplies viral and bacterial vaccines (see Institut Merieux, France).

Merseyside Laboratories

17K Westside Industrial Estate, Jackson St, PO Box 62, St Helens, Merseyside WA9 3AJ.

Tel: 0744 612108

Offers an oligonucleotide custom synthesis service. Also markets peptides, antiserums, antibodies (monoclonal and polyclonal) and hormones.

Metachem Diagnostics Ltd

29 Forest Rd, Piddington, Northampton NN7 2DA. Tel: 0604 870370 Telex: 312237

Manufactures immunohistochemical-based diagnostic kits for detection of bone marrow lymphoid cells, lymphomas, leukemias etc. Also distributes products of Milab, Sweden.

Mettler Instruments Ltd

Kingsmead House, Abbey Barn Rd, High Wycombe, Bucks HP11 1QW. Tel: 0494 450202 Telex: 837564 metins Fax: 0494 25056

Supply a full range of balances and weighing systems.

MI Scientific Ltd

Exchange Building, 2nd Floor, Suite 7, Quayside, Newcastle upon Tyne NEI 3BJ

Supplies equipment and reagents for electrophoresis as well as scanning densitometers. Agents for Helena Laboratories, US.

MIC Bio-Sciences Ltd

131 Mount Pleasant, Liverpool L3 5TF. Tel: 051 708 0123 Telex: 627 095

Carries out contract research and manufactures protein coated colloidal-gold reagents and monoclonal antibodies for use in veterinary and medical diagnostics.

Micran Ltd

Unit A1 Wellheads Crescent, Wellheads Industrial Estate, Dyce, Aberdeen AB2 0GA.

Tel: 0224 770668 Telex: 739294

Offers a research and consultancy service in relation to effects of bacteria in, for example, oil degradation and corrosion of steel.

Microbial Developments Ltd

formerly Microferm

Spring Lane North, Malvern Link, Worcester WR14 1AH. Tel: 06845 68434

Supply mixed formulations of enzymes with the bacteria L plantarum and P acidilactici and others for use as silage inoculants with the addition of 'Clostridiaphage' to invade Clostridia contaminants and destroy them.

Microbial Supply Co

PO Box 23, Toddington, Beds LU5 6DW. Tel: 05255 2515

Supplies reagents and intermediates for use in health care products including diagnostics, detergents, anaerobic incubators, bacteriological culture medium and enzymes.

The Microbiological Supply Company

26 High Street, Toddington, Beds LU5 6BY. Tel: (052 55) 2515

Supplies products to health care laboratories including diagnostics, anaerobic incubators, culture media and blood products.

Micromeritics Ltd

Unit 4, The Ringway Centre, Houndmills, Basingstoke, Hants. Tel: 0256 844094 Telex: 858671 Fax: 0256 842431 Fax: 0256 842431

Supply amino acid analyzers, chromatography accessories and detectors.

Microplants Ltd

Longnor, Nr Buxton, Derbyshire SK17 0NZ. Tel: 0298 83585 Telex: 668135

Produces plant by micropropagation.

Microtest Research Ltd

University Road, York YO1 5DU. Tel: 0904 411805 Fax: 0904 430164

Developing immunoassays for food testing. Offer a toxicology testing service including a test for aflatoxin and tests for possible carcinogens.

Miles Ltd

Biotechnology Group

PO Box 37, Stoke Court, Stoke Poges, Slough, Berks SL2 4LY. Tel: 0753 645151 Telex: 848337 milabs Fax: 0753 64 Fax: 0753 643893

Supplies biochemicals and enzymes for research, clinical and industrial use. Products include plasma proteins, albumins, globulins and transferrins, industrial culture media and growth factors as well as dairy cultures. (see Miles Inc, US).

Millipore (UK) Ltd

11-15 Peterborough Rd, Harrow, Middx HA1 2YH.

Tel: 01 864 5499 Telex: 24191

Block 2 Unit 1, Heriot-Watt Campus, Riccarton Research Park, Currie, Edinburgh EH14 4AP.

Tel: 031 449 5086 Tx:727516 Fax: 031 449 5157

Produces a wide range of membranes, filters and associated equipment for ultra- and microfiltration, filtering and sampling equipment for radioimmunoassay samples, as well as membranes of defined pore size and filters for microbial sterilization of gas, liquids etc. Also supplies water treatment equipment and analytical enzymes and diagnostic kits and equipment and accessories for liquid chromatography and HPLC. Subsidiary of Millipore Corp, US.

Milton Roy Ltd

Milton Roy House, Stone Business Park, Stone, Staffs ST15 0HH. Tel: 0785 813542 Telex: 36623 Fax: 0785 815616

Supplies a wide range of equipment and accessories for chromatography (see Milton Roy, US).

Mitchell Cotts Group

Cotts House, Camomile St, London EC3A 7BJ.

Tel: 01 283 1234 Telex: 8814641

Holding company of a group with principal activities in engineering, transport and trading.

Monoclonal Antibodies Inc (UK)

28 Crown Road, Wheatley, Oxon OX9 1NB.

Fax: 08677 2413 Telex: 837117 Tel: 08677 2156

Carrying out research and development of rapid enzyme immunoassays including fertility tests.

Monotech Laboratories Ltd

155 St Vincent St, Glasgow G2 5PA. Tel: 041 522 8521 Telex: 777711

Research and development company involved in aspects of cell hybrids and monoclonal antibodies, with particular emphasis on human hybridoma response to specified antigens. Subsidiary of Inveresk Research International Ltd, UK.

Monsanto plc

Monsanto House, Chineham Court, Chineham, Basingstoke RG24 0UL. Telex: 858837

Supplies plant protection chemicals. Carrying out research, mainly in the US, on new plant varieties, biological pest control, animal health products, plant tissue culture, plant growth regulators and herbicides as well as protein and peptide drugs, tissue plasminogen activator and bovine growth factors.

Montedison UK Ltd

7/8 Lygon Place, Ebury St, London SW1W 0JR. Tel: 01 730 3405 Telex: 918743 montedison

Branch Office for Montedison, Italy.

Morris Hanbury Jackson Leway Ltd

Nettlestead Oast, Paddock Wood, Kent TN12 6DA. Telex: 957062 Tel: 089283 5155/9

Supplies hop extracts and pellets to the brewing industry.

MRC Clinical and Population Cytogenetics Unit

Western General Hospital, Crewe Rd, Edinburgh EH4 2XU. Tel: (031) 332 2471

Studying abnormalities in human chromosomes in relation to malignancy. Performing genetic analysis of the control of histocompatability antigens-cell surface glycoproteins. Constructing functional linkage maps and using DNA clones derived from RNAs to study regulation of expression of genes for albumin, lipoproteins and other proteins in cells transformed with SV40 virus.

MRC Clinical Research Centre

Liposome Research Group

Watford Road, Harrow, Middx HA1 3UJ. Tel: (01) 864 5311 Telex: 923410

Researching the use of liposomes for drug delivery, drug targeting and for use as immunological adjuvants.

MRC Department of Pharmacology

Brain Metabolism Unit

1 George Square, Edinburgh EH8 9JZ.

Investigates recombinant DNA techniques for studying genetic control in synthesis of peptide neurotransmitters and brain proteins.

MRC Laboratory of Molecular Biology

Hills Road, Cambridge CB2 2QH.

Research covers aspects of protein synthesis and structure, as well as chemistry and structure of nucleic acids, relating to all aspects of respiratory proteins, membrane proteins, antibody production etc. Studying gene structure and function, as well as recombinant DNA techniques and genetic manipulation, include examining tumour lines, eukaryotic chromosomes, viruses, insects and nematodes. Also developing new instruments and methods for structural determination and cell studies.

MRC Steroid Reference Collection

Chemistry Department, Westfield College, Kidderpore Ave, Hampstead, London NW3.

Tel: (01) 435 7141

Provides free samples of reference steroids to clinical and biochemical researchers.

MSE

Bishop Meadow Road, Loughborough, Leicester LE11 0RG. Tel: 0509 616000

Supply a wide range of automated bench and refrigerated centrifuges.

MSE Scientific Instruments

Manor Royal, Crawley, W Sussex RH10 2QQ. Tel: (0293) 31100 Telex: 87119

Produces a wide selection of scientific equipment including centrifuges (ultra, refrigerated, high-speed, micro, bench-top), electrophoresis apparatus and powerpacks, fractionators and fraction collectors, pH and conductivity meters, electrodes (including ion selective), viscometers, cryoscopes, gradient formers, blood analysis apparatus and industrial weighing systems and balances.

Munton & Fison Itd

Cedars Factory, Stowmarket, Suffok IP14 2AG.

Specializes in production of malt extracts and enzymes. Supplies plant amylases, proteases and preparations of mixed activity for industrial use. Also produces plants by micropropagation.

Murphy & Son Ltd

Wheathampstead, St Albans, Herts. Supply papain for industrial use.

Mycofarm Ltd

London Road, Braintree, Essex CM7 8QH. Tel: (0376) 21721 Telex: 98251

Supplies animal health-care products including antibiotics, steroids, poultry vaccines, pig vaccines, feed additives, rabies vaccine and pet products. Subsidiary of Gist-brocades NV, Netherlands.

National Collection of Dairy Organisms

Reading Institute of Food Technology, Shinfield, Reading RG2 9AT. Tel: 0734 883103

Holds a collection of bacteria derived from or associated with milk processing and milk products.

National Collection of Industrial and Marine Bacteria Ltd

Torry Research Station, 135 Abbey Road, PO Box 31, Aberdeen AB9 8DG

Collects and conserves cultures of bacteria of industrial interest which are made available to laboratories worldwide, holding over 5000 strains including genetically modified strains and strains manufactured using recombinant DNA as well as plasmids. Recognized as an international depository authority under the Budapest Treaty for patent strains.

National Collection of Pathogenic Fungi

PHLS Mycological Reference Laboratory, London School of Hygiene & Tropical Medicine, Keppel Street, London WC1 7HT.

Tel: 01 580 4674

Provide identification and safe deposits for fungi and yeasts pathogenic to man and other animals.

National Collection of Plant Pathogenic Bacteria

ADAS Central Science Laboratory, Hatching Green, Harpenden, Herts AL5 2BD.

Tel: (05827) 5241

Provides an identification service and depository for bacteria reference material of species known to be pathogenic to plants.

National Collection Of Type Cultures (NCTC)

Central Public Health Laboratory

61 Colindale Avenue, London NW9 5HT. *Tel*: 01 200 4400 *Telex:* 922094

Maintains reference culture collections of pathogenic bacteria as well as viruses. Recognized as an international depository authority for patent strains under the terms of the Budapest Treaty.

National Collection of Wood Destroying Macrofungi

Princes Risborough Laboratory Department of the Environment Building Research Establishment

Princes Risborough, Aylesbury, Bucks HP17 9PX. Tel: 08444 3101

Provides an identification service for wood-rotting fungi as well as acting as a depository for reference material and carrying out biodeterioration testing and contract work.

National Collection Of Yeast Cultures

Food Research Institute

Colney Lane, Norwich NR4 7UA. *Tel*: (0603) 56122 *Telex:* 975453

Maintains yeast cultures other than known pathogens. Provides information on yeasts (computer searches and printouts of strain data), identification and preservation services. An international depository authority for patent strains under the terms of the Budapest Treaty.

National Diagnostics

Unit 3 Chamberlain Road, Aylesbury, Bucks HP19 3DY. Tel: (0296) 36177

Supply non-toxic biodegradable liquid scintillation solution and a complete range of electrophoresis chemicals.

National Engineering Laboratory

Bioreactor Project Heat Transfer Division

East Kilbride, Glasgow G75 0QU. Tel: (03552) 20222 Telex: 777888

Carrying out research related to the design of bioreactors, with the aim of understanding the physical behaviour of materials in stirred vessels, including aspects of heat and mass transfer, flow and transport of materials, organism response to changes in large scale bioreactor environments etc, as well as performance tests on scale up and large reactors. Runs a Bioreactor Design Club in conjunction with universities and industrial companies.

National Vegetable Research Station

Wellesbourne, Warwick CV35 9EF. Tel: (0789) 840382

Activities include maintenance of a vegetable gene bank, as well as playing a world role in the genetic conservation of temperate types of Brassica and Allium species. Small quantities of seed are available free of charge to plant breeders anywhere in the world.

NBL Enzymes Ltd

South Nelson Industrial Estate, Cramlington, Northumbria NE23 9HL. Tel: 0670 732992 Telex: 538239 Fax: 0670 732537

Offers a range of restriction endonucleases available in two grades: mapping and cloning. Distributor for Stratagene Cloning Systems, US. Division of Northumbria Biologicals Ltd, UK.

NCB (Coal Products) Ltd

Engineering contractor and consultant involved in the recovery and utilization of methane produced from landfill sites.

Nelson Design Services Ltd

Southbank Technopark, 50 London Rd, London SE1 6LN. Tel: 01 922 8877 Fax: 01 620 0884

Developing biological life support systems.

Neo Plants Ltd

197 Kirkham Rd, Freckleton Preston, Lancs PR4 1HU.

Tel: 0772 635011 Telex: 8950511 Fax: 0772 632200

Plant breeder producing woody plants mainly by micropropagation.

New Brunswick Scientific UK Ltd

6 Colonial Way, Watford, Herts WD2 4PT.

Tel: 0923 223293 Telex: 894187 Fax: 0923 242582

Specializes in fermentation equipment, biological shakers, laboratory freeze driers, media sterilization and dispensing equipment, colony counters, tissue culture apparatus, and oligonucleotide synthesizers. Subsidiary of New Brunswick Scientific Co Inc, US.

Newcastle Upon Tyne University

Department of Civil Engineering Public Health and Environmental Engineering Group

Claremont Road, Newcastle upon Tyne NE1 7RU. Tel: (0632) 328511 Telex: 53654

Studying anaerobic digestion for treatment of industrial wastewaters and classified refuse sewage sludge feedstock using anaerobic contact digesters, anaerobic filters, anaerobic fluidized beds and anaerobic rotating biological contactors. Studied in terms of treatment kinetics, ecology, separation and the effects of nutrients and toxic materials.

Newcastle upon Tyne University

Department of Biochemistry

Newcastle upon Tyne, NE1 7RU.

Tel: 0632 328511

Carrying out basic studies on genetic recombination, gene cloning and bacterial molecular genetics as well as developing vaccines against the Newcastle disease virus.

Newtech (Clwyd) Ltd

Newtech Square, Deeside Industrial Park, Clwyd CH5 2NU. Tel: 0244 822881 Telex: 617314 Fax: 0244 822002

Produce monoclonal antibodies, tissue cultures and enzymes.

The Nickerson Seed Co Ltd

Cambridge Science Park, Milton Rd, Cambridge CB4 4WE. Tel: 0223 862933 Fax: 0223 861925

Applying biotechology to the development of new crop plant varieties including cereals, sugar beet, forage crops and vegetables. Subsidiary of Royal Dutch Shell.

Nicolet Instruments Ltd

Budbrook Rd, Warwick CV34 5XH. Tel: 0926 494111

Supply analytical instruments and laboratory computer systems.

Nikon UK Ltd

Distributors of a wide range of microscopes with biological, scientific and industrial applications including research, inverted, fluorescence and polarising microscopy.

NIPA Laboratories Ltd

Nipa Industrial Estate, Lantwit Fardre Pontypridd, Mid Glamorgan CF38 2SN.

Manufacture antimicrobials.

Niro Atomizer Ltd

30 Clarendon Road, Watford, Herts WD1 1JJ.

Tel: 0923 52955 Telex: 24077 atomna Fa

atomna Fax: 0923 249609

Supplies dewatering equipment for pharmaceutical and biological products; cooling, drying, coating, encapsulation, agglomeration, solid/liquid extraction etc. Also spray driers, fluidized bed driers, reverse osmosis, spray fluidizers, flash driers and continuous extraction as well as aqueous and organic solvent systems for sterile and non-sterile products. Subsidiary of Niro AS, Denmark.

Nissei Sangyo Co Ltd

Unit 4 Sutton's Industrial Park, Reading, Berks. Tel: (0734) 664149 Telex: 849823

Distributes analytical equipment of Hitachi including microprocessor-controlled spectrophotometers.

Nordic Immunological Laboratories Ltd

Dairy House, Moneyrow Green, Holyport, Maidenhead, Berks. Tel: 0628 24978 Telex: 847823

Supplies immunological and biological reagents. Subsidiary of Nordic Immunological Laboratories, Netherlands.

Norit (UK) Ltd

Clydesmill Place, Cambuslang Industrial Estate, Glasgow G32 8RF. Tel: (041) 641 8841 Telex: 777880 Fax: 041 641 0742

Manufactures activated carbon products for use in adsorption and catalysis with applications in fermentation, waste water treatment and as a support material for enzymes and bacterial systems.

North East Biotechnology Centre

Chemical Engineering Department Teesside Polytechnic Borough Road, Middlesborough, Cleveland TS1 3BA. Tel: 0642 218121

Consortium formed between Teesside and Sunderland Polytechnics to promote the development of biotechnology and to provide central facilities for industries in the North East requiring specialised aid in developing products aimed at the biotechnological markets. Can accomodate work ranging from micro-analytical scale to large pilot scale operations. Working on aspects of fermentation and recovery of intracellular enzymes, as well as scale-up of fungal fermentation.

Northeast Biomedical Laboratories Ltd

PO Box 45, Uxbridge, Middx UB9 6QJ. Tel: (089 582) 367 Telex: 23152

Manufactures and distributes biological products for immunology, including antiserums to human and animal proteins, histochemical and immunoenzymology reagents, immunoglobulins, blood proteins, tissues, glands, organs and extracts. Also produces antiserums and other products on a contract basis.

Northern Environmental Consultants Ltd

No 1 Industrial Estate, Medomsley Rd, Consett, Co Durham DH8 6SS. Tel: 0207 507254

A contract research organisation concerned with pollution control, waste treatment and environmental monitoring. Activities include aspects of the recovery of metals from wastes based on the use of microorganisms and higher plants.

Northern Media Supply plc

Supply environment shakers with controlled temperature and humidity, homogenizers and centrifuges.

Northumbria Biologicals Ltd

South Nelson Industrial Estate, Cramlington, Northumbria NE23 9HL. Tel: 0670 732992 Telex: 538239 nbl Fax: 0670 732537

Develops and markets immunodiagnostics, viral diagnostics and monoclonal antibodies. Products include Chlamydia trachomatis, direct immunofluorescence, in vitro test kit.

Northumbrian Water Authority

Northumbria House, Regent Centre, Gosforth, Newcastle upon Tyne NE3

Tel: 091 2843151

Regional water authority using both aerobic and anaerobic processes, including activated sludge and biological filters for treatment of sewage and industrial effluents.

Norton Performance Plastics

Chesterton Works, Loomer Road, Newcastle, Staffs ST5 7HR. Tel: 0782 563726

Manufacture PTFE, fluoropolymer and thermoplastic elastomer products for biotechnology including tubing, fluid handling systems, pumps, valves and fittings and laboratory ware, resistant to chemicals and high temperature, inert seals, medical tubing, filter material and gas sampling bags.

Nottingham University

Biochemical Engineering Group

Department of Chemical Engineering, University Park, Nottingham NG7 2RD.

Tel: 0602 506101

Developing systems for down-stream processing and recovery of by-products in biotechnical processes as well as carrying out research on anaerobic digestion and ethanol fermentation including dehydration processes.

Nottingham University

In Vitro Conservation Group

School of Agriculture, Sutton Bonington, Loughborough LE12 5RD. Tel: 0602 506101

Carrying out research on plant propagation using tissue culture techniques for the conservation of plant genetic resources including culture storage by growth limitation as well as cryopreservation.

Nottingham University

Botany Department Plant Genetic Manipulation Group

University Park, Nottingham NG7 2RD.

Tel: (0602) 56101

Has a plant genetic manipulation group involved in basic and applied research in the field of somatic hybridization of plants using protoplast fusion techniques.

Novabiochem (UK) Ltd

3 Heathcoat Building, Highfields Science Park, University Boulevard, Nottingham NG7 1BR.

Tel: 0602 430840 Fax: 0602 430951

Offers custom synthesis and bulk quantities in a wide range of biochemicals and related products including amino acids and derivatives, biologically active peptides, lipids and phospholipids, enzymes, enzyme substrates and inhibitors, serum proteins, immobilized enzymes and proteins, antibodies and antiserums, leukotrienes, carbohydrates and lectins as well as biocides and preservatives for biochemistry. Subsidiary of Novabiochem AG, Switzerland.

Novo Biolabs Ltd

Downham House, Downham's Lane, Milton Rd, Cambridge CB4 1XG.

Sales: Dirac House, Cowley Rd, Cambridge CB4 4WS. Tel: 0223 421060 Tx: 817739 Fax: 0223 420019

Developing diagnostic tests based on monoclonal antibodies combined with enzyme amplification, as well as supplying spectrophotometric systems linked to microprocessors capable of reading and calibrating a 96-sample microplate within 1 minute. (formerly I Q Bio, now also incorporates Celltech Diagnostics). Subsidiary of Novo Industri, Denmark.

Novo Laboratories Ltd

Pharmaceuticals Division

Ringway House, Bell Road, Daneshill East, Basingstoke, Hants RG24 00N.

Tel: (0256) 55055 Telex: 858700 novouk

Produces antibacterials and antimicrobials (including amoxicillin, neomycin, penicillin, polymyxin, streptomycin, tetracycline), high-purity insulin, hormones, preparations for the treatment of circulatory disorders and clinical diagnostics. Subsidiary of Novo Industri AS, Denmark.

Nuclear Enterprises Ltd

Bath Rd, Beenham, Reading RG7 5PR. Tel: 0734 712121 Tx: 848475

Supplies a range of isotope counters including models designed for life sciences adapted to radioimmunoassay and high performance liquid chromatography, microprocessor-based gamma-counters with dedicated software for multiuser use and specific routines, such as hepatitis and T3 uptake immunoassay, multisample counters (combined with desk top computer and software), radioactivity monitor for use with a wide range of isotopes and simple manual liquid scintillation counters. Also markets scintillation fluids.

Nycomed (UK) Ltd

Nycomed House, 2111 Coventry Road Sheldon, Birmingham B26 3EA. Tel: 021 742 2444

Supply separation media for cell and subcellular particle isolation techniques.

Nygaard (UK) Ltd

Mylen House, 11 Wagon Lane, Sheldon, Birmingham B26 3DU. Tel: (021) 742 8806 Telex: 338908

Supplies research chemicals including media for cell separations, clinical diagnostics and pharmaceuticals (see Nyegaard & Co, Norway).

Oceanus Cultures

2a Shiel House, Craigshill, Livingston EH54 5EH.

Tel: 0506 32871 Fax: 0506 35482

 $Developing\ techniques\ of\ microalgal\ production\ of\ pharmaceuticals.$

Olympus Optical Co (UK) Ltd

2-8 Honduras St, London EC1Y 0TX.

Tel: 01 250 0179

Manufacture a wide range of microscopes, cameras, combined systems and other optical devices including Nomarski differential interference contrast attachments as well as standard phase contrast or fluorescent contrast light microscopy and other systems offering oblique, bright-field and dark-field illumination.

Omega Diagnostics Ltd

Develops, manufactures and markets immunological reagents and diagnostic kits for infectious diseases including STDs, pregnancy tests and rheumatoid arthritis, based on enzyme immunoassay and latex technology.

Omex Agriculture Ltd

Bardney Airfield, Tupholme, Lincoln LN3 5TP. Tel: 0526 398661 Fax: 0526 398147

Distributes products including enzymes and microbial products, which have uses in agriculture to aid breakdown of straw and stubble as well as to promote plant growth.

Open University

Biophysics Group Oxford Research Unit

Foxcombe Hall, Berkley Rd, Boars Hill, Oxford OX1 5HR. Tel: 0865 730031

Studying the polyelectrolyte behaviour of biological gels of importance in biology and food technology including muscle, the cornea and lens of the eye as well as the proteins and polysaccharides derived from them.

Open University

Alternative Technology Group

Milton Keynes MK7 6AA.

Developing a rural community biogas plant in order to assess the technical and social feasibility of such systems in Indian villages.

Optec Ltd

11 Littleworth Common Rd, Esher, Kent KT10 9UE. Tel: 0372 64529 Telex: 8951417

Contract and design engineering company with experience in single-cell protein, fuel alcohol, anaerobic digestion, waste treatment and recovery of valuable products from wastes.

Optical Activity Ltd

Bury Road Industrial Estate, Ramsey, Huntingdon, Cambs PE17 1NA. Tel: (0487) 813913 Telex: 32680

Manufactures simple and automated polarimeters.

Optical Services (Croydon) Ltd

166 Anerley Road, London SE20 8BD. *Tel*: (01) 788 7278

Supplies a wide range of optical microscopes including stereo and inverted systems of most makes. Specialise in the servicing of optical microscopes.

Orbisphere Laboratories

Staveley Hall, Staveley, Chesterfield. *Tel*: 0246 476226

Manufacture dissolved oxygen analyzers fitted with membrane isolated polarographic sensors which can be sterilized in situ.

Organon Laboratories Ltd

Newhouse, Motherwell, Lanarkshire ML1 5SH. Tel: 0698 732611 Telex: 777927 Fax: 0698 732084

Carrying out research, development and marketing of pharmaceuticals.

Organon Teknika Ltd

Cambridge Science Park, Milton Rd, Cambridge CB4 4FL.

Tel: 0223 423650 Telex: 818866 orgcam Fax: 0223 420264

Supplies immunological and biological reagents (see Organon Teknika, US)

Orme Scientific

PO Box 3 Stakehill Industrial Park, Middleton, Manchester ME24 2RH. Supplies a wide range of equipment including preparative scale liquid chromatographs, HPLC equipment, spectrophotometers etc, as well as Whatman and Desaga thin layer products.

Oros Instruments Ltd

715 Banbury Avenue, Slough SL1 4LJ. Tel: 0753 693555 Fax: 0753 691774

Develop and manufacture controlled protein purification systems. The systems have built in safety features combined with high level software to give maximum flexibility.

Ortho Diagnostics Systems Ltd

Enterprise House, Station Rd, Loudwater, High Wycombe, Bucks HP10 9UF.

Supplies laboratory reagents and control solutions for diagnostic use (see Ortho Pharmaceutical Co, US).

OSWEL DNA Service

OSWEL DNA Unit

Chemistry Department Edinburgh University, West Mains Road, Edinburgh EH9 3JJ.

Tel: 031 667 1081 Fax: 031 662 4054

Provides custom made oligonucleotides, methyl phosphonate, phosphorothioate as well as aminotagged and biotinylated DNA.

Oxford Biomedical Ltd

The Spendlove Research Centre, Enstone Rd, Charlbury, Oxfordshire OX7 3PQ.

Offers consultancy to the independent medical sector and provides contract clinical research in diagnostics and Phase I-IV testing facilities for the pharmaceutical industries.

Oxford University

Department of Chemical Pathology

Sir William Dunn School of Pathology, South Parks Rd, Oxford. Tel: 0865 57321

Studing aspects of eukaryotic gene expression using a model system based on human globin as well as cloning the genes for fibronectin, lipid carrier proteins and ATPases. Also working on the determination of the structure and expression of these genes.

Oxford University

Genetics Laboratory

South Parks Road, Oxford OX1 3PF.

Studying human chromosome structure, linkage mapping of chromosomes, control of synthesis of serum proteins and cell surface antigens in Drosophila.

Oxford University

Microbiology Unit

South Parks Road, Oxford OX1 3PF.

Studying molecular biology of plasmids in Staphylococcus, as well as biochemistry and genetics of spore formation.

Oxford University

Department of Biochemistry

South Parks Road, Oxford OX1 3QU.

Carrying out the following studies: mechanism of enzyme action; molecular basis of recognition in the immune response; the expression of mammalian genes in yeasts and control of individual genes by steroids. Also includes the Oligosaccharide Research Group.

Oxford University

Liaison Unit

University Offices, Wellington Square, Oxford OX1 2JD. Tel: (0865) 56747

Coordinates interaction between the university and industry.

Oxford Virology Ltd

10 Storey's Gate, Westminster, London SW1P 3AY. Tel: 01 2229272 Telex: 24955 Fax: 01 2223791

Developing OTC tests for ovulation, cholesterol and Alzheimer's disease as well as human and veterinary diagnostics, vaccines and biological control systems using baculovirus.

Oxoid Ltd

Wade Road, Basingstoke, Hants RG24 0PW.

Tel: 0256 841144 Telex: 858793 Fax: 0256 463388

Supply high-quality extracts, hydrolyzates, peptones and agars, as well as complete formulations as dehydrated culture media for laboratory culture of microorganisms and cell lines.

P & S Biochemicals Ltd

38 Queensland Street, Liverpool, Merseyside L7 3JG.

Tel: (051) 709 4701 Telex: 627694

Supply Afl II, Alu I, Ava III, EcoRV, Hinde II, Hinf I, Kpn I, Sac I, Sau3A, Sea I, Sma I, Taq I and Xba. Also supply reagents for DNA technology including lambda packaging systems and nucleotide synthesis systems of Promega Biotech, US.

PA Technology

Cambridge Laboratory, Melbourn, Royston, Herts SG8 6DP. Tel: 0763 61222 Cables: 81561 Fax: 0763 60023

Carries out contract research as well as all aspects of new product and process development in all areas of industry, including biotechnology. Interested in genetic manipulation, enzyme technology, medical biosensors, monoclonal antibody production, plant tissue culture, applied microbiology etc. Research facilities located at Cambridge provide support for other branches in the UK, the US, Belgium and Australia.

Paar Scientific Ltd

594 Kingston Road, Raynes Park, London SW20 8DN.

Tel: 01 540 8553 Telex: 938292 Fax: 01 543 8727

Manufacture a digital densimeter for determination of fluid density suited to applications in food and pharmaceutical industries replacing hydrometry measurements on products such as alcoholic beverages, flavours and fragrances, cosmetics and perfumes, drug formulations and blood products.

Pafra Ltd

150 Cambridge Science Park, Cambridge CB4 4GG. Tel: 0223 862921 Telex: 995241

Produce synthetic adhesives and developing low temperature preservation techniques for biological materials.

Paisley College of Technology

Department of Biology

High St, Paisley, Renfrewshire PA1 2BE. Tel: 041 887 1241

Carrying out research on the biodegradation of lignocellulose as well as purification and immobilization of enzymes.

Pall Process Filtration Ltd

BioSupport Division

Europa House, Havant Street, Portsmouth, Hants PO1 3PD. Tel: 0705 753545 Telex: 86251 Fax: 0705 831324

Develops and manufactures a wide range of high performance filter cartridges, filter housings, disposable capsules and discs for use in research and product development in biotechnology and health care related activities. Typical applications include sterile fermenter gas systems, containment, product and media sterilization, prefilters and downstream processing. The BioSupport Division produces a range of high quality microporous membranes which are specifically designed for nucleic acid transfer techniques and for incorporation into a variety of diagnostic devices.

PAM Laboratories Ltd

34 Clarence Avenue, Cliftonville, Margate, Kent CT9 3DR. Tel: 0843 227737

Carrying our research in veterinary products. Have developed adjuvin, synthetic cell-growth promoter.

Parke Davis Research Unit

Addenbrooke's Hospital Site, Hills Road, Cambridge CB2 2QB. Tel: 0223 210929

Research Centre specializing in the development of drugs for treatment of neurobiological diseases. Part of Warner Lambert, US.

Paterson Candy International Ltd

RO Division

Laverstoke Mill, Whitchurch, Hants RG28 7NR.

Tel: 0256 892360 Telex: 858128 Fax: 0256 893835

Manufactures industrial membranes and equipment for reverse osmosis applications, such as concentration of effluents from fermentation processes, resulting in permeate streams of low chemical oxygen demand.

Pauls Malt Ltd

Key Street, Ipswich IP4 1BX.

Tel: (0473) 56711 Telex: 98412

Manufacturers of brewing malt.

PB Gelatins UK Ltd

Treforest Industrial Estate, Pontypridd, Mid Glamorgan. Tel: 044 385 2464 Telex: 498341

Produces gelatins for the pharmaceutical industry.

Peboc Ltd

Industrial Estate, Llangefni, Gwynedd LL77 7YQ.
Tel: 0248 72274 Telex: 61379 Fax: 0248 723890

Manufacturer of vitamin D3 (cholecalciferol), pharmaceuticals and research biochemicals.

Pendar Environmental Ltd

Hamp Industrial Estate, Old Taunton Road, Bridgewater, Somerset TA6 3NT.

Manufactures packaged water treatment plant for small communities, as well as a rotating biological contactor for sewage treatment.

Peninsula Laboratories Europe Ltd

PO Box 72, 17K West Side Industrial Estate, Jackson St, St Helen's, Merseyside WA9 3AJ.

Tel: 0744 30064/612108 Telex: 629705 peneur Fax: 0744 30064

Produce a wide range of synthetic peptides and offer a custom synthesis service. Quantities ranging from milligrams to kilograms of high purity product can be supplied. Also supply BOC- and FMOC- amino acid derivatives, resins for synthesis, isolated proteins, peptide antiserums, monclonal antibodies and nucleotide products.

Penrhos Electronics Ltd

Westfields Trading Estate, Grandstand Rd, Hereford HR4 9PA. Tel: 0432 269890 Telex: 946240

Produces devices for process control and monitoring suitable for use in industrial fermentations in the brewery, dairy and food industries.

Perifleur Ltd

Hangleton Lane, Ferring, Worthing, West Sussex BN12 6PP. Tel: (0903) 45944 Telex: 877805

Involved in plant breeding using both conventional techniques and mutation induction and use of plant growth regulators to produce new varieties. Also produces horticultural aids including reflective insect screens.

Perkin-Elmer Ltd

Post Office Lane, Beaconsfield, Bucks HP9 1QA.
Tel: 0494 676161 Telex: 83257 Fax: 0494 678324

Supplies instruments and accessories for chromatography and spectroscopy including a laser sampling system (see Perkin Elmer Corp, US).

Peter Hand (GB) Ltd

15-19 Church Rd, Stanmore, Middx HA7 4AR.

Tel: 01 954 7422 Telex: 922029 phgbuk Fax: 01 954 1897

Manufacture vitamin, trace element and medicated premixes for use in animal feeds; carrying out research into the production of vitamins, vaccines, antibiotics and amino acids using fermentation and recombinant DNA technology.

Peter Swan & Sons Ltd

31/33 Peffermill Industrial Estate, Kingshaugh, Edinburgh EH16 5UY. Tel: 031 667 5596 Fax: 031 659 6541

Manufacture and supply ultra low storage freezer, environmental equipment and laboratory equipment.

Peteric Instrumentation Ltd

Shepperton Studio Centre, Studios Road, Shepperton, Middx TW17 0QD. Tel: (09328) 64319/64310

Manufacture microbiological safety cabinets.

Pfizer Ltd

Central Research

Ramsgate Road, Sandwich, Kent CT13 9NJ. Tel: (0304) 616161 Telex: 96144

Manufacturer of pharmaceuticals, fine chemicals, food additives and animal health products. Subsidiary of Pfizer Inc, US.

Pharmaceutical Proteins Ltd

10 The Paddock, Harston, Cambridge CB2 5PR. Tel: 0223 872253

Kings Building, West Mains Road, Edinburgh EH9 3JQ. Tel: 031 6676901

Develops products based on high value proteins with therapeutic applications in medicine. Has close links with the AFRC Edinburgh Research Station which has developed techniques for cloning genes into large animals that can be used to extend the range of proteins available for use in medicine via milk etc.

Pharmacia Biotechnology

Pharmacia Ltd Fine Chemicals Division

Pharmacia House, Midsummer Boulevard, Milton Keynes, Bucks MK9 3HP.

Tel: 0908 661101 Telex: 826778 Fax: 0908 690091

Supplies a wide range of over 2200 products for molecular biology and biochemical research including DNA plasmid strains, such as pUC4K, for cloning DNA. The strains can be used for inserting restriction sites into cloned DNA or used for construction of new vectors. Products also include non-isotopic and isotopic kits for free T4 measurement. Formed following a merger of Pharmacia Fine Chemicals, Sweden with P-L Biochemicals Inc.

Pharmacia-LKB Biochrom Ltd

Science Park, Milton Road, Cambridge CB4 4FJ. Tel. 0223 69722 Telex: 817210 Fax: 0223 311164

Manufactures equipment for biomedical research including separation of macromolecules by liquid chromatography, electrophoresis, electrofocusing, isotachophoresis, fraction collectors and chromatographic gradient formers, as well as microtomy, calorimetry and laboratory fermentation equipment. Subsidiary of Pharmacia-LKB AB, Sweden.

Pharmacia-LKB Instruments Ltd

232 Addington Road, Selsdon, Croydon, Surrey CR2 8YD. Tel: (01) 657 8822 Telex: 264414

Supplies instruments and chemicals for liquid chromatography, electrophoresis, isotachophoresis, electrofocusing, microtomy, fermentation and calorimetry (see Pharmacia-LKB AB, Sweden).

Phase Separations Ltd

Deeside Industrial Park, Deeside, Clwyd CH5 2NU. Tel: 0244 816816/816444 Telex: 61459 Fa Fax: 0244 821232

Manufactures adsorption media for high performance liquid chromatography, total organic carbon analyzers, flow meters and event markers. Distributes reagents and accessories for HPLC and gas chromatography

Phenomenex Ltd

3-5 Weighhouse St, London W1Y 1YL. Tel: 01 629 1015

Fax: 01 493 8745 Telex: 266708

Supply equipment and accessories for affinity chromatography, gel filtration and HPLC. Subsidiary of Phenomenex, US.

Philip Harris Biological Ltd

Oldmixon, Weston-super-Mare, Avon BS24 9BJ. Tel: 0934 413063 Telex: 449248

Produces materials and resources for teaching science including kits aimed at demonstration of aspects of enzymology, immunology, tissue culture, biochemistry and food technology.

Philips Scientific

Analytical Division

York St, Cambridge CB1 2PX.

Telex: 817331 Tel: 0223 358866 Fax: 0223 312764

Manufacture analytical transmission electron microscopes for use in life sciences as well as other electronic apparatus (see Pye Unicam, UK). Also provide a range of general laboratory instruments and consumables for spectroscopy, electrochemistry and chromatography.

PHLS Centre for Applied Microbiology and Research

Division of Biotechnology

Porton Down, Salisbury, Wilts SP4 0JG. Tel: 0980 610391 Telex: 47683 phcamr Fax: 0980 611096

Carries out reseach and development in areas of enzymes, vaccines and diagnostics, including both ELISA and radioimmunoassays for detection of toxins in foods, using fermentation and recombinant DNA technologies.

Photo Bioreactors Ltd

Sonning Farm, Charvil Lane, Sonning, Reading, Berks RG4 0TH. Tel: 0734 691130 Telex: 83389 Fax: 0494 459540

Carrying out research and development of algal culture, harvesting and processing technologies for algal products with applications in the food and fees industries. Products include fish food, beta-carotene, unsaturated fatty acids, agar and Spirulina.

Phylax

4 Mynchen Rd, Beaconsfield, Bucks HP9 2AS. Tel: 049 46 5758 Telex: 8950511

Contract research organisation developing products for the pharmaceutical and health care industries. Areas of interest include development of new plant varieties using cloning techniques, production of food additives and fatty acids, proteins and peptides) by fermentation and the use of monoclonal antibodies in diagnostics.

Physiological Instruments Ltd

Whitland Abbey, Whitland, Dyfed SA34 0LG. Tel: 0994 240798 Telex: 48523

Manufacture sensors for use with medical instruments including oxygen analyzers and transcutaneous oxygen/carbon dioxide monitors.

Phytomer Plant Development

Haploid House, Terrinton St Clement, King's Lynn, Norfolk PE34 4NP. Tel: (0553) 829080

Using plant tissue culture to produce new varieties of plants as well as

Pierce and Warriner (UK) Ltd

44 Upper Norgate Street, Chester, Cheshire CH1 4EF. Tel: 0244 382525 Telex: 617057 piewar Fax: Fax: 0244 373212 Telex: 617057 piewar

Distributors of high quality products within the fields of chromatography, bioseparations, immunology, biotechnology, sample handling and diagnostics. Suppliers include Pierce Chemicals and Spectrum Medical

Pierce (UK) Ltd

36 Clifton Road, Cambridge CB1 4ZR. Tel: (0223) 214525 Telex: 817969 pierce

Supplies accessories for chromatography as well as reagents for protein synthesis and sequencing etc (see Pierce Chemical Co, US).

Pilkington Brothers plc

R&D Laboratories

Lathom, Ormskirk, Lancs L40 5UF. Tel: (0695) 73801 Telex: 629909

New Opportunities Dept:, Prescott Rd, St Helens, Merseyside WA10 3TT. Tel: 0744 692515 Tx: 627441

Developing controlled release glass systems for trace elements, metal biocides, biosensors and glass supports for use in immobilization of cells and enzymes.

Pilkington Brothers plc

Prescot Rd, St Helens, Merseyside WA10 3TT.

Tel: 0744 692515 Telex: 627441

Research and Development Laboratories, Lathom, Ormskirk, Lancashire L40 5UE

Tel: 0695 73801 Tlx: 629909

Developing controlled release products for administration of trace elements to plants or animals as well as for use in veterinary medicine and human health care as pharmaceutical delivery systems.

Planar Biomed

Fax: 09327 81151

Supply freezing and storage equipment including ultra-low temperature systems, cryo gloves, etc. A division of Planar Products Ltd.

Plant Breeding International Cambridge

Formerly AFRC Plant Breeding Institute

Maris Lane, Trumpington, Cambridge CB2 2LQ. Tel: 0223 840411

Existing breeding programmes on wheat, barley, potato, oilseed and leguminous crops are continuing with genetic engineering for improvement of crop yield, quality and disease resistance as well as modification of the fatty acid composition of oilseed crops. Subsidiary of Unilever.

Plant Science Ltd

317 Glossop Road, Sheffield, S Yorks S10 2HP.

Tel: 0742 768555 Telex: 547216 Fax: 0742 739826

Contract research organization working in the areas of plant tissue culture and plant propagation.

Polaron Equipment Ltd

53-63 Greenhill Crescent, Watford Business Park, Watford, Herts WD1

Tel: (0923) 37144 Telex: 922080

Develops and manufactures specimen preparation equipment for electron microscopy. Supplies chemicals and materials for embedding, staining etc, including a computerized grid stainer.

Polcon Environmental Control Systems Ltd

High Street, Much Hadham, Herts SG10 6DA. Tel: (027 984) 3101 Telex: 81774

Supplies aeration and gas-stirring equipment for use in aerobic wastewater treatment or for sludge agitation in anaerobic digesters.

Polyclonal Antibodies Ltd

Blaenwaun Farm, Ffostrasol nr LLandysul, Dyed SA44 5JT. Tel: 0239 75378 Fax: 0239 758814

Produce antiserums under contract for use in immunodiagnostics. Products include normal animal serums as well as first and second antibodies from sheep, donkeys and goats.

Polymer Laboratories Ltd

Essex Road, Shrewsbury SY6 6AX.

Tel: 0694 723581 Telex: 356213 Fax: 0694 722171

Supplies calibration standards for gel permeation chromatography and fine research chemicals, including custom synthesis.

Polysciences Ltd

24 Low Farm Place, Moulton Park, Northampton NN3 1HY. Tel: 0604 46496 Telex: 312646 Fax: 0604 48241

Supply high-purity chemicals for use in research and industry, with applications to microscopy, immunology, electrophoresis and affinity chromatography.

Polysystems Ltd

9 South Avenue, Clydebank Business Park, Glasgow G2 8BP. Tel: 041 941 3626 Fax: 041 952 9473 Telex: 776245

Manufacture and develop controlled drug release systems.

Porton Products Ltd

Porton Down, Salisbury, Wiltshire SP4 0JG. Tel: 0980 610787 Telex: 47525 Fax Fax: 0980 610896

Porton House, Vanwall Rd, Maidenhead, Berks SL6 4UB.

Tel: 0628 771417 Fax: 0628 770122

Produce monoclonal antibodies, nucleases, enzyme immunoassays, diagnostic kits and reagents for blood, controls and supports for affinity chromatography, biochemicals including protein A, streptavidin, salicylate and paracetamol assays.

Powell & Scholefield Ltd

38 Queensland Street, Liverpool L7 3JG. Tel: 051 708 7208

Supplies enzymes for the brewing industry, including bacterial and fungal amylases, glucanases and proteases, including plant-derived enzymes.

Premier Breeders Ltd

Vallum Farm, Military Rd, Stamfordham, Newcastle upon Tyne NE18 OLL.

Tel: 043 472 331 Telex: 537544 Fax: 043 472 295

Supplies embryos and markets Holstein and Friesian semen. Part of Agricultural Technology group, UK.

Prestige Plants

PO Box 8, Largs, Ayrshire KA30 8SJ. Tel: 0294 822904 Telex: 778185

Plant tissue culture laboratory for production of ornamental plantlets using micropropagation techniques

Pro-Lab Diagnostics

PO Box 57, Bury, Lancs BL9 7UL. Tel: 061 764 3078

Products include a latex test for Legionella.

Prochem BOC Ltd

24 Deer Park, London SW19 3UF. Tel: (01) 542 6677 Telex: 928154

Produces deuterated solvents, stable isotopes and enriched compounds. Subsidiary of BOC plc, UK.

Proctor & Gamble Co Ltd

Hedley House, St Nicholas Avenue, Gosforth, Newcastle upon Tyne NE99

Tel: (0632) 857141 Telex: 53320

Produces fatty acids, stearic acids, fatty alcohols and animal feeds.

Produce Studies Ltd

Northcroft House, West St, Newbury, Berks RG13 1HD. Tel: 0635 46112 Telex: 849228 Fax: 0635 43945

Offer consultancy to the agriculture and food industries carrying out surveys, market intelligence, formulation development, least cost formulation programmes, small scale production of new products for test marketing and crop forecasting.

Purac Ltd

MCD House, Birmingham Road, Kidderminster, Worcs DY10 2SH. Tel: (0562) 744818 Telex: 338472

Engineering contractors for the design of systems for treatment of domestic and industrial wastewaters by conventional aerobic methods.

PWT Projects Ltd

Permutit House, 632-652 London Road, Isleworth, Middx TW7 4EZ. Tel: 01 560 5199 Telex: 24440 Fax: 01 568 5479

Provides a complete water-treatment service from consultation, through design to installation and commissioning. Interests include filtration, ion exchange, reverse osmosis, electrodialysis, desalination and water recycling.

Pye Unicam Ltd

York Street, Cambridge CB1 2PX. Telex: 817331 Tel: (0223) 358866

Manufactures instruments for laboratory use and industrial applications in spectrophotometry and chromatography including ultra-violet, visible and atomic absorption spectrophotometers. Also produce equipment and accessories for gas and liquid chromatography, including fully microprocessor-controlled systems. Subsidiary of Philips NV, Netherlands.

QMC Industrial Research Ltd

229 Mile End Road, London EC1 4AA. Tel: 01 980 4811 Telex: 28905 ref 980

Research and development company based at Queen Mary College, University of London, UK. The biotechnology section carries out contract research, feasibility studies and consultancy in: microbial enhanced oil recovery and upgrading of oil and coal; biological treatment of oil and metal-contaminated waste; microbial corrosion and souring of oil; screening for novel microbial products; marine biofouling; molluscicides; novel insecticides; pollution monitoring; wood preservation and plant protection; surveys of biotechnological opportunities for industry.

Quadrant Bioresources Ltd

Manor Farm, Soulbury Nr Leighton Buzzard, Bedfordshire. Tel: 0525 27382

Has developed a process for protecting proteins, enzymes, antigens and polysaccharides with a matrix impregnated with trehalose.

Ouantitech Ltd

75 Garamonde Drive, Wymbush, Milton Keynes, Bucks MK8 8DD. Tel: (0908) 564141

Supplies gas analyzers for use in monitoring toxic gases and vapours.

Queen's University Belfast

Biotechnology Steering Group

Belfast BT7 1NN.

Tel: 0232 45133

Coordinates the activities of those departments which are involved in biotechnology including aspects of biological pest control, animal health products, the production of coenzymes and enzymes for use in diagnostic kits, the production of fungal single cell protein, techniques of enzyme immobilization and development of monitoring equipment.

Queen's University Belfast

Department of Microbiology Belfast BT7 1NN. Tel: (0232) 661111

Studying microbiology of river pollution.

Queen's University Belfast

Department of Agriculture Belfast BT7 1NN. Tel: (0232) 661166

Undertaking studies in the following subjects: Rhizobia, food spoilage by yeasts and fungi, production of mycotoxins in feedand foods, recycling of nitrogen and phosphorus in wastewaters and identification of meat-spoilage organisms.

R E Pickstone Equipment Ltd

Rutherford Way, Thetford, Norfolk. Tel: 0842 64264

Supply incubators.

R W Unwin & Co Ltd

Prospect Place, Welwyn, Herts AL6 9EW. Tel: (043 871) 6441

Supply a wide range of industrial and pharmaceutical chemicals including agar, alginates, nucleotides, amino acids, antibiotics (penicillin, tetracyclines, etc) and vitamins (E and K) in bulk form.

Radian Corp

3rd floor, Block B, Duke's Court, Duke St, Woking, Surrey GU21 5BH. Distributor of computer sample and analysis laboratory management systems of Radian, US.

Radiomatic Instruments & Chemicals Ltd

11 Lincoln Park Business Centre, Lincoln Road, High Wycombe, Bucks. Tel: (0494) 452216

Manufacture and supply a wide range of equipment and accessories for radioactive work including a a TLC scanner with colour graphics, sensitive detectors for HPLC including combined UV and radiation monitoring.

Randox Laboratories Ltd

55 Diamond Road, Crumlin, County Antrim BT29 4QY.
Tel: 084 94 22413 Telex: 748135 Fax: 084 94 52912

Manufactures enzymes for use in diagnostics and a range of diagnostic kits and quality control serum for clinical hospital and veterinary laboratories.

Rank Hovis McDougall

The RHM Centre, PO Box 178, Alma Rd, Windsor, Berks SL4 3ST. Tel: (07535) 57123

Produces seed. Engaged in manufacture, processing and marketing of flour starch and baked goods. Also produces gluten, starch and glucose syrups.

RAST Allergy Unit

Benenden Chest Hospital, Cranbrook, Kent TN17 4AX. Tel: 0580 240495

Developing assays on human serum.

Reading Scientific Services Ltd

Lord Zuckerman Research Centre, PO Box 234, Whiteknights, Reading RG6 2LA.

Offers biotechnology consultancy services in contract process research and analysis in relation to food technology, biochemistry, microbiology and fermentation, including advice on appropriate legislation on product safety testing and evaluation. Subsidiary of Cadbury Schwepps with access to additional facilities and expertise at the University of Reading.

Reading University

Dept of Food Science & Technology

PO Box 226, Whiteknights, Reading Berks RG6 2AP. Tel: 0734 875123

Carrying out research on aspects of enzymology, including enzyme sensors and the enzyme systems of edible and white rot fungi as well as working on fermented food, food spoilage by microbial activity, immobilized bacterial processes, rapid sensing methods, protein functionality and the characterization of foodstuffs. Also investigating bioreactor system design including aspects of fixed film and baffled fermenters as well as membrane separation techniques and other downstream processes.

Reading University

Environmental Biotechnology Group

Department of Microbiology, London Road, Reading, Berks RG1 5AQ. Tel: 0734 875234

Carrying out research on the microbiological decomposition of cellulosic materials in municipal wastes and agricultural residues as well as other aspects of biological treatments used in waste management. Microbiology Department also has a programme of research on insect/virus host relationships, mycobacteria/host interaction, and development of biological control systems.

Reckitt & Colman Ltd

Reckitt House, Stone Ferry Road, Hull, N Humberside HU8 8DD. Tel: $0482\ 223141\ Tx: 527032$

Produces antiseptics, starches, analgesics and other household goods.

Rees Immunoassays

Supplies immunological and biological reagents. Distributor for UCB Bioproducts, Belgium and Buhlmann Laboratories, Switzerland.

Reeve Analytical

73 Chapel Street, Glasgow, G20 9BD. Tel: 041 946 6303 Fax: 041 946 6303

Manufactures scientific instruments including radioactivity monitors designed for the measurement of weak emitters under chromatographic conditions and dedicated systems for use in HPLC with microprocessor control.

Regis Machinery (Sales) Ltd

Richmond Rd, Bognor Regis, Sussex PO21 1DP. Tel: 0243 825661 Telex: 86759

Supply a wide range of mixers, metering and blending machines as well as rotating disc filters, blenders, bag filling and weighing machines as well as pelletizers and heavy duty shredders.

Rheocal (Bucks) Ltd

12 Meadway Park, Gerrards Cross, Bucks. Tel: (02813) 83583

Developing methods for the use of polysaccharides in the recycling of paper and in seed sowing using a fluid drilling technique.

RHM Research and Engineering Ltd

The Lord Rank Research Centre, Lincoln Road, High Wycombe, Bucks HP12 3QR.

Carries out research and engineering relevant to production and manufacture of flour, starch and baked goods, Has developed a process for production of microbial protein based on a Fusarium mould. Part of Rank Hovis McDougall Group.

Rhone-Poulenc Ltd

formerly May & Baker Ltd

Dagenham, Essex RM10 7XS.

Tel: (01) 592 3060 Telex: 28691

Liverpool Rd, Eccles, Manchester M30 7RT.

Tel: 061 789 5878 Tx: 667023, Freepost: Eccles Manchester M30 7JZ

Produces pharmaceuticals, fine chemicals and agrochemicals. Member of the Rhone-Poulenc Group.

Riker Laboratories

1 Morley Street, Loughborough, Leics LE11 1EP. Tel: (0509) 268181

Manufactures aerosol inhalers and preparations for inhalation therapy. Subsidiary of 3-M Co, US.

Roche Products Ltd

PO Box 8, Welwyn Garden City, Herts AL7 3AY. Tel: 043 871 28128 Telex: 262098

Drakemire, Dalry, Ayrshire KA24 5JJ. Tel: 0294 832345 Tx: 777839 Fax: 0294 2700

Part of a major international pharmaceutical group producing a wide range of antimicrobials and other health care products, as well as diagnostic instruments including fibro-coagulation analyzers under the Cobas trademark (see Hoffmann-La Roche & Co AG, Switzerland).

Rodwell Scientific Instruments

199-209 Hornchurch Road, Hornchurch, Essex RM12 4TJ. Telex: 896666 Tel: (040 24) 48877

Supplies a wide range of laboratory autoclaves (2-600 litres) which can be modified to customer specifications. Accessories include assisted load cooling, water stills, anaerobic culture equipment, bench-top centrifuges, ovens and stirrer hot plates.

Rohm & Haas Co European Operations

Chesterfield House, 4th Floor, Barter Street, London WC1A 2TP. Tel: (01) 242 4455 Telex: 24139

Supplies radioimmunoassay equipment, enzymes and research chemicals (see Rohm & Haas Co. US).

Rohm and Haas (UK) Ltd

Lennig House, 2 Masons Avenue, Croydon, Surrey CR9 3NB. Telex: 917266 Tel. (01) 686 8844

Supplies radioimmunoassay equipment, reagents, enzymes, fine chemicals etc (see TosoHaas and Rohm & Haas Co, US).

Rohm Ltd Hexoran Division

Derwent Street, Belper, Derby DE5 1WQ.

Supplies enzymes, reagent-grade and fine chemicals (see Rohm GmbH, Germany).

Romil Chemicals

63 Ashby Rd, Shepshed, Loughborough, Leics LE12 9BS. Tel: 0509 505060 Telex: 342156 Fax: 0509 505487

Supply super purity solvents for HPLC packaged under nitrogen and ion-pair reagents.

Rosewater Engineering Ltd

Stonebroom Industrial Estate, Stonebroom, Derby DE5 6LQ. Tel: 0773 875017

Produce equipment for use in water treatment and sludge handling as well as fine bubble aeration systems and peristaltic sludge pumps.

Roth Scientific Co Ltd

Alpha House, 9-11 Alexandra Road, Farnborough, Hants GU14 6BU. Tel: 0252 513131 Telex: 858650

Supplies fermentation equipment and apparatus for high performance liquid chromatography.

Rothamsted Rhizobium Collection

Rothamsted Experimental Station

Harpenden, Hertfordshire.

Holds culture collection of bacteria for agricultural microbiology research.

Roussel Laboratories Ltd

Roussel House, Wembley Park, Middx HA9 0NE. Tel: (01) 903 1454

Major ethical pharmaceutical company. Subsidiary of Roussel-Uclaf, France.

Royal College of Surgeons of England

35-43 Lincolns Inn Fields, London WC2A 3PN. Tel: (01) 405 3474

Undertaking studies on monoclonal antibodies, techniques for animal cell culture and immunopharmacological function of various cell types.

Royal Free Hospital

Liposome Research Group School of Medicine, London NW3 2QC. Tel: 01 794 0500

Carrying out research on the use of liposomes for drug delivery and targeting as well as for use as immunological adjuvants in production of vaccines. Supported by the Medical Research Council, UK.

Rumenco

Stretton House, Derby Road, Burton-on-Trent Staffs DE13 0DW. Tel: 0283 61211

Produces silage inoculants as well as animal feeds and ingredients.

Russell pH Ltd

Station Road, Auchtermuchty, Fife KY14 7DP. Telex: 76598 Fax: 0337 28972 Tel: 0337 28871

Supply a wide range of electrodes for laboratory and industrial use including those suitable for use in fermenters. Electrodes include those for determination of pH, conductivity and specific ions and sterilizable and autoclavable types as well as custom-made electrodes. Also supply buffers and electrolytes.

Safelab Systems Ltd

Bush House, 72 Prince St, Bristol BS1 4HU.

Produce laboratory protective masks for protection from solvent fumes or aerosols.

Salford Ultrafine Chemicals

Enterprise House, Manchester Science Park, Lloyd St North, Manchester

Fax: 061 227 9758 Tel: 061 226 8774 Telex: 665509

R&D organization specializing in preparation of organic compounds not available in catalogues. Prepares biological reagents and biochemicals by custom synthesis.

Salford University

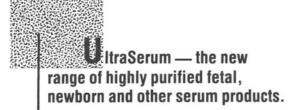
Department of Biochemistry Salford M5 4WT.

Tel: 061 736 5843

Carrying out research into aspects of food technology including the production of single cell protein and food additives as well as investigating conversion and up-grading of wastes to fermentation feedstocks.

Salter ARD

George St, West Bromwich, West Midlands B70 6AD. Telex: 337314 Tel: 021 553 1855



salzman corporation

The Salzman Corporation has 40 years experience as a major supplier of animal by-products to leading pharmaceutical companies throughout the world.

Contacts:- USA Salzman Corporation 308 East River Drive Davenport, Iowa, 52801 Tel. No. (319) 324 1028 Fax No. (319) 324 6221 Telex No. 6711608 SALZ. UW.

> EUROPE P.O. Box 189 Nottingham NG2 6JQ. U.K. Tel. No. 44 (0)602 233426 Fax No. 44 (0)602 452038



Salzman Corp

PO Box 189, Nottingham, NG2 6JQ. Tel: 0602 233426 Fax: 0602 452038

Supplies highly purified blood serums for use in cell culture, growth media and diagnostic assays, including foetal bovine serum, for pharmaceutical, vaccine and research use. Also supplies animal cells and tissues and culture media

Sandoz Products Ltd

Calverley Lane, Horsforth, Leeds, W Yorks LS18 4RP. Tel: (0532) 584646 Telex: 55411

Manufactures pharmaceuticals, agrochemicals and other products of Sandoz AG, Switzerland.

Saros Ltd

PO Box 805, Edinburgh EH14 7LS. Tel: 031 449 3814 Telex: 946240

Clinical research consultancy advising on product development and clinical research programmes.

Sarose Scientific Instruments

33-34 Sheraton Business Centre, Wadsworth Rd, Perivale, Middx UB6 7JB.

Tel: 01 997 5941

Supply laboratory equipment.

Sarstedt Ltd

68 Boston Rd, Leicester, LE4 1AW. Fax: 0533 366099 Tel: 0533 359023 Supplies a wide range of laboratory centrifuges.

Sartorious Filters Ltd

18 Avenue Road, Belmont, Sutton, Surrey SM2 6JD. Tel: (01) 642 8691 Telex: 946918 Fax: 01 642 1104

Supply membrane filters with a wide range of porosity, chemical composition, flow rate, working temperature, etc.

Longmead, Blenheim Rd, Epsom, Surrey KT19 9QN. Fax: 03727 20799 Tel: 03727 45811 Telex: 925108

Supply high-precision balances and scales.

SAS Pharmaceuticals Ltd

Victoria House, Vernon Place, London WC1B 4DF. Tel: (01) 404 5711 Telex: 24508

Supplies fine biochemicals, dyes, pharmaceuticals and medical equipment.

Satec Ltd

PO Box 12, Weston Road, Crewe, Cheshire CW1 1DE. Tel: 0270 584017 Telex: 36421 Fax: 0270 589863

Offers engineering and contracting services for waste water treatment as well as aerobic fungal fermentation systems for treatment of high BOD organic wastes with production of single cell protein.

Saunders Valve Co Ltd

Grange Rd, Cwmbran, Gwent NP44 3XX. *Tel*: 0633 838044 *Telex*: 498241 Fax: 0633 838413

Manufactures stainless steel diaphragm valves designed for sterile working in fermentation and other biological applications.

Saxon Micro Ltd

PO Box 28, Newmarket, Suffolk CB8 8NY. Tel: 0638 665120 Telex: 817114 Fax: 0638 663818

Supplier of HLA tray reading equipment, single-cell transfer micromanipulators, TV-based autoradiography systems, beta-radiation imaging systems, X-Y motorized stages for inverted microscopes, immunological and biological reagents, monoclonal antibodies against human markers and HLA reagents. Distributor for One Lambda, Pel-Freez and Cryomed, US.

Schaefer Instruments Ltd

9a Grove St, Wantage, Oxon OX12 7AB.

Tel: 02357 3412 Telex: 837943 Fax: 02357 3002

Supply a range of equipment for use in microbiology and fermentation. Products include a microbial sampler for determination of organisms in process and packing environments as well as multiple gas analyzers for determination of fermenter gas composition from up to 32 fermenters.

Schering Chemicals Ltd

Pharmaceutical Division

The Brow, Burgess Hill, West Sussex. Tel: (044 46) 6011 Telex: 87577

Markets pharmaceutical products of Schering AG Germany, especially steroids and oral contraceptives.

Schott Glass Ltd

Drummond Road, Stafford ST16 3EL. Tel: (0785) 46131

Manufacture capillary viscosity equipment, water stills and gas samplers, and supply a wide range of laboratory glassware, glass joints and glass tubing for use in the manufacture of scientific apparatus. Also manufacture sintered glass filter packing for bioreactor, effluent treatment

Scientific Glass Engineering (UK) Ltd

Potters Lane, Kiln Farm, Milton Keynes MK11 3LA. Tel: (0908) 568 844 Telex: 825017

Manufacture chromatography accessories, including packed HPLC columns, capillary column switching systems, column adaptors and a range of gas tight syringes.

Scientific Hospital Supplies Ltd

38 Queensland Street, Liverpool L7 3JG. *Tel*: (051) 708 8008 *Telex*: 627694

Supply a wide range of control solutions for clinical applications and diagnostics: serum controls, urine controls, sterilized saline for blood group serology, stabilized papain solution for antibody screening. Also supply antibiotic sensitivity screening test systems.

Scientific Lesser Ltd

The Causeway, Teddington, Middx TW11 8BR. Tel: (01) 977 8755 Telex: 934226

Specialise in the provision of completely serviced clean buildings for the pharmaceutical and similar industries.

Scotgen Ltd

Dept of Genetics, University of Aberdeen, 2 Tillydrone Avenue, Aberdeen AB9 2TN.

Tel: 0224 487030 Fax: 0224 487044

Carry out research and development in mammalian cell genetic manipulation and DNA probe technology.

Scotlab Analytical Ltd

15 Earn Avenue, Righead Industrial Estate, Bellshill ML4 3JQ. Telex: 779977 Fax: 0698 740593

Offer research services in bioanalytical and clinical pharmacology.

Scotlab Instrument Sales Ltd

Unit 15 Earn Avenue, Righead Industrial Estate, Bellshill ML4 3JQ. Telex: 779977 Fax: 0698 740593 Tel: 0698 841616

Manufacture and supply laboratory equipment, disposables and chemicals.

Scottish Crop Research Institute

Invergowrie, Dundee, DD2 5DA. Tel: 0382 562731

Carrying out a coordinated research programme aimed at improving the efficiency and predictability of crop production.

Scottish Development Agency

Health Care & Biotechnology Division

120 Bothwell Street, Glasgow G2 7JP.

Tel: 041 248 2700 Telex: 777600 Fax: 041 221 3217

Promote the commercial interests of Scottish companies in the medical and biotechnology sectors and attract investment in biotechnology and the establishment of new companies in Scotland.

Scottish Marine Biological Association

Dunstaffnage Marine Research Laboratory

Carries out research and development work on all aspects of marine science grant aided by the National Environmental Research Council as well as undertaking contract work. Research includes the development of feeds for use in fish farming as well as aspects of biogas production by anaerobic digestion of seaweed.

Scottish National Blood Transfusion Service

Protein Fractionation Centre

21 Ellen's Glen Rd, Edinburgh EH17 7QT. Tel: 031 664 2317 Telex: 72426

Manufactures a wide range of blood products derived from human plasma which are distributed for clinical use in the National Health Service. Products include albumins, immunoglobulins and coagulation factors. Developing continuous flow down stream processes and associated control systems as well as investigating the use of serums in animal cell culture and carrying out research aimed at developing mammalian cell lines and techniques for the preparation of therapeutic and diagnostic proteins.

Sequal Ltd

University of Aberdeen, Marischal College, Aberdeen AB9 1AS. Tel: (0224) 40241 Telex: 73458

Offers a contract service in the sequencing of nucleotides and peptides and in the synthesis of oligonucleotides and oligopeptides.

Sera-Lab Ltd

Hophurst Lane, Crawley Down, W Sussex RH10 4FF. Tel: (0342) 716366 Telex: 95317 serlab Fax: 0342 717351

Supplies blood serums, antiserums and monoclonal antibodies. Distributes monoclonal antibodies developed at MRC Cambridge UK.

Seravac

Manufacture enzymes including peroxidase, alkphosphatase, deoxyribonuclease, catalase, urease, hyaluronidase, trypsin, chymotrypsin,

SERC Biotechnology Directorate

SERC Central Office

Polaris House, North Star Avenue, Swindon SN2 1ET. Tel: 0793 26222

Provides research support for a full range of biotechnological projects.

Serono Diagnostics Ltd

21 Woking Business Park, Albert Drive, Woking, Surrey GU21 5JY. Telex: 859441 maia Fax: 0483 755889

Manufactures and distributes specialist immunoassays, haematology instruments and reagents, and clinical biochemistry reagents. Specialist immunoassays include those applicable to thyroid function testing, obstetrics and gynaecology, growth and metabolism, sex steroids, tumour markers and research products. A member of the Ares-Serono group.

Serono Laboratories Ltd

2 Tewin Court, Welwyn Garden City, Herts AL7 1AU.

Supply immunological and biological reagents. Member of the Ares-Serono Group.

Serotec Ltd

22 Bankside, Station Approach, Kidlington, Oxford OX5 1JE. Tel: 08675 79941 Telex: 838960 sertec Fax: 08675 3 Fax: 08675 3899

Manufacturers and suppliers of immunological reagents.

Servomex (UK) Ltd

Crowborough, East Sussex TN6 3DU.

Telex: 95113 Fax: 0892 662253 Tel: 0892 652181

Supply gas analyzers including oxygen and infra red units and process gas chromatographs. Undertake design and manufacture of complex analyzer

Severn Analytical Ltd

Unit 2B, St Francis Way, Shefford Industrial Park, Shefford, Beds SG17

Tel: 0462 816406 Fax: 0462 815892

Supply instrumentation and accessories for HPLC and SFC. Products include UV/visible, RI, fluorescence and electrochemical detectors, data systems, gradient controllers, pumps, autosamplers, SFC/GC systems and accessories

Severn-Trent Water Authority

Abelson House, 2297 Coventry Rd, Sheldon, Birmingham B26 3PU. Tel: 021 743 422226 Telex: 339333

A regional water authority engaged in both aerobic and anaerobic biological treatment of waste waters and sewage.

SGi (UK) Ltd

Avis Way, Newhaven, East Sussex BN9 0JX. Tel: 0273 517999 Telex: 877979 rigmor

Fax: 0273 513500

Manufactures a range of microbial fermenters and bioreactors for mammalian cell culture. Subsidiary of Moet Hennessy, France.

Shandon Scientific Ltd

Chadwick Road, Ashmoor, Runcorn, Cheshire WA7 1PR. Tel: 0928 566611 Telex: 627706 Fax: 0928 581078

Supplies materials including fixatives for histology, cytology, biochemistry and high performance liquid chromatography. Subsidiary of Shandon Southern Inc, US.

Shanks & McEwan (Southern) Ltd

69-71 Bromham Rd, Bedford Mk40 2BL. Tel: (0234) 327911 Telex: 825633

Developing technical and management aspects of landfill solid-waste disposal methods with generation of methane gas by anaerobic digestion for use as an energy source. Carrying out a joint research and development programme with the Department of Energy Technology Support Unit and Environmental Landfill Group at AERE Harwell, UK. Offers consultancy services in landfill design, management and technology.

Sheffield University

Molecular Genetics Group

Department of Microbiology, Sheffield S10 2TN.

Tel: 0742 78555

Investigating basic parameters which relate to the control of fermentation reactions as well as the regulation of enzyme and metabolite production by bacterial cultures.

Sheffield University

Liaison Unit

Mappin Street, Sheffield S1 3JD.

Tel: (0742) 78555

Handles industrial enquiries and arranges short or long-term research or development contracts or consultancies. Organizes courses for industry. Fosters links between departmental staff and industry.

Sheffield University

Wolfson Institute of Biotechnology

Sheffield S10 2TN.

Tel: (0742) 78555

Carrying out studies on the culture of plant cells for production of secondary metabolites, including large scale production of liquid suspension cultures, investigations of basic metabolism, etc. Undertakes consultancy and contract research on plant tissue culture.

Sheffield University

Department of Virology

Western Bank, Sheffield, S10 2TN.

Tel: 0742 766222

Carrying out viral research including the role of human papillomaviruses in cervical cancer, funded by the Yorkshire Cancer Research Campaign.

Sheffield University Department of Microbiology Culture Collection

Western Bank, Sheffield, Yorks S10 2TN.

Holds culture collection of bacteria for general microbiology research and

Shell Biosciences Laboratory

Sittingbourne Research Centre, Sittingbourne, Kent ME9 8AG. Tel: (0795) 24444 Telex: 96181

Carries out research relevant to production of agrochemicals.

Shell Research Ltd

Shell Centre, London SE1 7NA. Tel: 01 934 3277 Telex: 919651

Carries out research in relation to agriculture agrochemicals, food technology, pollution control, biomass energy systems recovery of oil and metals from deposits and the recycling of wastes and residues. Activities include use of plant tissue culture in propagation, fermentation to produce industrial chemicals enzymes and microbial leaching and the production of bioethanol.

Shield Diagnostics Ltd

Bellfield House, Bellfield St, Dundee DD1 5HT.

Telex: 76243 Fax: 0382 200783

Manufacture diagnostics for use in determination of levels of immune complexes in serum samples. Products include systems to monitor the IgG, IgM and IgA complexes. Developing further diagnostic kits for use in identification of specific antigens in immune complexes.

Siber Hegner Ltd

221-241 Beckenham Road, Beckenham, Kent BR3 4UF. Tel: (01) 659 2345 Telex: 946657

Supplies pharmaceuticals, vitamins, organic acids amino acids, fragrances, steroids and steroid intermediates, enzymes, rare sugars, natural plant isolates and derivatives.

Sigma Chemical Company Ltd

Fancy Road, Poole, Dorset BH17 7NH. Tel: 0202 733114 freephone: 0800 373731 Fax: 0202 715460

Telex: 418242 sigma

Supply a wide range of biochemicals and organic compounds for research as well as diagnostic kits and reagents.

Silverson Machines Ltd

Waterside, Chesham, Bucks HP5 1PQ. Tel: (0494) 786331 Telex: 837335

Supplies batch and continuous in-line, high-speed mixers, mills and homogenizers for chemical, pharmaceutical and cosmetic industries, as well as for laboratory use.

Simon Hartley Ltd

Etruria, Stoke on Trent, Staffs ST4 7BH. Tel: (0782) 29541. Telex: 36305

Coplastix Division:, Park Farm Industrial Estate, Crossgate Road,

Redditch, Worcs B98 7TA

Produces turn-key installations for wastewater treatment from municipal and industrial sources. Includes new pretreatment systems incorporating an intensified activated sludge process utilizing wholecell immobilization techniques (developed in conjunction with UMIST, UK) using a reticulated polyurethane foam, as a result of which high hydraulic loads can be applied without need for secondary sludge separation.

Simsons Of Edinburgh Ltd

12/13 Gayfield Square, Edinburgh EH1 3NX.

Tel: (031) 557 3222 Telex: 727366

Ridgeway House, 13 The Ridgeway, Stanmore, Middx HA7 4BE. Tel: 01 954 0696

Produces a range of industrial-scale filtration and centrifugal equipment, including decanter centrifuge (up to 6000 rpm, 4600 g), with continuous liquid/solid separation for brewing, paper, chemical etc, applications, band press filters, screening centrifuges and filtering centrifuges. A member of the Motherwell Bridge Group, UK.

Skatron Ltd

Unit 11 Studlands Park Avenue, PO Box 34 Newmarket, Suffolk CB8 7DB.

Tel: 0638 660600 Telex: 36274

Supply microplate washers, high resolution flow cytometers and other cell harvesting equipment; products of Skatron, Norway.

Smallman Lubricants Ltd

Great Bridge St, West Bromwich, West Midlands.

Produce biocides for the protection of aqueous lubricants against microbial spoilage.

Smith Kline and French Laboratories Ltd

Eye, Suffolk IP23 7HS.

Telex: 261347 Tel: (070 73) 25111

Research Institute, The Frythe, Welwyn, Herts AL6 9AR

Manufacture pharmaceutical and animal health-care products. Subsidiary of SmithKline Beckman, US.

Smith & Nephew Watson-Marlow Ltd

Falmouth, Cornwall TR11 4RU. Tel: (0326) 73461 Telex: 45594

Manufactures a wide range of peristaltic pumps including low cost systems for dosing/dispensing, multi-channel systems for microlitre sampling and high capacity metering pumps.

Smiths Flour Mills Ltd

PO Box 3 Eastgate, Worksop, Notts S80 1QY. Tel: 0909 472216

Manufacture flours of maize, rice and rye for use as fermentation media.

Soilax Ltd

David Murray John Building, Swindon SN1 1ND.

Tel: 0793 485151 Telex: 449184

Supplies speciality chemicals and offers engineering services for the food technology and biotechnology industries including in-place cleaning of manufacturing equipment.

Southampton University

Plant Biotechnology Group Department of Biochemistry

School of Biochemical & Physiological Sciences, Bassett Crescent East, Southampton S09 3TU.

Tel: 0703 559122

Carrying out research on the use of recombinant DNA technology and techniques such as microinjection and cell fusion to obtain new plant varieties and plant cell tissue culture lines producing high levels of secondary metabolites of possible medical importance.

Southern Water Authority

Guildbourne House, Chatsworth Rd, Worthing, Sussex BN11 1LD. Tel: 0903 205252 Telex: 877340

A regional water authority engaged in aspects of biological pest control using aquatic herbicides, antibiotics and vaccines for fish disease and the production of biogas by anaerobic digestion of sludges as well as basic business of treating potable water, sewage and industrial effluents using aerobic systems, biological filters and anaerobic sludge digesters.

South-Western Industrial Research Ltd

University of Bath, Claverton Down, Bath, Avon BA2 7AZ. Tel: (0225) 63637 Telex: 449097

Undertakes contract work for industry utilizing the resources of Bath University in a wide range of disciplines, including engineering, biology (horticulture, biochemistry, bacteriology, and microbiology), pharmacy and chemistry (analytical and organic).

Spectra Physics Ltd

17 Brick Knoll Park, St Albans, Herts AL1 5UF. Tel: (0727) 30131 Telex: 23578

Supplies equipment for gas and liquid chromatography: complete systems, monitoring and detection, data logging and processing, columns and prepacked columns (see Spectra Physics Inc, US).

Speywood Laboratories Ltd

Ash Road, Wrexham Industrial Estate, Wrexham, Clwyd LL13 9UF. Telex: 617154 Tel: 0978 61181 Fax: 0978 660366

Manufacture speciality biological products using recombinant technology for the pharmaceutical, veterinary and food industries. Has particular expertise in protein extraction and purification to pharmaceutical standards, aseptic filling and freeze drying. Products include human Factor VIII. Worldwide distribution is via Porton International, UK.

Spirax Sarco

Charlton House, Cheltenham, Glos GL53 8ER. Tel: 0242 521361 Telex: 43123 Fax: 0 Fax: 0242 573342

Organization with a network of Group Companies and worldwide distributors, manufacturing equipment for the control of steam use in fermentation and sterilization. Products include steam traps, temperature controls, pressure reducing valves and strainers.

Squibb Surgicare Ltd

Unit 20 First Avenue, Deeside Industrial Park, Deeside Clwyd CH5 2NU. Developing wound care products. Member of ConVaTec Division of the Squibb Corporation

SRI International

NLA Tower, 12/16 Addiscombe Rd, Croydon CR0 0XT. Telex: 946125

A contract research and consulting organization offering single client and multi-client studies in the fields of biotechnology with an emphasis on applications in industry and business.

SSP Pumps Ltd

Birch Rd, Eastbourne, East Sussex BN23 6PQ Tel: 0323 25151 Telex: 87384 Fax: 0323 30495

Manufacture stainless steel rotary lobe positive displacement pumps for ultra hygiene and aseptic use, with flow rates of 160 litres to 680 cubic metres per hour.

St Ivel Ltd

Dorcan House, Eldene Drive, Swindon, Wilts SN3 3TU. Tel: (0793) 488333 Telex: 449250

Manufactures cheese and other dairy products. Developing methods for treatment and recovery of valuable materials by anaerobic treatment of wastes.

Starch Products Ltd

Stadex Works, Middle Green Road, Langley Slough, Berks SL3 8AX. Tel: (0753) 33388

Manufactures starches, dextrins and vegetable adhesives.

Starlyne Feeds

3 Irthling Borough Road, Finedon, Wellingborough, Northamptonshire NN9 5EH.

Tel: 0933 680188

Produces silage inoculants based on enzymes and mixed bacterial cultures.

Starna Ltd

33 Station Road, Chadwell Heath, Romford, Essex RM6 4BL. Tel: (01) 599 5116 Telex: 8951154

Manufactures adaptors and cells for converting spectrophotometers to continuous monitoring cell flow systems, available for over 40 different cell

Stearns Catalytic International Ltd

St Johns George's Square, High St New Malden, Surrey KT3 4HH. Tel: 01 949 0055 Telex: 23200 stn cat

Process design and management engineers with experience in construction of facilities for biotechnical processes at research, pilot and manufacturing levels in areas which include agriculture, chemicals, health care, pollution control, fuel and energy.

Sterilin Ltd

Lampton House, Lampton Rd, Hounslow, Middx TW3 4EE. Tel: 01 572 2468 Telex: 889124 steri Fax: 01 572 7301

Manufactures and markets a range of bulk cell culture systems. European distributor for Bellco Biotechnology, US.

Sterling Electronics

20 Edward Street, Birmingham B1 2RX.

Tel: (021) 236 5036

Research and development company which designs electronic monitoring and control equipment for use in health care, pollution control, food, energy and chemical industries. Offers contract service to provide instruments to customer requirement.

Sterling Organics Ltd

Hadrian House, Fawdon, Newcastle-upon-Tyne NE3 3TT. Tel: 091 285 3311 Telex: 537671 sterga Fax: 091 Telex: 537671 sterga Fax: 091 284 5975

Manufactures pharmaceuticals, fine chemicals and agrochemicals, as well as bulk chemicals to custom specification. Products include high performance adsorbents for industrial scale protein separations. Subsidiary of Sterling Drug, part of the Eastman Kodak group.

Sterling-Winthrop Laboratories

Alnwick, Northumbria. Tel: (0665) 604141

Research and development centre for the Sterling-Winthrop Group Ltd, UK; carries out trials on formulation and development of new medicines.

Stirling Diagnostics Ltd

Innovation Park, Hillfoots Rd, Stirling FK9 4NF. Tel: 0786 500502 Fax: 0786 51030

Carrying out research and development of medical and veterinary diagnostics. First veterinary diagnostic product is for detection of bacterial diseases in trout. Developing fish vaccines for use in fish farming as well as a range of diagnostic kits for detection of viral, bacterial and fungal pathogens in crop and horticultural plants including potato, cereals and sugar beet, and mushroom spawn. Joint venture between Agricultural Diagnostics, UK subsidiary of Agricultural Genetics, US and Tulbero Ltd,

Stirling University

NERC Unit of Aquatic Biochemistry

Department of Biological Science, Stirling FK9 4LA. Tel: 0786 73171

Developing diagnostic probes for evaluation of toxic substances in aquatic environments as well as studying human and animal nutrition.

Stirling University

Aquatic Vaccine Research Unit Department of Aquaculture, Stirling FK9 4LA. Tel: 0786 73171

Carrying out research and development in relation to the production of anti-bacterial vaccines for use in fish farming. Also produce monoclonal antibodies for use in research and in diagnostics. Work includes aspects of the regulation of genes responsible for the production of primary protective antigens.

Stockdale Filtration Systems Ltd

Waters Green House, Macclesfield, Cheshire SK11 6LF. Telex: 668885 Fax: 0625 34678 Tel: 0625 616109

Supplies filtration equipment for use in the fermentation, pharmaceutical, brewing and distillation industries.

Stone and Webster Engineering Ltd

Stone & Webster House, 500 Elder Gate, Milton Keynes, Bucks MK9

Tel: (0908) 668844 Telex: 826701

Engineering and construction company offering services in design, specification, construction and commissioning for process plant in the chemicals, food, energy, health-care and waste treatment industries.

Stratech Scientific Ltd

50 Newington Green, London N16. Tel: 01 354 2601

Supplies products for immunology and molecular biology including immunocytochemicals, oncogene probes, hybridization systems and antibodies to oncogene proteins as well as equipment including a vacuum concentrator/evaporator and a bench top counter for use with phosphorus labelled DNA and RNA samples. Distributor for Savant, Jackson Immunoresearch, Bio 101 Geneclean and Lee Biomolecular, US.

Strathclyde University

Department of Bioscience & Biotechnology

204 George St, Glasgow G1 1XW. Tel: 041 552 44009

Research interests include aspects of the production of enzymes and monoclonal antibodies as well as waste treatment and anaerobic digestion (biogas production). Also working on the development of immunodiagnostics, biosensors and monitoring equipment as well as the design of fermenters and bioreactors

Strathclyde University

Department of Biochemistry

Todd Centre, 31 Taylor Street, Glasgow G4 0NR.

Tel: 041 552 4400 Telex: 77472 Fax: 041 552 0775

Carrying out the following studies: metabolic regulation of citrate production in Candida, large-scale culture of anchorage-dependent animal cells, and generation of human lymphocytes for production of antibodies and lymphokines.

Strathclyde University

Department of Pharmacy

204 George Street, Glasgow G1 1XW.

Tel: 041 552 4400 Telex: 77472 Fax: 041 552 0775

Investigating methods for drug delivery using liposomes and developing targeted drug delivery systems.

Strathclyde University

Department of Chemical Engineering

Glasgow G1 1XQ.

Tel: 041 552 4400

Telex: 77472 Fax: 041 552 0775

Researching into animal cell culture and fusion technology, fermentation technology and culture of fungi, chemical engineering in relation to downstream processing and product recovery. Recognized as a centre for expansion in biotechnology research and teaching.

Sulzer (UK) Ltd

Mechanical & Process Engineering Division

MBR Dept, Farnborough, Hants GU14 7LP. Tel: 0252 544311 Telex: 858 771 sulzer

Fax: 0252 518636

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

Sunderland Polytechnic

Biotechnology Group

Department of Biology, Sunderland SR1 3SD.

Tel: 0783 76191

Research studies include aspects of plant science (transposable elements in maize, lipid biosynthesis and plant tissue culture); bioelectronics (biosensors) and biofilters; environmental protection (waste water treatment and air monitoring); chemicals (microbial synthesis of chiral compounds); pharmaceuticals (cloning, drug delivery systems, virus diseases) and design of equipment (plastic air-lift fermenters).

Supelchem UK

London Road, Sawbridgeworth, Herts CM21 9JH. Tel: 0279 722661/723983/722636 Telex: 817074 radley Supplies laboratory separation products.

Surrey University

Research Park Office

Guildford, Surrey GU2 5XH.

Tel: 0483 579693 Telex: 859331

Working in areas of monoclonal antibodies, development of ethanol tolerant yeasts, use of cytochrome P450 in drug synthesis, metabolism of food additives by gut flora, biodeterioration, farm waste disposal, shale oil recovery, microbial fouling of metal surfaces, use of radioisotopes, etc. Microbial genetics interests include cloning of beta-lactamase, strain selection, and studies on mycotoxins.

Surrey University

Biotechnology Unit

Department of Microbiology, Guildford, Surrey GU2 5XH.

Tel: 0483 571281

Carrying out research on fermented foods and dairy products as well as animal and plant cell and tissue culture, application of biosensors to fermentation processes, monitoring of water quality, waste treatment and aspects of environmental control. Also studying aspects of diagnostics (DNA probes), antibodies, hormones and vaccines as well as enzyme technology and the production of speciality chemicals. Produce equipment for biotechnology including both hardware and software for computerised control systems for use with fermenters and bioreactors.

Sussex Clinical Research Consultants Ltd

39-40 High Street, Lewes, E Sussex BN7 2LU. Tel: (07916) 78332

Provides clinical research management consultancy and specialist training services to the pharmaceutical industry, including aspects of trial design and project management. Also offers a regular programme of courses designed for pharmaceutical industry staff covering protocol design and preparation, statistical methods, information science etc.

Sussex University

Hormone Biotechnology Unit

School of Biological Sciences, Falmer, Brighton BN19QC. Tel: 0273 606755

Carrying out research on the biochemistry of peptide hormones, neuropeptides and growth factors using recombinant DNA technologies. Also working on monoclonal antibody systems for recognition of such peptides.

Sussex University

Microbial Genetics Group

Department of Biology, Sussex House, Falmer, Brighton BN1 9QT. Tel: 0273 606755

Investigating enzyme structure and reaction mechanisms using techniques of molecular biology with an emphasis on the nature of penicillin binding proteins of E coli as well as the molecular basis for penicillin resistance in streptococci and other pathogenic bacteria.

Sussex University

Nitrogen Fixation Unit

Brighton, E Sussex BN1 9QJ.

Investigating molecular biology of nitrogen fixation with cloning of the nitrogen fixation (nif) genes.

Swan Ltd

Units 4/5 Duddingston Yards, Duddingston Park South, Edinburgh EH15 3NT.

Tel: 031 667 5596

Supplies freeze drying equipment and chart recorders.

Syntex Pharmaceuticals Ltd

St Ives House, St Ives Road, Maidenhead, Berks SL6 1RD. Tel: (0628) 33191

Manufactures ethical pharmaceuticals, oral contraceptives, clinical diagnostics, animal health-care products etc.

Tasmin Vaccine Laboratory (UK) Ltd

Eastern Way, Bury St Edmunds, Suffolk IP32 7AL. Tel: (0284) 63521 Telex: 817957

Supplies vaccines for animal use.

Tecan UK Ltd

The Glebe House, Sandpit Lane, Dunsden, Reading RG4 9PG. Tel: 0734 461133 Fax: 0734 472068

Supply a wide range of robotic sample processors, single or dual arm, for fast and accurate performance of all laboratory liquid handling tasks. IBM-based software enables user defined control over work surface usage, pipetting protocols, liquid handling and data management. Hardware includes liquid level sensing sampling probes, positive sample identification and a complete range of microplate readers and washers with 'on board' or PC-based software.

Tecator Ltd

Cooper Road, Thornbury, Bristol BS12 2UW. Tel: (0454) 417798 Telex: 449727 Tel: (0454) 417798

Manufactures scientific instruments including a fully automated analyzer for carrying out Kjedahl nitrogen determinations. This is built around a microprocessor which automatically controls dispensing of reagents as well as calculation and presentation of results.

Techmation Ltd

5 Colonial Business Park, Colonial Way, Watford WD2 4PR. Tel: 0923 367671 Fax: 0923 244470

Distributes scientific equipment including fermenters and bioreactors as well as a wide range of teflon-type equipment for fluid handling, products of Fluorocarbon, US.

Techne Cambridge Ltd

Duxford, Cambridge CB2 4PZ.

Tel: 0223 832401 Telex: 817257 Fax: 0223 836838

Supplies laboratory equipment and manufactures a microcarrier stirrer system for cultivation of animal cells.

Technical and Optical Equipment

Zenith House, The Hyde, Edgware Road, London NW9 6EE. Tel: 01 200 6505

Supplies Zenith range of microscopes & accessories.

Technicol Ltd

Brook Street, Higher Hillgate, Stockport, Cheshire SK1 3HS. Tel: 061 477 7020 Telex: 669581 Fax: 061 429 8397

Supplies HPLC equipment and columns, including chiral phase columns for isomer separation and wide pore silica for protein separations.

Distributors for preparative HPLC systems manufactured by Separations Technology, US.

Technicon Instrument Co Ltd

Evans House, Hamilton Close, Basingstoke, Hants RG21 2YE. Tel: 0256 29181 Telex: 858375 Fax: 0256 52916

Supplies a wide range of general-purpose multichannel automated analyzers and dedicated automated equipment for determination of nitrogen, chemical oxygen demand, protein and amino acids. Also produces infra-red reflectance analysis equipment.

TechnoGen Systems Ltd

Altec House, Brigade Close, South Harrow, Middx HA2 0LQ. Tel: 01 423 6333

Supplies equipment for mammalian cell culture, a cyclone bioreactor, computer controlled microplate readers and real-time control systems for fermentation processes.

Teledyne Analytical Instruments

The Harlequin Centre, Southall Lane, Southall, Middx UB2 5NH. Telex: 35008 Fax: 01 571 9439

Supply chemical analyzers and ambient air analyzers. Subsidiary of Teledyne Analytical Instruments, US.

Tenstar Products Ltd

Tufton Road, Hythe Road, Ashford, Kent TN24 8BH. Tel: 0233 29231 Telex: 965219

Produces vital wheat gluten, wheat starch and various types of glucose product including syrups and powders with applications in the food industry, as well as in joint ventures: Staper Ltd with Reed International as a strengthening agent in paper manufacture; Stadis Ltd for manufacture of potable quality ethyl alcohol; and Tenstar Aquitaine SA, France for production of dried starch products.

Testbourne Ltd

Unit 12, Hassocks Wood, Stroudly Rd, Basingstoke, Hants RG24 0NE. Tel: 0256 467055 Telex: 858029 Fax: 0256 842929

Supply microscopes, microtomes and accessories.

Thompson & Joseph Ltd

119 Plumstead Road, Norwich, NR1 4JT. Tel: 0603 39511 Telex: 97291 Fa

Fax: 0603 700243

Suppliers of animal serums, petones, enzymes and organ extracts. Distributor for Bocknek Labs, Canada and Organotechnie, France.

Thorn EMI

Central Research Laboratories

Dawley Road, Hayes, Middx UH3 1HH. Tel: (01) 8488 9779 Telex: 934135

Carrying out research into the development of biosensors for monitoring and diagnostics.

Thrombosis & Haemostasis Research Group

Department of Medicine, Ninewells Hospital, Dundee DD1 9SY. Tel: 0382 60111

Carrying out investigations on new therapeutic agents for the treatment of thrombosis as well as the basic pathology of thrombosis.

TI Accles and Pollock Ltd

Stainless Fittings Division

Tipton Road, Dudley, W Midland DY1 4SG. Tel: (021 557) 1188 Telex: 338101

Manufactures pumps, automated and manual valves and pipework and fittings for use in pharmaceutical, brewing, dairy and food industries.

The Tintometer Co Ltd

Waterloo Rd, Salisbury, Wilts SP1 2JY. Tel: 0722 27242 Telex: 47372 Fax: 0722 412322

Supply colour analysis equipment, colorimeters, photometers, spectrophotometers, titrators, electrodes and related accessories. Affiliated to The Tintometer Co, US.

Tissue Culture Services Ltd

Botolph Claydon, Bucks MK18 2LR.

Tel: 029671 4071 Telex: 847464 Fax: 029671 4806

Manufactures and supplies an extensive range of animal blood and serum products and dehydrated powder media for microbiology and cell culture and a range of antibodies for immunology.

Titanium Fabricators Ltd

Orgreave Crescent, Handsworth, Sheffield S13 9NQ. Fax: 0742 695329 Tel: 0742 697334 Telex: 54655

Specialists in the fabrication of heat exchangers, pressure vessels, pipework and ancillary components in corrosion resistant metals and alloys. Activities include fabrication of large brewery tanks and fermenters in stainless steel and nickel alloys as well as very large fermenters in stainless steel for production of single cell protein. Supply pilot plant assemblies, larger scale plant or individual fermenters. Have developed inhouse micro-computer based software for pressure vessel design to British and US design codes.

Tithebarn

Road 5, Industrial Estate, Winsford CW7 3PG. Tel: 06065 3012

Supplies silage inoculants based on mixed enzymes and bacterial cultures.

Tom Maguire & Co Ltd

10/11 Honeyborough, Neyland, Milford Haven, Dyfed SA73 1SE. Tel: 0646 601300 Telex: 48487

Design and manufacture equipment for use in aerobic effluent treatment processes including venturi aerator systems.

Torry Research Station

135 Abbey Rd, PO Box 31, Aberdeen AB9 8DG. Tel: 0224 877071 Telex: 73587

Carrying out research on the use of proteases and other enzymes in the production of food grade proteins from fish processing by-products.

Tracor Europe

19 Cochrane Close, Crownhill, Milton Keynes MK8 0JA. Tel: 0908 565662 Telex: 825823

Supply a wide range of analytical instruments for chromatography and spectroscopy.

Travenol Laboratories Ltd

Caxton Way, Thetford, Norfolk IP24 3SE. Tel: 0842 4581 Telex: 81319

Supply immunological and biological diagnostic kits including radioimmunoassay systems as well as other pharmaceutical products.

Trent Polytechnic

Biochemical Technology & Microbiology Groups

Department of Life Sciences, Clifton Lane, Nottingham NG11 8NS. Tel: 0602 418248

Carrying out research on the development of biocatalysts for the production of industrial chemicals including fragrances, pharmaceuticals and products of the petrochemical industry.

Tripos Associates

Gallop House, Hasler's Lane, Great Dunmow, Essex CM6 1XS. Tel: 0371 6191

Supplies molecular modelling and analysis systems for proteins and nucleic acids providing biopolymer and 'small' molecules software in a single package (see Tripos Associates, US).

Trivector Systems International Ltd

Sunderland Road, Sandy, Beds SG19 1RB. Tel: (0767) 82222 Telex: 825478

Produces a range of multichannel datasystems for chromatographic analysis and laboratory management.

Tropical Development and Research Institute

now part of ODNRI Overseas Development Natural Resources Institute 56-62 Gray's Inn Road, London WC1X 8LU. Tel: (01) 242 5412

Industrial development department: Culham, Abingdon,, Oxfordshire OX11 3DA. Tel: (086 730) 7551, Storage department: London Road, Slough, Berkshire.. Tel: (0753) 4626

Assists developing countries to derive greater benefit from their renewable energy natural resources by dealing with scientific technical and economic problems that arise after harvesting through research and development programmes. Areas covered include anaerobic digestion, fermentation, control of pest infestation and biodegradation on storage, food processing machinery and waste utilization.

Tunnel Refineries Ltd

Tunnel Avenue, Greenwich, London SE10 0PA Fax: 01 305 0981 Tel: 01 858 3271 Telex: 23455

Manufactures glucose and other starch syrups.

TW Associates

190a Three Bridges Rd, Three Bridges, Crawley, Sussex RH10 1JT. Tel: (0293) 33777

Supplies freeze drying apparatus.

Twyford Plant Laboratories Ltd

Baltonsborough, Glastonbury, Somerset BA6 8QG. Telex: 449325 Fax: 0458 50071 Tel: 0458 50576

Engaged in commercial propagation of a wide range of agricultural and horticultural crops using plant tissue culture techniques for production of new varieties, production of disease-free stock, multiplication of difficult to propagate plants, creation of new genotypes, long term storage of valuable germplasm etc. Research areas include plant tissue and cell culture, plant cloning, haploid culture, protoplast culture and fusion, mutation breeding, in vitro fertilization and production of disease-indexed plants. Produces homozygous plants for breeders. Developing arid crops including jojoba.

Twygen

Block 1 Dunsinane Ave, Dunsinane Industrial Estate, Dundee DD3 3QN. Tel: 0382 833624 Fax: 0382 561590

Developing new plant varieties by genetic and somaclonal engineering. Joint venture of Plant Genetics, US and Twyford Seed, UK.

U-Microcomputers Ltd

Winstanley Industrial Estate, Long Lane, Warrington Cheshire WA2 8PR. Tel: 0925 54117 Telex: 629279 Telex: 629279

Supply a computerized chemical modelling workstation which allows stereochemical modelling designed for synthetic chemists.

Ubichem Ltd

281 Hithermoor Road, Stanwell Moor Staines, Middx TW19 6AZ. Tel: (028 12) 5117 Telex: 847601 ubic Tel: (028 12) 5117

Supplies industrial and analytical enzymes, including amylases, cellulases, proteases and preparations with mixed activity.

Ultrafilter Ltd

33 Sandy Way, Amington Industrial Estate, Tamworth, W Midlands B77 4DS

Tel: (0827) 58234 Telex: 342323

Supplies filtration and separation equipment including sterile air filters and membrane filters.

Ultra-Violet Products Ltd

Science Park, Milton Rd, Cambridge CB4 4FH. Tel: 0223 420022 Telex: 817923 Fax: 0223 420561

Laboratory equipment includes: ultraviolet light sources, hand lamps, illumination cabinets and transillluminators; protective safety wear; and an extensive range of camera systems for applications throghout numerous research and genetic engineering fields.

Unichema Chemicals Ltd

Bebington, Wirral, Merseyside L62 4UF. Tel: 051 645 2020 Telex: 629408

Specialize in production of fats, oils and derivatives for the food and oleochemical industries. Part of Unichema International, a Unilever group of companies.

Unidata Europe Ltd

Enterprise House, Lloyd St North, Manchester M15 4EN. Tel. 061 227 9685 Fax: 061 227 9498

Supply battery powered data recording and monitoring instrumentation suitable for environmental, water quality and meteorological data collection in remote locations. Fully compatible with laboratory computer data logging equipment.

Unigate Ltd

Unigate House, Western Avenue, London W3 0SH. Tel: (01) 992 3400 Telex: 23753

Engaged in production of milk, meat and other food products, as well as engineering, distribution and transport.

Unilever plc

PO Box 68, Unilever House, London EC4P 4BQ. *Tel*: (01) 822 5252 *Telex*: 28395

Holding company. Subsidiaries manufacture and distribute edible fats and oils, food products, animal feeds, detergents, proprietary medicines, chemicals, paper, packaging and plastics.

Unilever Research

Colworth Laboratory

Colworth House, Sharnbrook, Bedford MK44 1LQ. Tel: 0234 222 603

Port Sunlight Laboratory, Quarry Rd East, Bebington Wirral, Merseyside

Food, biotechnology and genetics research centre. Carries out research related to chemistry of edible fats and oils, detergents and soaps, polysaccharides and gums, animal feeds and consumer goods. Activities include the development of methods for propagation of oil palm using tissue culture techniques, protein chemistry and monoclonal antibody engineering research for development of cancer therapeutics.

Union Carbide UK Ltd

Union Carbide House, High Street, Rickmansworth, Herts WD3 1RB. Tel: 0923 720366 Telex: 262472 Fax: 0923 775462

Produce equipment for cryogenic storage and transport.

Unipath-Oxoid Ltd

Norse Road, Bedford MK41 0QG. Tel: 0234 47161 Telex: 826784

Fax: 0234 218781

Supplies a range of monoclonal antibodies to many human proteins, tumour markers and cell-surface antigens including human milk fat globule antigen and human T-lymphocyte subsets. Immunological reagents and accessories include monoclonal antiserums to human proteins, human reference serum preparations and conjugated antiserums. Manufactures and markets OTC pregnancy and fertility test systems for home-use and a professional pregnancy test system. Part of Unilever (UK) Medical Products Group.

Uniprobe Instruments Ltd

Clive Road, Cardiff CF5 1HG. Fax: 0222 222735 Tel: 0222 394048

Markets sterilizable oxygen electrodes for fermentation systems, oxygen meters and pH meters.

United Distillers Group

Research & Engineering

Glenochil, Menstrie, Clackmannanshire, FK11 7ES. Tel: 0259 61701 Fax: 0259 62271 Telex: 779266

Carry out biotechnology research related to the distilling industry.

United Molasses Company

Sugar Quay, Lower Thames Street, London EC3R 6DQ. Tel: 01 626 8700

Supply molasses for use as animal feed or fermentation feedstock as well as silage inoculants based on mixed cultures of L plantarum and Pacidilactici.

Universal Biologicals Ltd

12-14 St Ann's Crescent, London SW18 2LS.

Tel: 01 870 8753 Telex: 262110 howe Fax: 01 871 9764

Supplies peptides, growth factors including human transforming growth factor-beta, antiserums, eicosanoids, DNA probes, EIA test kits, latex particles and speciality tubings. Agent for Collaborative Research, Enzo, Cayman, Diamedix and Norton.

University College of North Wales Bangor

Institute of Molecular & Biomolecular Electronics

Bangor, Gwynedd LL57 2UW.

Tel: 0248 351151

Investigating the electronic properties of biological molecules as well as studying the electrical and optical properties of organic molecules in thin

University College of North Wales Bangor

Microbial Biochemistry Group

Department of Biochemistry and Soil Science, Bangor, Gwynedd LL57

Tel: 0248 351151

Carrying out research on synthetic antibiotics for targeting via membrane transport systems as well as developing diagnostics based on microbiological procedures for measuring the nutritional quality of protein

University College of North Wales Bangor

Plant Biotechnology Group

Bangor, Gwynedd LL57 2UW. Tel: 0248 351151

Investigating the structure of plasmids coding for the breakdown of aromatic hydrocarbons as part of investigations on methods of waste treatment. A joint activity between the department of soil science and the department of biochemistry.

University College of North Wales Bangor

Department of Biochemistry

Bangor, Gwynedd LL57 2DG. Tel: (0248) 51151

Studying plasmids in Pseudomonas which determine enzymes for catabolism of aromatic compounds. Analyzing regulated distribution of bacterial plasmids at cell division.

University College of Wales Aberystwyth

Department of Biochemistry

Aberystwyth, Dyfed SY23 2AX.

Tel: (0970) 3711

Studying mechanism of formation of excretory products in marine algae. Also investigating mechanism of photorespiration, degradation of alicyclic compounds by bacteria and of xenobiotics such as pesticides and industrial pollutants.

University College of Wales Aberystwyth

Department of Microbiology

Aberystwyth, Dyfed SY23 2AX.

Tel: (0970) 3711

Studying mechanism of bacteria producing acetone/ butanol, as well as genetics of control of bacteria sporulation using gene-cloning tecniques.

University College of Wales Aberystwyth

Anaerobe Research Group Department of Botany and Microbiology Old College, PO Box 2, Aberystwyth, Dyfed SY23 2AX. Tel: 0970 3111

Carrying out research on the physiology of obligate anaerobic bacteria including clostridia as well as investigating genetics of gram-positive microorganisms.

University Diagnostics Ltd

Mappin House, 4 Winsley St, London W1N 7AR.

Provides an advanced medical diagnostic service in the field of inherited and infectious diseases.

University of East Anglia

Dept of Biological Sciences

Department of Biological Sciences, Norwich NR4 7TJ. Tel: 0603 56161

Carrying out design studies on fermenters and bioreactors as well as associated monitoring equipment.

University of Leeds Industrial Services Ltd

175 Woodhouse Lane, Leeds LS2 3AR.

Tel: 0532 454084

Promotes the industrial activities of the University in areas of biotechnology which include the use of recombinant DNA technologies and fermentation in relation to animal health care, production of enzymes, the conversion of wastes to food, production of fuel alcohol, pollution control, design of equipment for biotechnology, chemical engineering and protein sequencing.

University of Manchester Institute of Science & Technology (UMIST)

Applied Molecular Biology Group Department of Biochemistry & Applied Molecular Biology

PO Box 88, Sackville St, Manchester M60 1QD. Tel: 061 236 3311

Studies include: investigations on the molecular biology of lignin degradation including the use of plasmids for genetic manipulation; genetics of thermophylic actinomycetes; gene expression in lignolytic fungi; genetics of industrially important yeasts; plant molecular biology; malaria; protein engineering and the production of industrial chemicals from biomass including aspects of bioethanol fermentations.

University of Manchester Institute of Science & Technology

Automation of DNA Sequencing Group Department of Instrumentation & Analytical Science

Working on aspects of DNA sequencing by the Sanger method including the improvement of electrophoresis apparatus, optimization of gel technology and the construction of multi-wire proportional counters for direct gel visualization and sequence interpretation suited to both Sanger and Maxam-Gilbert methods. Have also constructed an automated system for manipulation of the reagents used in Sanger sequencing reactions.

University of Manchester Institute of Science & Technology

Biochemical Engineering Group Department of Chemical Engineering PO Box 88, Sackville St, Manchester M60 1QD. *Tel:* 061 236 3311

Investigating the kinetics and modelling of microbial fermentations as well as designing conventional and novel bioreactors using immobilized cells in areas of waste treatment, fuel alcohol production and anaerobic digestion. Also carrying out research on single cell protein production, plant tissue culture, cellulose hydrolysis and animal waste recycling as well as design work on equipment for biotechnology including fermenters, bioreactors, distillation systems and filtration equipment.

University of Manchester Institute of Science & Technology

Department of Chemistry

PO Box 88, Sackville St, Manchester M60 1QD. *Tel*: 061 236 3311

Carrying out research on techniques of enzyme immobilization for possible use in semiconductors and electrodes.

University of Manchester Institute of Science & Technology

Manchester Biotechnology Centre

PO Box 88, Sackville St, Manchester M60 1QD. *Tel*: 061 236 3311

Carries out work in areas of process engineering, instrumentation, protein engineering, biomass conversions and secondary metabolites representing a collaboration between the departments of: Biochemistry and Applied Molecular Biology; Chemical Engineering and Instrumentation and Analytical Science.

University of Manchester Institute of Science & Technology

Pollution Research Unit

PO Box 88, Sackville St, Manchester M60 1QD. Tel: 061 236 3311

Carries out research on the control of water pollution. Work includes aspects of reactor design, anaerobic digestion and biogas production, sludge management and the removal and recovery of toxic metals.

University of Saint Andrews

Department of Biochemistry & Microbiology North St, St Andrews, Fife KY16 9AL.

Tel: 0334 76181

Carrying out research on the assimilation of nitrogen by fungi and bacteria as well as investigations on the production of fuel alcohol including strain improvement using recombinant DNA technology.

Upjohn Co Ltd

Fleming Way, Crawley, W Sussex RH10 2NJ. Tel: (0293) 31133 Telex: 87367

Manufactures pharmaceutical and veterinary products of Upjohn Co, US.

Urquhart-Dykes & Lord

Chartered patent agents with experience in biotechnical products also act as European patent attorneys, trade mark agents and advise on intellectual property in general including aspects of design registration, industrial copyrights and licensing.

UVP Ltd

Science Park, Milton Road, Cambridge CB4 4BN.

Tel: (0223) 355722 Telex: 817923 Fax: 0223 862561

Supplies ultra-violet transilluminators and filters, other lighting sources and equipment for bioluminescence and thin layer chromatography (see UVP, US).

VA Howe

12-14 St Ann's Crescent, London, Sw18 2LS. Tel: 01 874 0422 Telex: 262110 howe

Supply laboratory equipment including centrifuges.

Vaponics Ltd

20 Park Street, Princes Risborough, Bucks HP17 9AL. Tel: (084 44) 6811

Manufactures water purification equipment and systems including pretreatment filters, reverse osmosis systems, deionization, ultrafiltration, water stills, ultra-violet systems for in-line or immersion sterilization, cartridge systems for ultra-pure reagent-grade water, storage tanks and distribution systems and water quality specific purity measurement instrumentation.

Varian Associates Ltd

Supplies instruments and accessories for chromatography and spectroscopy (see Varian Associates, US).

Vector Laboratories Ltd

16 Wulfric Square, Bretton, Peterborough PE3 8RF. Tel: 0733 265530 Telex: 329220

Supply a wide range of reagents for immunochemistry, enzyme immunoassays, nitrocellulose/nylon transfer blots, in situ hybridization and biotinylation of nucleic acids or proteins. Biotin/avidin system reagents, antibodies, and lectins are all available unconjugated, fluorescently labelled (FITC, rhodamine, Texas red, AMCA, phycoerythrin), enzyme conjugated (peroxidase, alkaline phosphatase, glucose oxidase) or agarose bound. Distributor for Cedarlane Laboratories' monoclonal antibodies and complement products.

VG Gas Analysis Systems Ltd

Quadrupoles Division: Nat Lane, Minsford, Cheshire CW7 3QH. Tel: 06065 50111 Tx: 669509

Manufactures analytical instruments including sampling/mass spectrometer systems for monitoring and control of fermentation using both dissolved and head space gases.

VG Microscopes Ltd

Imberhorne Lane, East Grinstead, Sussex RH19 1UB. Tel: 0342 27211 Telex: 957273

Produce accessories for high resolution electron microscopy.

VG Scientific Ltd

Imberhorne Lane, East Grinstead, Sussex RH19 1UB. Tel: 0342 27211 Telex: 957273

Produce accessories for use in secondary ion mass spectrometry.

Vickers-Dawson

Crayford, Kent DA1 4AX. *Tel*: 0322 526222 *Telex*: 22545

Manufactures pasteurization equipment.

Vinten Instruments Ltd

Jessamy Rd, Weybridge, Surrey KT13 8LE. Telex: 929823 Tel: 0932 57711

Manufactures devices for use in sensing and control of biotechnical processes used in waste treatment and the recovery of oil and minerals using biotechnical processes.

Vital Scientific UK Ltd

Huffwood Trading Estate Unit 14, High Street, Partridge Green, Sussex RH13 8AU, 0403 710479.

Supplies photometers for routine laboratory analysis with capabilities for preprogrammed test routines, non-linear calibration, automatic sampling and multiple cuvette changers.

Vitatron UL Ltd

Boyn Valley Road, Maidenhead, Berks. Tel: (0628) 28944 Telex: 848498

Supplies reagents for discrete system autoanalyzers.

Vitek Systems Ltd

1 Newtown Industrial Estate, Newtown Road, Henley-on-Thames RG9 1HG

Tel: 0491 572442 Fax: 0491 573403 Telex: 848846

Supplies systems for automated screening and counting of bacteria which may be used for optimization of fermenter media, metabolic studies, sterility testing, bioassays etc. For organism identification the in-built database covers both Gram-negative and Gram-positive bacteria, common pathogens, yeasts, etc, and can determine sensitivity for up to nine anti-microbial agents simultaneously.

Vitrocal Ltd

2a Shiel House, Craigshill, Livingston EH 54 5EH. Tel: 0506 32871 Fax: 0506 35482 Tel: 0506 32871

Produces plants by micropropagation techniques and offers plant diagnostic services.

Voss Ltd

Victoria Gardens, Burgess Hill, W Sussex RH15 9QN. Tel: 04446 45911 Telex: 877952

Supplies blenders and shakers, test-tube mixers and stirrers.

VW Scientific

Outgang Lane, Osbaldwick Industrial Estate, York YO1 3UP. Tel: 0904 414 956 Telex: 57851

Supply analytical equipment including segmented flow systems and other products for wet chemical analysis or automatic digestion of samples.

W L Gore & Associates (UK) Ltd

Pitreavie Industrial Estate, Dunfermline, Fife KY11 5PU. Tel: 0383 726777 Telex: 72679 Fax: 0383 733380

Manufactures microfiltration membranes.

W Reeve & Co Ltd

Lombard Road, London SW19. Tel: (01) 542 1031

Supplies saccharometers.

W S Atkins Manufacturing and Process Industries

Woodcote Grove, Ashley Road, Epsom, Surrey KT18 5BW Tel: 03727 26140 Telex: 266701 Fax: 03727 40055

Engineering consultants and contractors. Developed a process for continuous production of fuel alcohol (ethanol) using a range of feedstocks. Ethanol is removed by flash evaporation reducing inhibition of fermentation and increasing energy efficiency. Pilot trials and computer simulations have been carried out.

W & T Avery Ltd/Oertling Division

Smethwick, Warley, W Midlands B66 2LP. Tel: 021 558 1112 Telex: 336490 Tel: 021 558 1112 Supplies balances and weighing systems.

Warner Lambert (UK) Ltd

Diagnostics Division

Chesnut Avenue, Eastleigh, Hants SO5 3ZQ.

Tel: (0703) 619777

Supplies diagnostics reagents and kits for clinical laboratories. Subsidiary of Warner Lambert Co, US.

Warren Spring Laboratory

Biotechnology Division

Gunnels Wood Road, Stevenage, Herts SG1 2BX.

Tel: 0438 741122 Telex: 82250

Undertakes consultancy, contract research and development work in extensive laboratory and pilot plant facilities in areas of process control, mineral processing, pollution control and biotechnology. Biotechnology aspects fall into two areas: microbiology and treatment of wastes and low-grade mineral ores, including sulphur removal and odour removal; and downstream separation processes and purification, cell disruption and product release. Supported by the Department of Industry, UK.

Warwick University

Department of Biological Sciences

Coventry CV4 7AL.

Tel: 0203 523508

Undertaking the following studies: interaction of viruses with monoclonal antibodies; mechanisms of resistance to infection; production of immune interferon; expression of alpha and beta-interferon genes in human leukocytes; control of F-cell interferon production and virus interaction; molecular biology of viruses and their replication; organization and expression of genes coding for chloroplast ribosomal proteins; interaction between nuclear and extranuclear genes in chloroplast development and cloning; control of formation of chloroplast proteins; genes coding for chloroplasts; regulation of methane oxidation in bacteria.

Warwick University

Animal Molecular Genetics Group

Department of Biological Sciences, Coventry CV4 7AL. Tel: 0203 523523

Carrying out research on the mechanisms of genetic control during animal development.

Warwick University

Virology Group

Department of Biological Sciences, Coventry CV4 7AL. Tel: 0203 523523

Carrying out research on the molecular basis of viral disease as well as the mechanism (both immune and non-immune) of resistance to viral infection including work on rotavirus vaccines.

Warwick University

Microbiology Group

Department of Biology, Coventry CV4 7AL.

Tel: 0203 523523

Carrying out research on methane oxidizing bacteria as well as on other microbial oxidations. Also investigating bacterial metabolic regulation, morphogenesis and differentiation as well as carrying out studies on cyanophytes.

Warwick University

Environmental Microbiology Group

Department of Biological Sciences, Coventry CV4 7AL. Tel: 0203 523181

Carrying out research on mineral degradation and metal leaching as well as the biodegradation of organic sulphur compounds. Also working on biosensors based on immobilized enzymes.

Warwick University

Plant Biochemistry Group

Department of Biological Sciences, Coventry CV4 7AL. Tel: 0203 523523

Carrying out research on the molecular biology and biochemistry of photosynthetic (chloroplast) proteins as well as the biochemistry of organelles (glyoxysomes and mitochondria), nitrogen metabolism and seed storage proteins.

Part III UNITED KINGDOM

Water Engineering Ltd

Aynho Rd, Adderbury, Nr Banbury, Oxon OX17 3NL Telex: 83655 Fax: 0295 811997 Tel: 0295 810581

Contracting engineers offering complete services for turnkey sewage and water treatment plants for municipal wastes, industrial effluents and potable water. Products and capabilities include: solids handling pumps; sedimentation tanks and scrapers; sludge thickeners; packaged aeration treatment plants; activated sludge plant; oxidation ditches; belt filter presses; surface aerators; dissolved air flotation systems; denitrification systems; digestion; incineration.

Water Research Centre

WRc Environment

PO Box 16, Henley Road, Medmenham, Marlow, Bucks SL7 2HD. Tel: 0491 571531 Telex: 848632 Fax: 0491 579094

WRc Processes, Stevenage Laboratory, Elder Way, Stevenage, Herts SG1 ITH.

Tel: 0438 312444 Tx: 826168 Fax: 0438 315694

Main UK organization for research and development on all aspects of water technology. Offers wide range of consultancy and specialist technical services with experience in aerobic and anaerobic biological water treatment. Carrying out research on anaerobic digestion of animal slurries, industrial wastes etc, using contact process or fluidized-bed technology.

Waters Associates (Instruments) Ltd

324 Chester Road, Hartford, Northwich, Cheshire CW8 2AH. Tel: (0606) 883846 Telex: 66927

Supplies equipment and accessories as well as prepacked columns for high performance liquid chromatography (see Waters Associates Inc, US).

Watson Hawksley

Terriers House, Amersham Road, High Wycombe, Bucks HP13 5AJ. Tel: (0494) 26240 Telex: 83439

Consulting engineers offering services in all aspects of wastewater management and solid waste disposal.

The Wellcome Bacterial Collection

Wellcome Foundation Ltd

Langley Court, Beckenham, Kent BR3 3BS.

Holds culture collection containing bacteria, fungi and yeasts with special collections of Clostridium, Escherichia and Streptococcus for general, medical and veterinary microbiology research.

Wellcome Biotechnology Ltd

Langley Court, Beckenham, Kent BR3 3BS. Tel: 01 658 2211 Telex: 23937 Fax

Fax: 01 650 9055

Producing alpha interferon using deep cell human lymphoblastoid cultures on a large scale, digoxin antibody and human vaccines. Subsidiary of the Wellcome Foundation, UK.

Wellcome Diagnostics

Temple Hill, Dartford DA1 5AH.

Telex: 896113 Fax: 0332 73288 Tel: 0322 77711

Produce à range of diagnostic kits including a salmonella latex test kit and serological test reagents incorporating monoclonal antibody detection methodology and a new staphylococcal testing kit using the staphaurex latex system. Division of the Wellcome Foundation, UK.

Wellcome Foundation

183 Euston Road, London NW1 2BP. Tel: (01) 387 4477 Telex: 22280

Parent company of an international group of pharmaceutical and chemical companies concerned with the discovery, development, manufacture and distribution of products used to promote health and hygiene of humans and animals. Products include medical and veterinary pharmaceuticals and fine chemicals, vaccines, laboratory reagents and insecticides for use in agriculture, industry and the home

Wellcome Medical Division

Crewe Hall, Crewe, Cheshire CW1 1UB. Telex: 36348 Tel: (0270) 583151

Supplies a wide range of medical and veterinary pharmaceuticals: medicines, vaccines, reagents, insecticides etc, for use in agriculture, industry and the home (see Wellcome Foundation, UK and Wellcome Reagents Ltd, UK).

Wellcome Research Laboratories

Langley Court, Beckenham, Kent BR3 3BS. Tel: (01) 658 2211 Telex: 23937

Carry out investigations on basic and applied aspects of a wide range of human and animal health problems. Molecular biology research includes studies into genetics and biochemistry of parasites, viruses, bacteria, protozoa and other disease agents using recombinant DNA, cell fusion and other techniques as applicable. Also conduct toxicological testing of new medical and veterinary products. Monoclonal antibody research activities include in vitro diagnostics and vaccine purification. Research centre for Wellcome Foundation, UK.

Wellman Biotechnology

Roberts House, Cornwall Road, Smethwick, Warley, W Midlands B66

Supplies research and industrial fermenters, bioreactors and fermentation plant. UK representative for MBR Bioreactor AG, Switzerland.

Welsh Development Agency

Pearl House, Greyfriars Rd, Cardiff CF1 3XX. Tel: 0222 32955 Telex: 497513

Offers consultancy, business advice, investment finance and loans, properties and factories to Welsh based companies including those interested in biotechnology.

Welsh Water Authority

Cambrian Way, Brecon, Powys LD3 7HP. *Tel*: 0874 3181 *Telex*: 497429

Regional water authority using biological filters and activated sludge systems as well as anaerobic digestion of sewage sludge. Investigating the use of thermophilic digestion for the production of fertilizer for farm use.

Westfalia Separator Ltd

Habig House, Old Wolverton, Milton Keynes, Bucks MK12 5PY. Tel: (0908) 313366 Telex: 82167

Manufactures centrifugal equipment for continuous liquid-liquid, liquid-solid and liquid separation or extraction, including cooled industrial centrifuges for recovery of heat-sensitive biological materials, a countercurrent decanter and steam-sterilizable self-cleaning disc separators.

Whatman BioSystems Ltd

Whatman Speciality Products Operations

Springfield Mill, Maidstone, Kent ME14 2LE.

Fax: 0622 691425 Tel: 0622 692022 Telex: 96113

Provides the biotechnology industry with a range of filtration and separation products for downstream processing requirements at preparative and process scale. Offers a consultative and applications-based customer service backed by strong technical resources. Products include microcarrier beads for anchorage dependent cell growth, ion exchange cellulose media, large-scale process columns, HPLC columns and silica media. A member of the Whatman International group of companies.

Whatman LabSales Ltd

Unit 1, Coldred Rd, Parkwood Industrial Estate, Maidstone Kent ME15

Tel: 0622 674821 Telex: 965983

Supply a wide range of Whatman instrumentation and equipment products including cartridge columns for use in HPLC as well as complete guard systems and accessories and various pocket sized sensors for determination Also supply digital pH meters. Part of Whatman International.

Whitbread plc

Brewerv

Chiswell Street, London EC1Y 4SD. Tel: (01) 606 4455

Telex: 888640

Research and Development:, Oakley Rd, Luton, Beds LU4 9QH. Tel: 0582 53231

Engaged in brewing, distilling and related activities. Research activities include basic and applied aspects of fermentation, brewing, microbiology, distilling, and wine and food technology.

UNITED KINGDOM Part III

Wilj International Ltd

Kingsnorth Technology, Park Wotton Road, Ashford, Kent. Tel: (0233) 38383 Telex: 965344

Manufactures instruments for diagnostic technology, including multihead gamma counters.

Willis Bio Systems Ltd

Gravel Hill House, Wombourne, Wolverhampton WV5 9HA. Tel: 0902 895802 Fax: 0902 896816

Supplies systems for recovery of energy, waste treatment, pollution control etc, based on anaerobic digestion, with optional aerobic treatments and solids recovery. Digester range is suited to animal slurries, distillery slops and food-processing effluents. Services include design engineering and commissioning of turn-key plant.

WMC (Resource Recovery) Ltd

Developing anaerobic digestion processes for waste treatment.

Woodall-Duckham Ltd

The Boulevard, Crawley, W Sussex RH1 1UX. Tel: (0293) 28755 Telex: 87317

Major contracting engineering company offering a complete service for plant in all areas including the fine chemicals and pharmaceutical industries

Wright Scientific Ltd

Upper Mill, Stonehouse, Glos GL10 2BJ. Tel: (045 382) 6676 Telex: 43532 wright

Manufactures chromatography columns for laboratory pilot and industrial use. Range from 6 mm to 1 m diameter and are of up to 1100 litre bed volume, specially designed for techniques such as separation by gel filtration. UK manufacturing and development division of Amicon Corp

Wyeth Research (UK)

Wyeth Laboratories

Huntercombe Lane South, Taplow, Maidenhead, Berks SL6 0PH. Tel: 06286 4377

Part of the research and development division of the Wyeth Ayerst Organization, developing pharmaceuticals and therapeutics including neurobiological products.

Xenova Ltd

Specialists in the design and operation of targetted screens for new microbial metabolites and enzymes. Have research programmes in immunological diseases and cancer as well as commercial collaboration in relation to various pharmaceutical and agrochemical targets.

Xoma (Europe) Ltd

Phillips House, Station Rd, Hook Hants RG27 9HD. Tel: 025672 4777 Telex: 859950

Carries out research, development and manufacture of monoclonal antibodies for use in diagnostics and as therapeutics and immunotoxins. Associated with Xoma Corporation, US.

York University

Department of Biology Heslington, York YO1 5DD. Tel: (0904) 59861

Working in areas of waste management and pollution control, construction of DNA probes, mechanism of action of antibiotics and risk assessment of genotoxins. Also incorporates the Centre for Biomolecular Design.

York University

Centre for Cell & Tissue Research (CCTR)

Department of Biology, York YO1 5DD. Tel: 0904 413798 Telex: 57933

Offer a microscopical service to biotechnologists including conventional electron microscopy preparation methods as well as cryo-techniques for freeze fracture, low temperature scanning microscopy, freeze-substitution and low temperature embedding. A full range of light microscopy as well as transmission and scanning electron microscopy techniques are available for examination of samples ranging from products of recombinant DNA technology to materials from fermentation and downstream processing.

York University

Centre for Biomolecular Design

Heslington, York Y01 5DD.

Tel: 0904 58961

Carries out research using recombinant DNA technology, protein isolation and X-ray crystallography for the development of new enzymes for the pharmaceutical industry for use in the synthesis of novel antibiotics. A collaborative venture between the Departments of Chemistry, Physics, Biology and Computing.

Yorkshire Brick Company

Wombell Lane, Stairfoot Barnsley, S Yorks S70 3NS. Tel: (0226) 83114

Developing methods for the management of landfill waste disposal sites for the generation of methane gas which is used for production of bricks.

Yorkshire Water Authority

West Riding House, 67 Albion St, Leeds LS1 5AA. Tel: 0532 448201

Regional water authority using aerobic and anaerobic effluent treatment systems.

Zer Hitec

Novo Centre, 9-11 London Lane, London E8 3PR. Tel: (01) 986 4717

Produces products for tissue culture, fibroblast growth function factor, radioimmunoassay test kits and affinity gel columns.

Zeta Engineering Ltd

Alfa Tower, Great West Rd, Brentford, Middx TW8 9BT. Tel: 01 560 1221 Telex: 22769

Manufacture a wide range of liquid and solids handling equipment including decanter centrifuges and screw conveyers as well as mixing and dosing systems and screening presses. The water and treatment division of the Alfa-Laval Group, Sweden.

UNITED STATES OF AMERICA

Entries in the US are arranged alphabetically by state. If the location of an organization is unknown, consult the Alphabetical Index to Part III where the ZIP code abbreviation of the state is given.

Alabama - AL

Alabama, University of, Birmingham

Cell Culture Center Department of Microbiology Medical Center, Birmingham, AL 35294.

Supply cultures of bacteria, fungi and yeasts.

Auburn University

Tel: (205) 934 2516

Dept of Entomology

301 Funchess Hall, AL 36849-4201.

Tel: 205 826 5006

Carrying out research on the biological control of Colorado potato beetle larvae using beta-exotoxin produced by Bacillus thuringiensis as well as investigating the control of Meloidogyne arenaria using species of Gliocladium, Paecilomyces and Verticillium.

Avanti Polar Lipids Inc

Manufacture liposomes.

City of Florence

Natural Gas Department, PO Box 1023, Florence, AL 35631. Tel: (205) 767 3431

Recovering landfill gas (methane) from waste disposal sites and upgrading it using the patented 'Prism' membrane separation system developed by Monsanto Corporation, US.

Research Genetics

2130 Memorial Parkway SW, Huntsville, AL 35801. Tel: 205 533 4363/800 533 4363

Offer custom DNA synthesis and purification services.

Southern Biotechnology Associates Inc

Write to: PO Box 26221, Birmingham, AL 35226

Manufactures affinity purified antibodies and monoclonal antibodies for research applications including immunofluorescence and flow cytometry, ELISA, immunochemistry and blotting, screening kits for hybridomas and diagnostic reagents. Developing new products using cell culture and hybridomas including collagen and collagen antibodies, as well as offering custom conjugation antibody development.

Arkansas - AR

Arkansas University

Biomass Research Center

415 Administration Building, Fayetteville, AR 72701. Tel: (501) 575 2654

Has developed and refined the process for converting cellulose to ethanol initiated by the Gulf Oil Corp, US. The process is based on the simultaneous hydrolysis of cellulose by enzymes from Trichoderma reesei and fermentation of sugars produced to ethanol using yeast.

ImmunoVision Inc

1506 Ford Ave, Springdale, AR 72764.

Tel: 501 751 7005/800 541 0960 Telex: 510 100 1341 Fax: 501 751 7005

Produce antiserums and immunoreagents including solid-phase absorbed antibodies as well as offering a custom protein purification service for autoimmune disease, blood proteins and animal tissues.

Pel-Freez Biologicals

PO Box 68, Rogers, AR 72757.

Manufactures a wide range of biological products: reagents for immunochemistry including antiserums to human proteins, second antibodies for radioimmunoassay and use with monoclonal antibodies etc, conjugated and affinity purified antibodies; whole blood serums and plasma from many different species; animal glands, organs and tissues; and nuclear antigens. In addition custom polyclonal and monoclonal services are available.

Arizona - AZ

Arizona State University

Department of Zoology

Tempe, AZ 85281.

Studying regulation of mRNA during development in Drosophila. Investigating structure and function of genes coding for alpha-amylase in Drosophila.

Arizona State University

Department of Chemistry

Tempe, AZ 85281.

Studying organization of chromatin on structural gene sequences in yeast.

Arizona, University of

Department of Cellular & Development Biology

Tucson, AZ 85721.

Studying interaction between poliovirus and HeLa cells.

Arizona, University of

Department of Biochemistry

Tucson, AZ 85721.

Tel: 602 621 1772

Investigating molecular biology of chloroplast ribosomes and site of synthesis of chloroplast ribosomal proteins.

Arizona, University of

Department of Physics, Office of Land Studies

Tucson, AZ 85719.

Tel: (602) 626 1955

Studying production of liquid fuels by growth of algae such as Dunaliella.

Arizona, University of

Department of Plant Sciences

Tucson, AZ 85721.

Isolating and characterizing mitochondrial DNA from sorghum and other monocotyledons with comparison of their structure using restriction endonuclease fragment analysis.

Arizona, University of

Center for Separation Science

Building 10, Tuscon, AZ 85721.

Tel: 602 621 4952

Offer services in contract electrophoresis.

Bio-huma-netics

201 Roosevelt Ave, Chandler, AZ 85226.

Tel: 602 961 1220

Supply soil conditioners, feed supplements and waste treatment products.

Protein Technologies Inc

1700 E 18th St, Suite 102, Tucson, AZ 85719. Tel: 602 629 9626

Produce systems for free flow electrophoresis for preparative and large scale separations with flow rates from 10 microlitres to 1 litre per hour. Can be used for separation of cells, bacteria phages or viruses as well as biopolymers such as proteins, nucleic acids, enzymes and nucleotides. Also available with an optional computerized scanner which permits reproducible separations as well as setting parameters for optimal separation.

Spider Pharm

PO Box 339, Black Canyon City, AZ 85324. *Tel*: 602 374 9419

Supplies spider venoms.

Vega Biotechnologies Inc

1250 East Aero Park Blvd, PO Box 11648, Tucson, AZ 85734.

Tel: 602 746 1401/800 528 4882 Telex: 165572 vegabio Fax: 602 889 4139

Manufactures a wide range of biologically active peptides on research and production scale, protected amino acids and nucleotides for peptide and DNA synthesis, polystyrene and CPG resins derivatized for peptide and DNA synthesis, and automated instruments for the synthesis pf peptides and organic chemicals from research to production scale.

California - CA

Aalto Scientific Ltd

1160 Joshua Way, Vista, CA 92083. Tel: 619 598 0903 Fax: 619 598 0908

Supplies human serum, human isoenzymes and other proteins.

Abbeon Cal Inc

123 Gray Ave, Santa Barbara, CA 93101. Tel: 805 966 0810

Supply laboratory equipment including monitoring devices.

Acorn Group

47 Quail Court, Suite 301, Walnut Creek, CA 94596. Tel: 415 934 1314 Fax: 415 934 8926

Offer consultancy services in regulatory procedures for FDA approval of new health care products.

Acurex Corp

Autodata Division

555 Clyde Ave, Mountain View, CA 94039. Tel: 415 967 9100 Fax: 415 967 7727

Supply computer controlled data systems and software as well as alarms.

The Agouron Institute

505 Coast Boulevard South, La Jolla, CA 92037. *Tel*: (619) 456 5300

Carrying out research in marine microbiology and mammalian genetics as well as molecular modelling.

Alacrity Marine Biological Services

PO Box 7000-358, Redondo Beach, CA 90277. Tel: 213 372 4950

Supplies tissues and extracts from marine animals.

Alpha Therapeutic Corp

5555 Valley Boulevard, Los Angeles, CA 90032.

Tel: 213 225 2221/800 421 0008 Telex: 4997369

Produces a range of therapeutic substances, blood proteins and other blood-derived products as well as a fluorocarbon-based blood substitute. Active in research and development of monoclonal antibodies, interferons and diagnostic enzymes and in the use of recombinant DNA technology in the production of albumins, blood factors and hepatitis vaccines. Supported by Green Cross Corp, Japan.

Alza Corp

950 Page Mill Road, Palo Alto, CA 94304. Tel: (415) 494 5067/800 692 2990

Developing and testing a wide range of therapeutics systems for controlled-rate continuous delivery of drugs for own sale on royalty basis or being developed on contract basis for other pharmaceutical companies.

Ambis Systems

3939 Ruffin Road, San Diego, CA 92123.

Tel: 619 571 0113/800 88 AMBIS Fax: 619 571 5940

Produces computerized radioanalytical imaging instrumentation.

American Biochemicals Inc

9888 Carroll Centre Rd, Suite 112, San Diego, CA 92126. Tel: 619 695 9259 Fax: 619 566 1171

Supplies human and animal hormones, special biologically active peptides, antiserums, functionalized resins for peptide synthesis, bulk production of protected peptide as well as fragments and unnatural amino acids for peptide synthesis.

American Biogenetics Corp

19732 MacArthur Blvd, Irvine, CA 92715. Tel: 714 851 7733

Carry out R&D in microbial genetics with applications in process design and chemical production.

American Bionetics Inc

ARN

21377 Cabot Blvd, Hayward, CA 94545. Tel: 415 732 9000/800 DNA PURE Telex: 510 100 2022 Fax: 415 732 0947

Manufacture products for molecular biology including systems to handle set-up and washing of Southern, Northern and Western blots. Hybridization and antibody binding reactions are performed in a disposable pouch, followed by a vacuum wash to provide low background results. Also produce phosphoramidite reagents for use in automated DNA synthesizers as well as reagents for electrophoresis and DNA sequencing. Recently released an HIV confirmatory test and in the process of developing other diagnostic tests for connective tissue diseases such as Lupus and Scleroderma, and a purification process for oligonucleotides. Offer custom oligonucleotide synthesis.

American Cytogenetics Inc

6440 Coldwater Canyon Ave, N Hollywood, CA 91606. Tel: 818 985 1730

Developing tests for genetic disorders and sexually transmitted diseases.

American Peptide Co Inc

3263 Kifer Rd, Santa Clara, CA 95051. Tel: 408 733 7604 Telex: 789199 Fax: 408 733 7603

Offer services in custom synthesis of peptides and other organic compounds

as well as in liquid chromatography.

American Qualex International Inc

14620 E Firestone Boulevard, La Mirada, CA 90638.

Tel: 714 521 3753/800 772 1776 Telex: 510 100 8733 am qualex

Birch Street, Santa Ana Heights, CA 92707

Produces affinity isolated antibodies and monoclonal antibodies, diagnostic kits, DNA probes, affinity isolation systems and antiserums. Offers custom services in assay development as well as protein A purification system for monoclonal antibody development.

Amgen

Carrying out research on oncogenes and the use of monoclonal antibodies as diagnostics for veterinary and pharmaceutical use. Products include: growth factors, interferon, erythropoietin (EPO), interleukin-2, colony stimulating factor, bovine and human growth hormones. Hold joint patent with Kirin, Japan for DNA sequences encoding erythropoietin and have recently won FDA approval for a new drug which is a copy of EPO for treatment of anaemia associated with kidney failure etc.

Analytical Imaging Concepts Inc

12 Woodfall, Irvine, CA 92714. Tel: 714 857 1269/800 535 2425

Manufacture computerized image analyzers.

Analytical Luminescence Laboratories

11760 Sorrento Valley Road E, San Diego, CA 92121. Tel: 619 455 9283/800 854 7050 Telex: 697845 firefly sdg Fax: 619 455 9204

Manufactures chemicals, reagents and kits for luminescence assay of nucleotide triphosphates etc. Products include both firefly and bacterial (Photobacterium fischeri) luciferase.

Analytical Products Inc

511 Taylor Way, Belmont, CA 94002. Tel: (415) 592 1400 Telex: 17206 Telex: 172060

Supplies laboratory chemicals and diagnostics.

Analytichem International Inc

24201 Frampton Ave, Harbor City, CA 90710. Tel: 213 539 6490/800 421 2825 Telex: 66 Telex: 664832 anachem hrbo Fax: 213 539 4270

Supplies equipment and accessories for analytical chromatography, including high performance liquid chromatography.

Antibodies Inc

PO Box 1560, Davis, CA 9569517. Tel: 916 758 4400/800 824 8540 Telex: 3710342 antibodies 916 758 5672

Produces custom and bulk blood serum products and both medical and veterinary diagnostics including polyclonal and monoclonal antibodies eg anti human T-cell factor, fluorescent diagnostics, radioimmunoassay. primary and secondary antiserums, and RNA and DNA test kits. Carrying out research on monoclonal antibodies, and infectious diarrhea and autoimmune diseases.

Antigen Supply House

19201 Parthenia St, Suite B, Northridge, CA 91324. Tel: 818 701 5997/800 423 5783

Produces bacterial and fungal antigens for use in skin tests.

Anver Bioscience Design Inc

160 E Montecito Ave, Sierra Madre, CA 91004. Tel: 818 355 1568

Carrying out contract research on biosynthesis of secondary metabolites as sources of chemicals and pharmaceuticals.

Applied Biosystems Inc

850 Lincoln Centre Drive, Foster City, CA 94404. Tel: 415 570 6667/800 874 9868 Telex: 470052 apbio Fax: 415 572 2743

170 Williams Drive, Ramsey, NJ 07446. Tel: 201 934 9000/800 545 7547, Tx: 6853505 Fax: 201 934 7909

Provides instrumentation for protein and DNA sequencing and a full range of instrument systems and components to isolate and purify DNA, proteins and peptides. Products include two synthesizers offering a choice of synthesis protocols, a fully automated amino acid analysis system, an integrated system for automated nucleic acid extraction of both DNA and RNA and a Taq polymerase reagent kit for fluorescent-based DNA sequencing. Produces a gas-phase protein sequencer based on an exclusive licence from California Institute of Technology (CIT). Has similar licences with CIT and the University of Colorado to produce DNA synthesizers capable of forming short lengths of oligonucleotides of known base pair sequence. Yields have been increased by phosphoramidite DNA synthesis using controlled pore glass (CPG) support. Products also include equipment and reagents for electrophoresis and HPLC.

Applied ImmuneSciences Inc

200 Constitution Drive, Menlo Park, CA 94025. Tel: 415 326 7302 Fax: 415 326 0923

Developing therapeutics based on genetically engineered molecules and monoclonal antibodies for selective removal of protein and blood components as well as cancer markers.

Applied Research Laboratories

24911 Avenue Stanford, Valencia, CA 91355. Telex: 4720130 arlabs Tel: 818 295 0019/800 551 8741 Fax: 805 295 0419

Supply spectrophotometers and spectrometry equipment.

Applikon Dependable Instruments

1165 Chess Drive, Suite G, Foster City, CA 94404. Tel: 415 578 1396 Fax: 415 578 8836

Manufacture a range of bioreactors including systems for cell culture and continuous cultures constructed of glass or stainless steel with 4 different impeller types available. Head plates are fitted with sensor plates for temperature, anti-foam, pH/redox, dissolved oxygen and turbidity. The fermenters are agitated by means of a magnetically coupled, slip-free, servo-controlled mechanism giving consistent results with media of varying viscosity. Products of Applikon, Netherlands.

ARCO Plant Cell Research Institute

6560 Trinity Court, Dublin, CA 94568. Tel: (415) 833 3400

Using recombinant techniques and tissue culture to produce new varieties of plants.

Astra Scientific Instruments Inc

PO Box 611088, 1961 Concourse Drive, San Jose, CA 95161-1088. Telex: TWX: 910 338 2042

Manufactures a cell-culture bioreactor and other fermentation equipment as well as amino acid analysers.

Athena Neurosciences Inc

957 P Industrial Rd, San Carlos, CA 94070. Tel: 415 595 4271 Fax: 415 595 8524

Developing diagnostics and therapeutics for nervous diseases as well as drug delivery systems

Automated Microbiology Systems Inc

3939 Ruffin Rd, San Diego, CA 92123. Tel: (619) 571 0113 Telex: 695053

Manufacture apparatus for electrophoresis.

Automedix Sciences Inc

19401 S Vermont Ave, Torrance, CA 90502. Tel: 213 327 1112

Developing cancer treatment products.

Axxiom Chromatography Inc

23966 Craftsman Rd, Calabassas, CA 91302-1217. Tel: 818 346 1800/800 423 5008 Fax: 818 704 1217

Manufacturer and distributor of microcomputer-based data systems and controllers for gas chromatography and HPLC.

B D Immunocytometry Systems

2350 Qume Drive, San Jose, CA 95131-1893. Telex: 9103382026 Tel: 408 432 9475

Supply monoclonal antibodies against DNA, complement components, histocompatability antigens, human immunoglobulins, lymphokines, monokines, cell markers and tumour associated antigens as well as equipment for flow cytometry.

BabCo Berkeley Antibody Co

4131 Lakeside Drive, Suite B, Richmond, CA 94806. Tel: 415 222 4940

Offer services in custom synthesis of monoclonal and polyclonal antibodies, protein purification and separations.

Bachem Inc

3132 Kashiwa Street, Torrance, CA 90505.

Tel: 213 539 4171 Telex: 910 347 7320 Fax: 213 530 1571

Produces a large selection of synthetic, bioactive peptides, synthetic intermediates and growth factors. Many products are available in either research grade or bulk pharmaceutical grade for clinical studies. Also offers custom peptide synthesis.

Baekon Inc

18866 Allendale Ave, Saratoga, CA 95070-5239. Tel: 408 741 0404 Telex: 362943 Fax: 408 741 0944

Specializes in bio-manipulation. Develop, manufacture and market advanced bioelectronic instrumemnts, macromolecules and organisms. Products include electrofusion and electro-gene-transfer systems for facilitating the transfer of foreign genetic material into bacterial, animal or plant cells. Developing a pulsed electrophoresis control system.

Baxter Healthcare Corp

MicroScan Division

1584 Enterprise Blvd, W Sacramento, CA 95691.

Develops and manufactures computer controlled electronic instrumentation and disposables for clinical laboratory use. Researching systems for rapid identification and susceptibility testing.

Bechtel Group Inc

Research and Engineering

50 Beale Street, San Francisco, CA 94105. Tel: (415) 768 1234 Telex: 470195 Tel: (415) 768 1234

Part of a major energy, petrochemical and mining consortium. Carries out studies on energy developments, including aspects of biomass fuels and bioconversion of raw materials with production of fuel alcohol from sugar and starch crops.

Beckman Instruments Inc

Altex Scientific Division

2350 Camino Ramon, PO Box 5101, San Ramon, CA 94583. Tel: 415 866 0511/800 742 2345 Telex: 678413

Manufacture amino acid analysers, chromatography equipment including liquid HPLC, detectors and accessories, columns, sample injectors and separation and purification equipment.

Beckman Instruments Inc

Microbics Division

2470 Faraday St, Carlsbad, CA 92008. Tel: 619 438 9151 Telex: 678413

Produces enzymes by fermentation for research and analytical purposes including cholesterol oxidase. Part of SmithKline Beckman, US

Beckman Instruments Inc

Diagnostic Systems Group

200 South Kraemer Blvd, PO Box 428, Brea, CA 92621.

Products under development include diagnostic enzymes, antiserums and

Beckman Instruments Inc

2500 Harbor Boulevard, PO Box 3100, Fullerton, CA 92634. Tel: 714 871 4848/800 742 2345 Telex: 0678413 Fax: 714 773

Manufactures analytical instruments and related chemicals, process instruments and controls and electronic components. Markets products of British Bio-technology Ltd, UK for research and development. Part of SmithKline Beckman, US.

Beckman Instruments Inc

Spinco Division/Bioproducts Operation

1050 Page Mill Rd, Palo Alto, CA 94304. Tel: 415 857 1150/800 742 2345

Manufactures high-speed centrifugal equipment including an elutriator rotor for counter-flow centrifugation of cells and particles, DNA synthesizers and synthesis reagents. Developing biologically active synthetic peptides in the following categories: central nervous system. ACTH, gastrointestinal, renin-angiotensin, pituitary, protease inhibitors etc (see SmithKline Beckman, US).

Beckman Instruments Inc

Scientific Instruments Division

Campus Drive at Jamboree Blvd, Irvine, CA 92713.

Tel: 714 833 0751

Manufactures electronic analytical equipment. Part of SmithKline Beckman, US.

Becton Dickinson & Co

Immunocytometry Systems

966 8914

Produce monoclonal antibodies against complement components and receptors, DNA, human histocompatibility antigens, immunoglobulins, tumour associated antigens, flow cytometers, cell sorters and reagents.

Behring Diagnostics

10933 N Torrey Pines Rd, La Jolla, CA 92037. Tel: 800 854 9256 Telex: 697934

17 Chubb Way, Somerville, NJ 08876. Tel: 201 707 3800/800 854 9256

Supplies a wide range of biological products including animal tissues, antiserums, research biochemicals and enzymes, reagents for bioluminescence, buffers, enzyme substrates, immunochemicals, monoclonal antibodies, diagnostics and viral reagents as well as equipment including fermentation equipment, apparatus for immunodiffusion and immunoelectrophoresis etc, and products of Calbiochem, US. Products under development include AIDS tests. Division of American Hoechst. Corp, US. Subsidiary of Hoechst AG, Germany.

Berkeley Antibody Company Inc

4131 Lakeside Dr, Suite B, Richmond, CA 94806. Tel: 415 222 4940 Fax: 415 1222 1867

Offer custom development of hybridomas, ascites fluid and polyclonal antibody production and purification of antibodies as well as hapten carrier and antigen conjugation in relation to immunoassay development.

Berkeley Biologicals

1831 Second St, Berkeley, CA 94710.

Tel: 415 843 6846

Produce fungal antigens for use in skin tests. Products under development include allergenic extracts, coccidiodin and histoplasmin.

Billups-Rothenburg Inc

PO Box 977, Del Mar, CA 92014. Tel: 619 755 3309/800 543 0522

Supply cell and tissue culture equipment, bacterial analyzers, growth chambers, incubators and viruses.

Binding Site Ltd

5889 Oberlin Drive, Suite 101, San Diego, CA 92121. Tel: 619 453 9177 Fax: 619 453 9189

polyclonal antibodies as well as custom immunization (see Binding Site, UK). Supplies immunological and biological reagents including monoclonal and

BIO 101 Inc

4206-H Sorrento Valley Blvd, San Diego, CA 92121. Tel: 619 546 0556/800 424 6101 Telex: 990498 bio101 Fax: 619 454 1799

PO Box 2284, La Jolla, CA 92038-2284

Manufacture and market a rapid DNA purification kit, plasmid preparation kit, growth media, cell and tissue culture equipment, laboratory glassware cleaning devices and storage.

Bio-Probe International Inc

2842 Walnut Ave, Suite C, Tustin, CA 92680-7027.

Manufacture a range of non-ionic gels for use in medium pressure affinity chromatography, characterized by no-leakage, high binding capacity and increased flow rates.

Bio-Rad Laboratories

Chemical Division

1414 Harbour Way South, Richmond, CA 94804. Tel: 415 232 7000/800 4 BIO-RAD/800 843 1412 Telex: 271772 Fax: 415 232 4257

Supplies fast affinity chromatography polymeric support, as pre-packed columns for HPLC or in bulk for production scale separation systems, as well as systems for rapid, quantitative electrophoretic transfer of high molecular weight denatured nucleic acids using nylon transfer membranes for electro-blotting of DNA/RNA for subsequent hybridization in DNA sequencing. Manufactures an organic acids analysis system with either refractive index or UV detector to monitor fermentable carbohydrates and major by-products of fermentation. Has developed a screening technique for the detection of AIDS in donor blood.

Bio-Rad Laboratories

Clinical Division

1000 Alfred Nobel Drive, Hercules, CA 94547. Tel: 415 724 7000 Telex: 337732 Fax: 415 724 5024

Supplies controls and reagents for toxicology and immunochemistry as well as developing immunodiagnostic tests including a test for AIDS.

Bio-Response Inc

1978 West Winton Avenue, Hayward, CA 94545.

Telex: 510 100 5247 Tel: 415 786 9744 Fax: 415 887 1388

Developing techniques for hollow-fibre, large-scale culture of animal cell lines, such as mouse myeloma and hybridomas, using lymph fluid systems with the objective of isolating specific cell types producing potentially useful products, including monoclonal antibodies. Other products include non-rDNA TPA and diagnostic kits. Distributes treated animal lymph as replacement for foetal calf serum.

Bio-Sep Co

872 Autumn Drive, Walnut Creek, CA 94598. Tel: 415 934 0656

Manufacture equipment for cell fractionation.

Biocell Laboratories

Telex: 277456 Fax: 213 637

Supplies blood proteins for use in diagnostics as well as for cell culture media including plasma and serum fractions of animal origin. Also supplies radial immunodiffusion kits, antibodies and controls. Products include an AIDS test. Offers services in research, process development and protein purification.

Biocine Co

4560 Horton St, Emeryville, CA 94608. Tel: 415 655 8730 Telex: 176247

Developing vaccines against infectious diseases. Joint venture between Ciba-Geigy and Chiron, US.

BioGenex Laboratories

4600 Norris Canyon Rd, Suite 200, San Ramon, CA 94583. Tel: 415 275 0550/800 421 4149 Telex: 296121 Fax: 415 275 0580

Carries out research and development in the areas of microbial genetics, microbial physiology, cell biology, hybridoma technology, immunology and protein chemistry. Products include enzyme immunoassay diagnostic test kits, immunohistochemicals and reagents.

Biogenics Inc

PO Box 627, Santa Cruz, CA 95061 Tel: 408 476 1200 Telex: 296452

Carry out algal culture and harvesting for production of extracts for pharmaceuticals, food supplements and fertilizers

BioGrowth Inc

3065 Atlas Rd, Suite 117, Richmond, CA 94806. Tel: 415 222 2084

Developing protein-based delivery systems to enhance the efficacy of recombinant DNA-derived pharmaceuticals used in wound healing, osteoporosis etc.

Biolog Inc

3447 Investment Blvd, Suite 3, Hayward, CA 94545. Tel: 415 785 2585/2564

Produces test kits for microbial detection and identification incorporating a single redox dye colour change based on NADH oxidation.

Biological Information Systems

101 South San Mateo Drive, Suite 315, San Mateo, CA 94401. Tel: 415 342 8323

Developing clinical diagnostics. Offers laboratory services in clinical testing

Biomed Instruments Inc

1020 South Raymond Avenue, Suite B, Fullerton, CA 92631 Tel: 714 870 0290 Telex: 692430 Fax: 714 870 6385

Manufactures and supplies a 1-D/2-D laser scanning densitometer working in 0-4.2 OD range with 5-10 micrometres resolution; a 1-D/2-D/DNA/ELISA UV-VIS video densitometer to scan X-ray films, gels, dots, blots on nitrocellulose, TLC, and to read DNA sequences, ELISA plates and colony counts; an image analyzer; a microdensitometry station which comprises laser scanner, video densitometer and image analyzer all operated by one computer.

Biomeda Corp

Produce antiserums, antibodies and antigens including peroxidase antibody conjugates as well as polyclonal and monoclonal antibodies against human immunoglobulins and human histocompatability antigens, immunohistochemical staining kits for tumour identification and differentiation, avidin-biotin complex reagents and phycoprobe fluorescent tracers. Offer services in custom DNA synthesis. Developing DNA hybridization-probe-detection systems.

Biomerica Inc

1533 Monrovia Ave, Newport Beach, CA 92663. Tel: 714 645 2111

Develop and supply laboratory products including veterinary diagnostics as well as clinical diagnostics for pregnacy, allergies and occult blood.

Bioprobe International Inc

14272 Franklin Ave, Tustin, CA 92680. Tel: 714 544 4035

Fax: 714 544 0322 Telex: 62914327

Offer separation services and supply products and equipment including activated and immobilized supports for affinity chromatography, gel filtration, ion exchange and HPLC packings and columns, including specialized gels, and reagents for enzyme immunoassay.

BioScience Resource

4143 Hubbartt Drive, Palo Alto, CA 94306. Tel: 415 856 9410 Fax: 415 856 8905

Provides consulting services in life science, biotechnology and health care including market analysis, technology assessment and start up planning.

Biosis

1057 East meadow Circle, Palo Alto, CA 94303.

Developing nematode based products for insect pest control.

Biosource Genetics Corp

3333 Vaca Valley Parkway, Vacaville, CA 95688. Tel: 707 446 5501 Fax: 707 446 3917

Using recombinant DNA techniques to select plant strains for production of biopolymers for the food and speciality chemicals industries. Projects include genetically engineered hybrid seed with improved disease resistance and vield.

BioSym Technologies Inc

10065 Barnes Canyon Rd, San Diego, CA 92121. Tel: 619 458 9990/619 546 5509 Fax: 619 458 0136

Market a 3-dimensional, real-time molecular modeling program which can selectively display and manipulate molecules and their components. Offer contract research in computer-aided molecular design.

Biotherapy Systems Inc

291 N Bernardo Ave, Mountain View, CA 94043. Tel: 415 940 1200

Produces monoclonal antibodies for cancer therapy.

Biozyme Laboratories International Ltd

9939 Hibert St, Suite 101, San Diego, CA 92131. Tel: 619 549 4484/800 423 8199 Telex: 240833 Fax: 619 549

Supplies enzymes for use in analysis, diagnostics and research; products of Biozyme Laboratories Ltd, UK.

Broadley James Corp

1714 S Lyon St, Santa Ana, CA 92705-0000. Telex: 182703 bjcorp sna Tel: 714 547 8061 Fax: 714 547 8988

Manufactures pH and ion-specific electrodes as well as fermenter systemaccessories.

Brownlee Labs Inc

2045 Martin Avenue, Santa Clara, CA 95050. Tel: 408 727 1346 Telex: 888296

Produces a wide range of liquid chromatography and HPLC columns and packing materials as well as pumps. Division of Applied Biosystems, US.

Brunswick Technetics

Membrane Filter Products

4116 Sorrento Valley Blvd, San Diego, CA 92121.

Tel: (619) 455 7260 Fax: TWX: 910 335 1706

Manufactures double layer membrane cartridge filters.

BTX/Biotechnologies & Experimental Research Inc

3742 Jewell St, San Diego, CA 92109. Tel: 619 270 0861/800 289 2465 Telex: 510 600 3313 Fax: 619

Involved in the following technologies: instrument systems for rDNA gene transfer; cell fusion; embryo manipulation; electroporation; separation and purification of cells and megabase DNA using electric and magnetic fields.

Cahn Instruments Inc

16207 S Carmenita Road, Cerritos, CA 90701. Tel: 213 926 3378/800 423 6641 Telex: 3724174 Fax: 213 926

Manufactures micro-balances, including systems designed to work at high pressures and temperatures.

Cal-Glass for Research Inc

3012 Enterprise St, Costa Mesa, CA 92626. Tel: 213 625 1121

Manufactures chromatography columns, quartz and pyrex, distillation laboratory glassware, micro glassware and vials for liquid scintillation counting as well as offering custom design and fabrication or repair for research laboratory and industrial glassware equipment.

Calbiochem Corp

PO Box 12087, San Diego, CA 92112-4180. Tel: 619 450 9600/800 854 9256 Telex Telex: 697934 10933 North Torrey Pines Rd, La Jolla, CA 92037.

Tel: 800 854 3417 Fax: 619 453 3552

Manufactures and distributes biochemicals and diagnostic reagents as well as analytical research enzymes. Products include serum and tissue proteins, mammalian immunoglobulins, biotin, insulin-like growth factor somatostatin and nerve growth factor. Offer custom synthesis of peptides.

Calgene Inc

1920 Fifth Street, Suite F, Davis, CA 95616. Tel: 916 753 6313 Telex: 350370 cgene

Research company using recombinant DNA technology and other in vitro methods of plant breeding to improve commercially important crops, such as corn, rapeseed, sunflower, cotton and tomatoes, the quality of food products and legume transformation and regeneration as well as herbicide resistance. Other areas of interest include plant biochemistry in relation to disease and the response to pathogenic bacteria. Developing pesticides for crop plants and trees. Undertakes contract research in this area. Allied Corp, US and Continental Grain Co, US hold a minor interest in this company.

California Biotechnology Inc

2450 Bayshore Parkway, Mountain View, CA 94043. Tel: 415 966 1550 Telex: 288961 cbi ur Fax Fax: 415 968 2438

Carrying out research in recombinant DNA technology including, gene isolation, sequencing and expression, and protein chemistry. Applying such techniques to areas of commercial importance in human therapeutics. Interests include monoclonal antibodies against alveolar surfactant protein, insulin, renin, human growth hormone, atrial natriuretic hormone, erythropoietin and a nasal drug delivery system.

California Institute of Technology

Jet Propulsion Laboratory

4800 Oak Grove Drive, Pasadena, CA 91109. Tel: (213) 354 4321

Carrying out studies on gas composition from anaerobic digestion.

California Institute of Technology

Department of Chemistry

1202 East California Boulevard, Pasadena, CA 91125.

Utilizing cloned DNA for the study of structural organization and processing of Drosophila RNA transcription.

California Institute of Technology

Division of Biology

1202 East California Boulevard, Pasadena, CA 91125. Tel: 818 356 4952/3990

Developing new techniques and instrumentation for an integrated protein and nucleic acid biotechnology.

California Integrated Diagnostics

1440 Fourth St, Berkeley, CA 94710.

Tel: 415 527 9400/800 334 3366 Telex: 330036

Develop diagnostic kits for sexually transmitted diseases and monoclonal antibodies. Subsidiary of Infergene, US.

California, University of, Berkeley

Department of Biochemistry

Berkeley, CA 94720.

Studying molecular basis of species differences in levels of lyzozyme gene expression.

California, University of, Berkeley

Department of Genetics

Berkeley, CA 94720.

Investigating regulation of gene expression in mutants of maize.

California, University of, Berkeley

Department of Molecular Biology

Berkeley, CA 94720.

Analyzing recombination between SV40 DNA and mammalian chromosomal DNA. Studying control of gene expression and DNA sequencing. Evaluating the process of viral integration during transforming infection by SV40. Has established gene libraries of mouse and human DNA fragments.

California, University of, Berkeley

Lawrence Berkeley Laboratory

1 Cyclotron Rd, Berkeley, CA 94720.

Tel: 415 486 4277

Carrying out research on human genetics associated with production of blood lipoproteins, especially aspects of abnormally high levels in relation to artheriosclerosis and heart disease.

California, University of, Berkeley

Department of Plant Pathology

Berkeley, CA 94720. Tel: 415 642 5121

Carrying out research on the use of genetically manipulated bacteria modified so as to decrease their effectiveness as initiation points for the growth of ice crystals in leaves under low temperature, thus decreasing the probability of frost damage to the plant.

California, University of, Davis International Collection of Phytopathogenic Bacteria

Davis, CA 95616.

Hold a collection of microorganisms pathogenic to plants.

California, University of, Davis

Department of Entomology

Davis, CA 95616.

Carrying out research on the production and use of the fungus Lagenidium giganteum as a biological agent for control of mosquitoes as well as studying the chemistry of the toxin of Bacillus sphaericus.

California, University of, Davis

Department of Agricultural Engineering Davis, CA 95616.

Tel: (916) 752 7420

Studying anaerobic digestion of poultry manure. Designs and operates a mobile anaerobic digester for trials with various farm wastes.

California, University of, Davis

Department of Agronomy

Davis, CA 95616.

Plant growth laboratory studying applications of genetic engineering and use of plasmids in improving bacteria for use in agriculture (eg Rhizobium for nitrogen fixation) and in production of fuels from biological raw materials (eg Zymomonas for fuel ethanol production).

California, University of, Los Angeles

Department of Biology

Hilgard Avenue, Los Angeles, CA 90024.

Carrying out studies on expression of genes coding for histone synthesis during development of the sea urchin embryo and nucleotide sequencing in oncogenic viruses.

California, University of, Los Angeles

School of Medicine

2025 Zonal Avenue, Los Angeles, CA 90024.

Analyzing repetitive DNAs in human chromosomes; cloning influenza viral DNA segments in E coli as a means of studying viral replication; studying expression of viral genes; developing gene therapy techniques; regulating adenovirus transcriptions.

California, University of, Riverside

Department of Plant Science

Riverside, CA 92521.

Tel: (714) 787 4425

Investigating growth and propagation of jojoba as a means of producing a substitute for sperm whale oil.

California, University of, San Diego

School of Medicine

La Jolla, CA 92093.

Studying gene expression in somatic cell hybrids and molecular biology of cytomegalovirus.

California, University of, San Diego

Department of Biology

La Jolla, CA 92093.

Selecting yeast mutants with increased level of alcohol dehydrogenase and investigating biochemical regulation of alcohol production.

California, University of, San Diego

Department of Chemistry

La Jolla, CA 92093.

Carrying out the following studies: structure of bacterial hydrogenases and arrangement of iron-sulphur centres, genetic modification of hydrogenase for use in hydrogen-generating photolytic systems and control of RNA synthesis in yeasts.

California, University of, Santa Cruz

Department of Chemistry

Santa Cruz, CA 95060.

Studying structure of rhodopsin through sequencing of cDNA cloned in E coli.

California, University of, Santa Cruz

Division of Natural Science

Graduate School, Santa Cruz, CA 95060.

Studying the genetics of the Rhizobium-legume symbiotic nitrogen fixation. Also studying role of plasmids in slow-growing strains and differentiations following infection.

Caltag Laboratories

384 Oyster Pt Blvd, Suite 16, South San Francisco, CA 94080. Tel: 415 873 6106 Telex: 261120

Carrying out research in purification of monoclonal antibodies and other immunological intermediates for production of clinical diagnostics and reagents for medical research.

Calzyme Laboratories Inc

3443 Miguelito Ct, San Luis Obispo, CA 93401.

Tel: 805 541 5754/800 523 9127 Telex: 4994640 Fax: 805 541 8301

Produces enzyme controls, enzyme inhibitors, nucleases, biochemicals for enzyme immunoassay and offers custom services in protein purification and separation.

Cangene (US) Inc

3880 Blackhawk Rd, Danville, CA 94526-4617. Tel: 415 820 9622

Research and development organisation using recombinant DNA technology to develop proprietary gene expression systems for licensing. Market multi-tissue block kits. Subsidiary of Cangene Corp, Canada.

Catalytica

430 Ferguson Drive, Mt View, CA 94043. Tel: 415 960 3000

Carrying out research on synthetic enzymes.

Cavro Scientific Instruments Inc

242 Humboldt Court, Sunnyvale, CA 94089.

Tel: 408 745 7400 Telex: 172665 Fax: 408 745 0309

Manufactures and designs a wide range of precision liquid handling equipment from stand-alone diluters to computer-controlled modular digital pumps. Also distributor of robotic sample processors.

Celtrix Laboratories

2500 Farber Place, Palo Alto, CA 94303-3334. Tel: 415 856 0200 Telex: 172194

Developing collagen products and cell growth factors for bone and skin healing. Subsidiary of Collagen Corp.

Center for Science Information

4252-20th St, San Francisco, CA 94114-2815. Tel: 415 553 8772

Non-profit organization offering information on biotechnological advances and their role in industry and the environment.

Cetus Corp

1400 53rd St, Emeryville, CA 94608.

Tel: (415) 420 3300/800 448 0049

Telex: 4992659

Major biotechnology company using molecular biology techniques and recombinant DNA technology for development and production of diagnostic, therapeutic and industrial products over a wide range of interests. Activities include insulin, development of non-isotopic DNA probes for retrovirus, HIV-1 and HIV-2, adult T-cell leukemia, tumour necrosis factor, colony stimulating factor, Salmonella, sickle cell anaemia, paternity testing and forensic applications, monoclonal antibody-based in vitro diagnostics against cancers, bacterial diseases etc, cancer imaging and therapeutic monoclonal antibodies, interferons, lymphokines, immunotoxins, vaccines against human infections, animal vaccines and food processing enzymes. Have patented a process for simultaneously detecting multiple antigens using dual sandwich immunometric assay. Have joint venture with Eastman Kodak to introduce an AIDS test based on the Cetus DNA amplification system. Developing proleukin IL-2 for kidney cancer treatment.

Chemicon International Inc

Supplies immunochemicals and reagents for molecular biology: monoclonal antibodies; polyclonal antibodies; affinity purified and labelled antibodies; purified viral, prokaryotic and eukaryotic antigens; growth factors; cell growth assay kits; interleukins; interferons; and enzymes. Offers contract manufacturing services for monclonal and polyclonal antibodies as well as conjugates.

Chevron Corp

225 Bush Street, San Francisco, CA 94104. *Tel*: 415 894 7700

Investigating microbial techniques for oil recovery and conversion of hydrocarbons. Has significant investment in Cetus Corp, US.

Chimera Biotech Inc

650 Town Center Drive, Suite 810, Costa Mesa, CA 92626.

Using techniques of micro injection, embryonal stem cell culture and mammalian gene expression to produce transgenic animals.

Chiron Corp

4560 Horton Street, Suite 0214, Emeryville, CA 94608. Tel: 415 655 8730 Telex: 176247 chiron emul

Research and development company involved in the application of recombinant DNA technology to production of immunological diagnostics and therapeutic substances. Interests include DNA probes for infectious and sexually transmitted diseases, monoclonal antibody in vitro diagnostics and sexually transmitted diseases, infolicional antibody in vitro diagnostics against disease, including AIDS antigen and hepatitis B tests, fibrinolytics, factor VIII, human growth hormones, epidermal growth factor, somatomedin C, interferon, lymphokines, including interleukin-2, enzymes, insulin, superoxide dismutase, human vaccines against hepatitis, herpes and AIDS, animal vaccines against viral disease and industrial enzymes for

Chiron Ophthalmics Inc

15A Marconi St, Irvine, CA 92718-9925 Tel: 714 768 4690 Fax: 714 768 4882

Developing opthalmic uses for products of recombinant DNA technology such as epidermal growth factors for stimulation of corneal cells, fibronectin for enhanced rates of corneal healing after eye surgery and a microbial corneal mortar, a proprietary compound for use in radial keratotomy as well as superoxide dismutase for use as an anti-inflammatory agent. A subsidiary of Chiron, US.

Climet Instruments Co

1320 W Colton Ave, PO Box 151, Redlands, CA 92373. Tel: (714) 793 2788 Telex: 676444 climet rlns

Manufacture particle analyzers. Division of Wehr Corp, US.

Clinetics Corporation

2991 Dow Ave, Tustin, CA 92680. Tel: 714 544 7991/800 854 8221 Telex: 292424

Supply liquid media for cell and tissue culture, diagnostics and a pregnancy testing kit.

Clonetics Corp

9620 Chesapeake Drive, San Diego, CA 92123-1324. Tel: 619 541 0086/800 852 5663 Telex: 510 100 9924 Fax: 619 541 0823

2211 Norfolk, Suite 705, Houston, TX 77098.

Tel: 713 524 0530

Supply culture media. Developing in vitro diagnostic kits including a human skin cell test.

Clontech Laboratories Inc

4030 Fabian Way, Palo Alto, CA 94303. Tel: 415 424 8222/800 662 CLON Telex: 330060 Fax: 415 424 1352

Produces a photo-activatable biotin labelling system for non-enzymic marking of nucleic acids as well as cDNA libraries in various vectors. Also using cloning techniques to produce TPA and blood clotting factors. Offer custom services in gene synthesis, cloning, probe synthesis and gel production for direct gel hybridization. New products include a PCR screening kit for oncogene research and DNA size markers and pulsed field reagents.

Codon Inc

Tel: 415 952 7070

430 Valley Drive, Brisbane, CA 94005.

Tel: 415 467 0740

Research and development company using molecular biology and immunological techniques to develop food and industrial enzymes and reagents for human and veterinary health care as well as human diagnostics and veterinary vaccines. Has completed work on the cloning and expression of rennin. Undertakes contract research. Celanese, US and Elf Aquitaine, France have investment interests.

Coherent Laser Products Division

3210 Porter Drive, PO Box 10321, Palo Alto, CA 94303. Tel: 415 493 2111

Produce a wide range of ion, dye, solid-state and ultrafast lasers.

Cole Scientific Inc

23966 Craftsman Rd, Calabasas, Los Angeles, CA 91302. Tel: (800) 423 5008

Supply accessories for analytical chromatography as well as for high performance liquid chromatography.

Collagen Corp

Telex: 910 373 2073

Involved in research and development activities related to the specific use of collagen-based products in medical applications. Also interested in the replacement, repairing or regeneration of human body tissue involving development of medical devices, collagen implant technique and cell biology.

Cooper Development Co

75 Willow Rd, Menlo Park, CA 94025. Tel: 415 853 6000

Developing new therapeutic agents using recombinant DNA technology. Products include AAT (alpha-1-antitrypsin) used in the treatment of lung congestion and emphysema made in genetically modified yeast by Zymos, US, and monoclonal antibodies.

Cooper Laboratories Inc

3145 Porter Drive, Palo Alto, CA 94304. Tel: 415 856 5000 Telex: 184924

Manufactures and distributes (through Cooper Diagnostics Inc, US and Cappel Laboratories, US) medical and other diagnostics based on immunological reactions.

Creative Scientific Equipment Corp

3711 Long Beach Blvd, Long Beach, CA 90807. Tel: 213 427 3318

Supply filtration equipment.

Cutter Biologicals Inc

PO Box 1986, 4th & Parker Sts, Berkely, CA 94701. Tel: 415 420 5000

Supply healthcare products.

Cygnus Research Corp

701 Galveston Drive, Redwood, CA 94063.

Tel: 415 369 4300

Developing drug delivery systems. Carrying out contracts for therapeutics companies.

Cytometrics Inc

11575 Sorrento Valley Road, San Diego, CA 92121. Tel: 619 455 6452

Offer flow cytometry and molecular biology services. Specialize in immunophenotyping and molecular characterization of leukemias and lymphomas, and DNA content/cell cycle analysis in solid tumours. Division of Specialty Laboratories, US.

Cytotech

11035 Roselle St, Suite B, San Diego, CA 92121. Tel: 619 452 1556/800 992 0290 Telex: 510 601 8430 Tel: 619 452 1556/800 992 0290 Fax: 619

Produce immunological reagents including monoclonal and polyclonal antibodies against infectious agents, viral antigens, complement components etc. Develop and market diagnostics for infectious diseases including reagents, diagnostic tests for rubella, herpes, CMV, HTLV-I etc, an AIDS test, and human complement diagnostic kits including CIC (circulating immune complexes), C3, C4 and Factor B assay, as well as developing therapeutics based on the use of complement to modulate the immune system.

Dako Corp

6392 Via Real, Carpinteria, CA 93013 Telex: 658481 Tel: 805 966 6655/800 235 5763 Fax: 805 566

Supplies reagents and diagnostic kits for immunological purposes. Distributor for Statens Seruminstitut, Denmark. Products include monoclonal and polyclonal antibodies and proteins. Developing antiserums. Subsidiary of Dakopatts AS, Denmark.

Davy McKee Corp

2430 Camino Ramon, San Ramon, CA 94583. Telex: 470670 Tel: 415 866 6312 Fax: 415 866 6520 (see Davy McKee Corp, IL),

DDI Pharmaceuticals Inc

518 Logue Avenue, Mountain View, CA 94043. Tel: 415 964 7676 Telex: 140498

Developing pharmaceuticals based on superoxide dismutase for use in medical and veterinary practice.

Detector Engineering & Technology Inc

2212 Brampton Rd, Walnut Creek, CA 94598.

Supplies laboratory equipment including chromatography detectors and chemical analyzers.

Diagnostic Products Corp

5700 West 96th Street, Los Angeles, CA 90045. Tel: 213 776 0180/800 654 3707 Telex: 4720518 Fax: 213 642 0192

Markets clinical and veterinary assays for diagnosis and/or monitoring of drug use, endocrine disorders, pregnancy and infertility, autoimmune diseases, infectious and allergic diseases, malignancy and connective tissue disorders. Assays utilize monoclonal or polyclonal antibodies, as appropriate.

Dionex Corp

1228 Titan Way, PO Box 3603, Sunnyvale, CA 94088-3603. Tel: 408 737 0700 Telex: 348347

Manufactures analytical equipment, including amino acid and glycoprotein analyzers, ion chromatographs and rapid kinetic systems.

Disease Detection International

17935 Sky Park Circle, Suite D, Irvine, CA 92714. Tel: 714 261 7267 Fax: 714 261 9540

Produce tests for parasitic and infectious diseases as well as veterinary tests including brucellosis. Carrying out research on solid phase immunoassay.

Diversified Diagnostic Industries Inc

1640 School St, Suite 102, Moraga, CA 94556-1123. Tel: 415 631 0300

Market a rapid salmonella test.

The DNA Factory

PO Box 210226, San Diego, CA 92121. Tel: 619 558 9570

Offer services in custom synthesis of DNA.

DNAX Research Institute

901 California Avenue, Palo Alto, CA 94304. Tel: 415 852 9196

Developing DNA probe diagnostics and viral detection kits. Subsidiary of Schering-Plough.

Domnick Hunter Filters Ltd

4220 Commercial Drive, Tracy, CA 95376. Tel: 209 832 0401 Telex: 172582 Fax: 209 832 0417

Manufacture a wide range of filters and membrane products including asymmetric pore filters, nylon membrane cartridges, integral PTFE membranes and polypropylene filters.

Dual Fuel Systems Inc

6140 Bristol Parkway, Culver City, CA 90230. Tel: (213) 649 1062

Carries out modifications of vehicles to run on alternative fuels, including methane purified from biogas.

Duke Scientific Corp

1135-D San Antonio Rd, Palo Alto, CA 94303. Tel: 415 962 1100/800 334 3883 Telex: 334490 Fax: 415 962 0718

Manufactures cell culture and harvesting equipment, particle counters and cell culture media.

Dynamic Solutions Corp

Manufactures an IBM/PC based chromatography workstation for handling laboratory data and graphical presentation.

E-Y Laboratories Inc

107 North Amphlett Boulevard, PO Box 1787, San Mateo, CA 94401. Tel: 415 342 3296/800 821 0044

Manufactures antibodies and antiserums as well as lectins, agglutinins and other products for use in immunological diagnostics including antibodies and antiserums against fibrinogens, albumins, gamma-globulins, lectins, toxins and conjugated products. Protein A is sold linked to a range of markers. Developing sensitive marker technology for rapid assay in monoclonal antibody diagnostics.

Eldex Laboratories

831 Bransten Road, Unit L, San Carlos, CA 94070. Tel: 415 592 9270 Telex: 171596 Fax: 415 Fax: 415 592 5028

Manufacture pumping systems including pumps for high performance liquid chromatography, fraction collectors and equipment for liquid and ion chromatography and HPLC.

Engenics Inc

3760 Haven Avenue, Menlo Park, CA 94025. *Tel*: (415) 324 8600

Research company developing processes for the continuous mass cultivation of cells and microorganisms resulting from research on recombinant DNA technology.

Escagenetics Corp

Escagen

830 Bransten Rd, San Carlos, CA 94070-3305. Tel: 415 595 5335 Telex: 910 376 5003

Fax: 415 5955 4332

Using tissue culture technology to obtain flavours and micropropagate date palms. Also producing seeds of crop varieties including potatoes and tomatoes.

Evergreen Scientific

2300E 49th St, PO Box 58248, Los Angeles, CA 90058. Tel: (213) 583 1331 Telex: 691328

Manufactures chromatography columns, test tubes and other laboratory

Fluorocarbon

Fluid Handling Division

1742 S Clementine Ave, Anaheim, CA 92803. Tel: 714 772 3000/800 TEFLON 1 (835 5661) Telex: 910 350

Fax: 714 772 2073

Manufacture teflon products including small valves with low dead volumes

giving a fast response.

Gen-Probe

9880 Campus Point Drive, San Diego, CA 92121 Telex: 188912 Tel: 619 546 8000/800 523 5001 Fax: 619 452

Developing and marketing diagnostics using techniques of DNA/RNA hybridization for both radioactive (I-125) and non-radioactive based products, including tests for Legionella, Mycobacteria and Mycoplasma as well as sexually transmitted diseases and gastro-intestinal disorders. Also developing cancer diagnostics and have interests in use of DNA probes for research and clinical treatment of genetic disorders, veterinary medicine, agricultural applications and environmental control. Carrying out research on AIDS vaccine.

Genelahs Inc

505 Penobscot Drive, Redwood City, CA 94603. Tel: 415 369 9500 Fax: 415 368 0709

Developing AIDS therapeutics, cytokines and non-A and non-B hepatitis, solid phase blood testing.

Genencor Inc

180 Kimball Way, South San Francisco, CA 94080. Tel: 415 742 7500 Telex: 6771263 genen

Carrying out research and development combining genetic engineering, enzyme immobilization techniques and new microbiology. Products include: protease enzymes; systems for the large-scale production of recombinant proteins, eg fungal rennin; pectinases; lipases; and carbohydrases, for the food, beverage, consumer product and other process industries. Originally a joint venture between Genentech Inc and Corning Glass Works; Staley Continental and Eastman Kodak Co have now acquired interest.

Genentech Inc

460 Point San Bruno Boulevard, S San Francisco, CA 94080. Tel: 415 266 1000 Telex: 910 371 7186

Research and development company using genetic engineering techniques to produce therapeutic substances for human and veterinary use. Areas of interest include fibrinolectics, urokinase, human blood factors, growth hormones including human growth nerve factor, somatomedin, gonadotrophin, alpha and beta interferon, lymphokines including tumour necrosis factor, calcitonin, pro-insulin, renin, factor VIII, protropin HGH, activase TPA, anti-trypsin, human vaccines against herpes, AIDS and hepatitis, bovine interferons, animal growth hormones and vitamin C. Genentech's TPA is FDA approved for treating heart attacks. Have developed a recombinant cloning process for microbial polypeptide expression.

GeneSystems Computer Software

755B Loma Verde Ave, Palo Alto, CA 94303. Tel: 415 493 0972

Have produced a new computer software graphic program which enables molecular biologists to construct both linear and circular publication-quality plasmid maps.

Gensia Pharmaceuticals Inc

11075 Roselle St, San Diego, CA 92121. Tel: 619 546 8300 Fax: 619 453 0095

Carrying out research and development of cardiovascular therapeutics.

Granbio Inc

PO Box 1725, Temecula, CA 92390-1223. *Tel:* 714 676 0049

Supplies reagents for complement testing, immunology and virology as well as diagnostic tests including AIDS.

GSF Energy Inc

2750 Signal Parkway, PO Box 1900, Long Beach, CA 90801-1900. Tel: (213) 595 4964

Developed and operates methane (landfill gas) recovery facilities using a patented molecular sieve process for gas purification. Subsidiary of Air Products and Chemicals Inc, US.

Haake/Fisons

24911 Avenue Stanford, Valencia, CA 91355. Tel: 805 295 0019/800 551 8741

Supplies a wide range of laboratory equipment.

Hana Biologics Inc

850 Marina Village Parkway, Alameda, CA 94501-1034.

Tel: 415 748 3000/800 772 4262 Telex: 6972094 hbio mci Fax: 415 769 8533

Developing foetal cell transplant techniques for treatment of diabetes, Parkinson's disease and haemophilia.

Henkel Research Corp

2330 Circadian Way, Santa Rosa, CA 95407. Tel: 707 575 7155 Fax: 707 575 7833

Carrying out research in molecular biology. Subsidiary of Henkel, Germany.

Hewlett Packard Co

3000 Hanover St, Mailstop 20B3, PO Box 10301, Palo Alto, CA 94304. Tel: 415 857 5731 Telex: 348461

Manufactures a wide range of chromatographic and radioactive counting equipment and accessories, as well as data acquisition, data reduction, control systems and computer graphics packages for use with laboratory instruments, including gas and liquid chromatographs. Software packages include inventory control, of interest to manufacturers of chemicals, pharmaceuticals, cosmetics and processed foods. These can maintain lot identification, analyse product histories and provide records of material consumption.

Hitachi America Ltd

Computer Sales & Service Division

950 Elm Ave, Suite 100, San Bruno, CA 94066. Tel: 415 872 1902/800 624 6176 Telex: 176308 Fax: 415 872 1906

Market a computer software package for use in molecular biology as a means of analyzing DNA sequence data as well as computer generated graphics and optical disk storage. The programme collects, analyses and presents nucleic acid and amino acid sequences, performing tasks such as codon usage ratios, restriction enzyme mapping, amino acid translation etc, as well as being able to access reference databanks (GenBank and NBRF).

Hitachi Sales Corporation of America

401 West Artesia Blvd, Compton, CA 90220. Tel: 213 537 8383

Distribute products of Hitachi, Japan.

Hitachi Scientific Instruments

Nissei Sangyo America Ltd

460 E Middlefield Road, Mountain View, CA 94043. Tel: 415 961 0461

25 W Watkins Mill Rd, Gaithersburg, MD 20878. Tel: 301 840 1650

Supply electron microscopes including systems with integral television imaging and automated specimen stage facilities with memory capability for storing up to 10 locations.

Hoefer Scientific Instruments

654 Minnesota St, PO Box 77387, San Francisco, CA 94107.

Tel: 415 282 2307/800 227 4750 Telex: 470778 Fax: 415 821 1081

Manufactures portable low-cost electrophoretic protein separation scanning densitometers operating in transmittance and and reflectance modes for gels, paper, films or thin layer chromatographic plates up to 20 cm long. Also supplies a complete line of electrophoresis equipment including both vertical and horizontal units and a jacketed sequencer.

Holz Bio-Engineering Inc

18675-0 Adams Court, Morgan Hill, CA 95037. Tel: 408 779 6505 Telex: 2748014 mci Fax: 408 779 0736

Manufacture benchtop fermenters with process monitoring control. Developing hollow fibre control systems and custom control equipment for retrofits of fermenters.

HP Genenchem

460 Point San Bruno Blvd, S San Francisco, CA 94080. Tel: 415 872 7057

Offers consultancy services in analytical instrumentation. Subsidiary of Hewlett-Packard.

Hybritech Inc

11085 Torreyana Rd, San Diego, CA 92121. Tel: 619 455 6700/800 854 1957 Telex: 182843

Write to: PO Box 269006, San Diego, CA 92126

Research and development company marketing monoclonal antibodies for diagnostics kits in the following areas: insulin, hematrope growth hormone, prostatic cancer, heart disease, congenital defects, allergies, immune deficiencies and immunorelated diseases, pregnancy etc, based on monoclonal/antigen/tagged monoclonal sandwich assay. Developing a random access immunoassay system. Subsidiary of Eli Lilly, US.

Hytech Biomedical Inc

1440 Fourth Street, Berkeley, CA 94710. *Tel*: (415) 527 9400

Markets biologicals, pharmaceuticals and diagnostics including monoclonal antibodies, immunodiagnostic kits and enzymes.

Hytech Scientific

1440 Fourth Street, Berkeley, CA 94710. Tel: (415) 527 9400

Research and development company invovled in basic studies relevant to biotechnology.

IBRD

Institute for Biological Research & Development Inc

2525 Campus Drive, Irvine, CA 92715. Tel: 800 358 0700 Fax: 714 752 7297

Offer consultancy in clinical product development and project management, licensing, clinical data processing etc, for pharmaceutical and biotechnology industries.

ICL Scientific Inc

11040 Condor Ave, Fountain Valley, CA 92708. Tel: 714 546 9581/800 382 2527 Telex: 655350 icl fnvy

Supplies diagnostic reagents for clinical immunology, including antiserums, serological test slides, urinalysis controls and therapeutic drug controls. Subsidiary of Hycor Biomed.

ICN Biomedicals Inc

3300 Hyland Ave, Costa Mesa, CA 92626.

Tel: 714 545 0113/800 854 0530 Telex: 685580 Fax: 714 557 4872

PO Box 19536, Irvine, CA 92713

Manufactures radioactive chemicals, biochemicals and ultrapure reagents, monoclonal antibodies, culture media, gel and thin layer chromatography supplies, cloning vectors, bioactive peptides, immunoassay reagents, sampling systems, scintillation vials and counting systems.

ICN Pharmaceuticals

ICN Plaza, 3300 Hyland Avenue, Costa Mesa, CA 92626. Tel: 714 545 0100 Telex: 670413

Develop, manufacture and market ethical drugs, research chemicals, pharmaceuticals and related products. One of a group of health care companies which also includes Viratek Inc, SPI Pharmaceuticals Inc and ICN Biomedicals, all US. Products under development include antivirals for AIDS and AIDS-related diseases.

IDEC Pharmaceuticals Corp

291 N Bernado Ave, Mountain View, CA 92037. Tel: 415 940 1200

Carrying out idiotype research, retrovirology, human T cell cloning, molecular biology and vaccine development. Has an AIDS programme to produce modulators of immunodeficiency sequelae induced by HIV.

Idetek Inc

1057 Sneath Lane, San Bruno, CA 94066. Tel: 415 952 2844/800 433 8351 Telex: 314129 Fax: 415 871 0615

Developing diagnostics and toxicology test kits for food and agriculture.

Immuchem Corp

Manufactures immunological diagnostics in the form of coated tubes for radioimmunoassays.

Immulok Inc

1019 Mark Avenue, Carpinteria, CA 93103. Tel: (805) 684 8717

Supplies immunodiagnostic products (Histoset, immunoperoxidase staining kits) for clinical and research use in the study of malignant and infectious diseases, and cancer in particular. Currently developing applications of antibodies, including monoclonal antibodies, for the rapid diagnosis of virus disease.

Immunetech Pharmaceuticals

11045 Roselle St, Suite A, San Diego, CA 92121. Tel: 619 438 7878 Telex: 754566 Fax: 619 452 7524

Producing immunologically active peptides as therapeutic agents.

Immuno Concepts Inc

9779 Business Park Drive, Suite 1, Sacramento, CA 95827.

Tel: 916 363 2649/916 966 4474/800 251 5115 Telex: 910 367 3820 Fax: 916 363 2843

Produces diagnostics, antinuclear antibody and fluorescent DNA tests as well as autoantibody test systems.

In Vitro Scientific Products

2686 Johnson Drive, Suite 202, Ventura, CA 93003.

Tel: 805 642 1024/800 325 2104 Fax: 805 642 2019

Manufacture tiussue culture products including roller bottles.

Infergene Co

433 Industrial Way, Benicia, CA 94510. Tel: 707 746 6804 Telex: 62899774 Fax: 707 746 0843

Producer of material and genetically engineered enzymes and other biochemicals for the food processing and medical diagnostics industries. Performs contract research in the genetic modification of microorganisms.

Ingene Inc

International Genetic Engineering Inc 1545 17th Street, Santa Monica, CA 90404. Tel: 213 829 7681

Research company creating pharmaceutical, agricultural and industrial products through genetic engineering technologies. Involved in protein purification and characterization, bacterial and yeast genetic engineering, immunogenetics, agricultural microbiology and mammalian gene isolation and characterization. Cloning and expression of DNAs, protein and peptide purification, amino acid sequence analysis, immunodetection techniques and monoclonal antibody production are also being investigated. Also have interest in sweeteners and pesticides. Developing therapeutic chimeric antibodies against HIV and HIV-1, human T-cell and leukemia virus. Have joint venture with Epitope Inc, US to develop virus targeting HIV mouse monoclonal antibodies for diagnostic and other in vitro non-therapeutic uses.

Inte Corp

Integrated Diagnostics Inc

1440 Fourth St, Berkeley, CA 94710. Tel: 415 527 9400

Developing the use of monoclonals in radio imaging and diagnostics. Market tests for Trichosomas and Chlamydia based on fluorescein-labelled antibody. Currently developing STD tests including Herpes and Candida as well as hepatitis. Subsidiary of Syncor International Corp, US.

Intek Diagnostics Inc

1450 Rollins Rd, Burlingame, CA 94010. Tel: 415 340 0530

Developing T cell clones, antigens and flow cytometry systems.

IntelliGenetics Inc

Markets software for analysis and management of DNA and protein sequence information. Typical applications include structural predictions, motif determination, sequence alignments, DNA sequencing fragment assembly, database searching, site-directed mutagenesis cloning simulation and probe design. Products are offered for use on IBM PC, Macintosh, Sun and VAX computer systems. Also offers its own databases: Keybank, a database of structural and functional patterns for protein and nucleic acid sequences and VectoBank, a cloning vector data bank.

Interaction Chemicals

1615 Plymouth Street, Mountain View, CA 94043.

Tel: 415 969 2400 Telex: 4946201 Fax: 415 969 0405

Supplies polymeric HPLC columns and packing materials. Columns include reversed-phase, ion, carbohydrate and biological. Solid phase extraction tubes are available also.

International Enzymes Inc

1432 S Mission Rd, Suite B, Fallbrook, CA 92028. Telex: 910 322 1110 Tel: 619 728 5205

Fax: 619 728 2902

Supplies enzymes and biochemicals for diagnostic applications, animal and human serums, polyclonal and monoclonal antibodies, viral antigens and disease state plasmas. Offers custom development of human controls and calibrators

International Genetic Engineering Inc

1545 17th St, Santa Monica, CA 90404. Tel: 213 829 7681 Fax: 213 828 2463

Using recombinant DNA technology to produce growth factors, antimicrobials and other peptides.

International Immunology Corp

Telex: 466810 Fax: 714 677 6752

Manufactures bulk reagents for immunodiagnostic applications. Supplying raw materials for major manufacturers of diagnostic reagents for use in clinical laboratories, hospitals and commercial laboratories. Developing polyclonal drug antiserums and monoclonal antibodies as well as controls and calibrators for diagnostic applications. Also developing antibodies for use in therapeutics.

International Plant Research Institute

830 Bransten Road, San Carlos, CA 94070. Tel: 415 595 5335 Fax: TWX: 910 376 5003

Research Laboratories: 853 Industrial Rd, San Carlos, CA 94070

Research and development organization using genetic manipulation and tissue culture to produce new, improved varieties of major crop plants, including date palms, oil palms and cereals, as well as investigating mechanisms and control of disease resistance. Attempting to modify structural and biochemical features that are present. Developing new technologies for producing chemicals from plant cell cultures. Subsidiary of Bio-Rad Laboratories, US.

Inti Corp

PO Box 6145, San Rafael, CA 94903-0145.

Tel: 415 491 0228 Telex: 650 230 3657 Fax: 415 499 0967

Supply enzyme immunoassay equipment as well as pipetters and other liquid handling equipment and microtitrator plate washers.

Invicta BioSystems Inc

Telex: 910 240 1660

Supply Whatman animal cell bioreactors.

Invitrogen

11588 Sorrento Valley Rd, Suite 20, San Diego, CA 92121. Tel: 619 259 4868/800 544 4684 Fax: 619 259 8683

Offer services in custom DNA sequencing and research and development. Produce cloning vectors, DNA markers and linkers, nucleases and reverse transcriptases.

Iotron Inc

3857 Birch St, No 521, Newport Beach, CA 92660. Tel: 714 551 5477 Telex: 295603

Manufacture combination long life pH electrodes.

Irvine Scientific

2511 Daimler Street, Santa Ana, CA 92705-5588. Tel: 714 261 7800/800 437 5706 Telex: 6814 Telex: 681425 Fax: 714 261

Supplies products for tissue culture. Also markets blood products and disposable laboratory ware.

I/U Medi-Tech Inc

c/o Yamaichi Uni Ven Co Ltd, 333 S Hope St, Los Angeles, CA 90071. Tel: 213 626 1064

Biotechnology joint venture consultants for US companies seeking strategic Japanese partners in biotechnology related business ventures.

J R Scientific

1 Harter Ave, Suite B, PO Box 1937, Woodland, CA 95695. Tel: 916 666 9835/800 231 3735 Fax: 916 666 4368

Produce monoclonal antibodies, cell culture supports and growth factors.

Jandel Scientific

65 Koch Rd, Corte Madera, CA 94925. Tel: 415 924 8640

Telex: 4931977 Fax: 415 924 2850

Manufactures and markets microcomputer software products for research. Products include programs for: creating quality charts and graphs for scientific journal publication; making two-dimensional measurements from strip charts, X-rays, photomicrographs etc on a digitizing tablet; performing video measurement and analysis including densitometry, automatic object counting, edge and line digitizing and morphometric measurements; creating three-dimensional computer models from serial sections.

Kelco

Division of Merck & Co Inc

8355 Aero Drive, PO Box 23576, San Diego, CA 92123.

Tel: (619) 292 4900 Telex: 695228

Manufactures alginates and xanthan gums.

Kirin-Amgen

c/o Amgen, 1900 Oak Terrace Lane, Thousand Oaks, CA 91320. Tel: 805 499 5725

Joint venture set up to produce erythropoietin.

Kleiner Perkins Caufield & Byers

4 Embarcadero Center, Suite 3520, San Francisco, CA 94111. Tel: (415) 421 3110

Investment company associated with the formation of Hybritech Inc, US, Genentech Inc, US, Applied Biosystems Inc, US and Collagen Corp, US.

Labindustries Inc

620 Hearst Ave, Berkeley, CA 94710-1992. Tel: 415 843 0220/800 227 0128 Telex Telex: 172160

Manufacture long-tip fixed volume positive displacement micropipettors in the range from 5 to 250 microliters.

Lawrence Livermore National Laboratory

PO Box 5507, Livermore, CA 94550.

Tel: 415 422 5662

Carries out research over a wide range of areas of molecular biology including the production of human chromosome gene libraries.

Lee Biomolecular Research Laboratories Inc

11211 Sorrento Valley Road, Suite M, San Diego, CA 92121. Tel: 619 452 7700

Manufactures mammalian interferons and anti-interferon serums, including sterile and lyophilized human, mouse and rabbit products for research purposes including polyclonal antibodies. Provides assay service on a contract basis for immunological characterization of interferons in culture media and body fluids. Carries out research in cell culture technology and on the development of diagnostics and vaccines.

LH Fermentation Inc.

3942 Trust Way, Hayward, CA 94545.

Tel: 415 786 0224 Telex: 910 350 6428 Fax: 415 786 0229

Supply a wide range of fermenters and bioreactors ranging in size from 0.5 litre laboratory systems to pilot plant of 10 cubic metres as simple modular bench top units, highly sophisticated computer controlled freestanding laboratory systems, airlift fermenters for the large scale cultivation of shear sensitive animal cells or dedicated skid-mounted systems for scale-up experiments. The fermenters accommodate a wide range of instrumentation and controls ranging from basic on/off systems to microprocessor based multi-loop controllers. Also supplies shaker incubators. Part of the Porton International Group, UK.

Link Analytical Inc

240 Twin Dolphin Drive, Suite D, Redwood City, CA 94065. Tel: 415 595 5465 Fax: 415 595 5589

Manufactures spectrometers.

Liposome Technology Inc

1050 Hamilton Court, Menlo Park, CA 94025. Tel: 415 323 9011

Research and development company with wide interests in the use of liposomes for drug delivery in clinical and pharmaceutical applications. Focusing on anticancer, antifungal and antiinfective liposome-drug formulations.

List Biological Laboratories Inc

501-B Vandell Way, Campbell, CA 95008. Tel: 408 866 6363

Produces bacterial toxins, including highly purified lipopolysaccharides (endotoxins) from a variety of gram negative organisms, hapten-conjugated lipopolysaccharides and exotoxins.

LJL Associates

491 Macara Ave, Suite 1009, Sunnyvale, CA 94086. Tel: 408 730 9686 Fax: 408 730 9695

Offer services in custom equipment and instrumentation including peptide synthesizers and associated computer control systems and software.

LMD Laboratories Inc

4626 Santa Fe St, San Diego, CA 92109. Tel: 619 270 6707 Telex: 4944495

Telex: 4944495 Fax: 619 535 9715

Develop and market serology kits and antigen detection kits for enteric diseases.

Lucky Biotech Corp

4560 Horton St, Emeryville, CA 94608. *Tel*: 415 653 0734

Products under development include therapeutics, interferons (alpha, beta, gamma), interleukin-2, hepatitis B diagnostics and porcine growth hormone. Subsidiary of Lucky Ltd, South Korea.

3-M Diagnostic Systems

3380 Central Expressway, Santa Clara, CA 95051. Tel: 408 739 2200/800 832 3200

Produce diagnostics for allergy testing including tests for total IgE, allergen-specific IgG4, quantitative immunoglobulins, quantitative IgG sub classes and theophylline using sandwich fluorescence enzyme immunoassay. Developing assays for cholesterol, detection of hypertension and measurement of lipoproteins. Division of Minnesota Mining & Manufacturing Co (3-M Co), US.

Mast Immunosystems Inc

630 Clyde Court, Mountain View, CA 94043. Tel: 415 961 5501/800 272 6278 Fax: 415 969 2745

Produce diagnostics for allergy testing including IgE and IgG tests based on chemiluminescence.

Medica Inc

Produce immunofluorescent diagnostics and custom tissue section slides. Distributor of monoclonal antibodies for Sanbio BV, Netherlands.

Medix Biotech Inc

420 Lincoln Center Drive, Foster City, CA 94404.

Tel: 415 573 3315 Telex: 1561412 Fax: 415 573 6734

Manufactures monoclonal and polyclonal antibodies, purified antigens, immunological reagents and EIA components and kits. Produces a wide range of quantitative and qualitative ELISA tests in microtitre well and other versions. Custom services are available for solid phase immobilization, monoclonal antibody production.

Membrana Inc

Supplies membrane filters.

Micro-Filtration Systems

6800 Sierra Court, Dublin, CA 94568. Tel: (415) 828 6010 Telex: 171348

Produces wide range of filters, including both micro- and ultrafiltration membranes and glass-fire filters. Part of Toyo Roshi International, Japan.

Microbio Resources Inc

6150 Lusk Blvd, Suite B105, San Diego, CA 92121. Tel: 619 587 0600 Fax: 619 587 0603

Derives natural products from algae. Interests are focused on the use of natural carotenoids as nutritional supplements, food colorants and animal feed ingredients.

Microgenics Corp

2380A Bisso Lane, Concord, CA 94520. Tel: 415 674 0667/800 23 CEDIA Telex: 330013 Fax: 415 674 1680

Carrying out research and development in molecular biology, including the use of recombinant DNA techniques for expression of both eucaryote and procaryote genes in yeast as well as developing enzyme linked immunoassay test kits including digoxin assay.

Microgon Inc

23152 Verdugo Drive, Laguna Hills, CA 92653.

Tel: 714 581 3880/800 654 0111 Telex: 62175850 Fax: 714 855 6120

Supply membrane and microfiltration equipment, fermenters and accessories for cell and tissue culture.

MMR Technologies Inc

1400 Shoreline Rd, Suite A-5, Mountain View, CA 94043-1312. Tel: 415 962 9620 Telex: 184817 Fax: 415 962 9647

Manufacture cold stage systems for use in scanning electron microscopes.

Modesto City

Public Works Department

PO Box 642, Modesto, CA 95353.

Tel: (209) 577 5300

Produces methane from anaerobic digestion of sewage sludge for use in modified city vehicles.

Molecular Biosystems Inc

10030 Barnes Canyon Rd, San Diego, CA 92121. Tel: 619 452 0681

Manufacturing, research and development company working on in vivo and in vitro diagnostic systems. Also working in the field of recombinant DNA research. Products include proprietary microspheres for contrast echocardiography, DNA and RNA probes, and an extractor DNA recovery system.

Molecular Design Ltd

2132 Farallon Drive, San Leandro, CA 94577.

Tel: 415 895 1313 Telex: 470631 Fax: 415 352 2870

Supplies software for molecular structure comparisons allowing the user to manipulate two 3-dimensional molecular models on the screen of a computer graphics terminal in order to compare their geometric and topographic features. Also offers a chemical database management software system that can store, search, retrieve and display molecules and chemical reactions.

Molecular Devices Corp

Menlo Oaks Corporate Center, 4700 Bohannon Drive, Menlo Park, CA

Manufacture microplate readers.

Molecular Dynamics

240 Santa Ana Court, Sunnyvale, CA 94086. Tel: 408 773 1222 Fax: 408 733 6567

Manufacture densitometers, image analyzers and associated software and autoradiography equipment.

Monoclonal Antibodies Inc

2319 Charleston Road, Mountain View, CA 94043.

Tel: 415 960 1320 Telex: 709307 Fax: 415 960 0564

Focusing on the application of monoclonal and polyclonal antibodies for the development and marketing of non-instrument diagnostic test kits with applications in areas of fertility and infectious disease.

Multiple Peptide Systems Inc

10955 John Jay Hopkins Drive, Bldg 2, San Diego, CA 92121. Tel: 619 455 3710/800 338 4965 Fax: 619 455 3713

Offerr a custom peptide synthesis including purification and KLH conjugation. Also sell HF cleavage system and provide HF cleavage service to researchers.

Mycogen Corporation

5451 Oberlin Drive, San Diego, CA 92121. Tel: 619 453 8030

Developing biopesticides including products based on the biotoxin of Bacillus thuringiensis packaged, using genetic engineering techniques, inside Pseudomonads as a means of increasing efficacy of the pesticide. Also developing herbicides, based on pathogenic fungi, for control of sicklepod and velvet leaf.

Nakanishi International Enterprises

Plant Tissue Culture Laboratory

529 East Third Avenue, San Mateo, CA 94401.

Tel: (415) 348 4240

Carries out research and development in relation to propagation of rare, exotic, endangered or under-utilized plant species and food crops. Also sells rare plants. Runs courses on tissue culture methods. Carries out contract work and acts as consultant. Research includes tissue culture and protoplast fusion.

Nanometrics Inc

690 E Arques Ave, Sunnyvale, CA 94086. Tel: 408 746 1600 Telex: 171119

Produce a general purpose scanning electron microscope designed for non-destructive analysis at low acceleration voltages and capable of being used with uncoated specimens at 1 keV or less without damage.

Nelson Analytical Inc

10061 Bubb Road, Cupertino, CA 95014. Tel: 408 725 1107 Fax: TWX: 910 338 2317

Supplies chromatographic systems and computer software packages developed for use with ion-exchange chromatography.

Neushel Mariculture

475 Kellogg Way, Goleta, CA 93117. *Tel*: 805 964 5844

Carrying out development of antiviral products, enzymes and molluscan seed and culture.

NMS Diagnostics

1533 Monrovia Ave, Newport Beach, CA 92663. Tel: 714 645 2111/800 854 3002 Telex: 910 596 1377

Produce immunodiagnostic kits and reagents.

Nordic Immunological Laboratories (USA)

Drawer 2517, Capistrano Beach, CA 92624.

Supplies reagents for immunodiffusion, immunofluorescence and other immunodiagnostic techniques including monoclonal antibodies and various antiserums.

Novex

PO Box 1158, Encinitas, CA 92024

Supply mini-electrophoretic equipment, gels for PAGE, mini-blot system and blot cutter. Developing bioanalytical systems for electrophoresis and sequencing etc.

Nuclepore Corp

Manufactures equipment, accessories and membranes for microfiltration.

Ocean Genetics Inc

140 Dubois St, Santa Cruz, CA 95060. Tel: 408 458 5205 Fax: 408 458 5208

Research and development company applying mass culture techniques and genetic engineering to marine organisms with the objective of producing food products, chemicals and therapeutics, particularly agarose and agar, speciality polysaccharides, dyes and lectins. Has agreement with Merck Sharp & Dohme Research Laboratories to screen for potential pharmaceutical and veterinary products as well as negotiating with possible partners in other areas.

Ocean Scientific Inc

11830 Monarch St, Garden Grove, CA 92641.

Tel: 714 8989001 Telex: 910 997 4760 Fax: 714 891 1229

Produce laboratory equipment for use in assays and diagnostic tests including an automated tube washing system for treating coated tubes, beads or disks. The microprocessor controlled system comes in two versions capable of handling either 95 or 175 tubes at a time.

Omega Biologicals Inc

21787 Ventura Blvd, Suite 144, Woodland Hills, CA 91364.

Tel: 818 704 1709

Telex: 6502927844

Fax: 818 346 7754

Supplies allergy plasma, autoimmune disease plasma, infectious disease plasma, factor deficient plasma, RBC antibody plasma, HLA plasma and purified enzymes, hormones and antigens for the manufacture of clinical diagnostics

Omni Biochem Inc

2215 Cleveland Ave, National City, CA 92050. Tel: 619 541 0309

Supply peptides, enzymes, amino acids and reagents for molecular biology and biochemistry.

One Lambda Inc

2233 Corinth Ave, Los Angeles, CA 90064. Tel: 213 478 1001 Telex: 182051

Produce polyclonal antibodies to histocompatability antigens.

Oxygenetics

39 Parker St, Irvine, CA 92718.

Tel: 714 261 8899 Fax: 714 261 5713

Developing technology for producing a blood substitute.

Pacific Bio-Marine Labs Inc

PO Box 536, Venice, CA 90294.

Tel: 213 822 5757

Supplies tissue, blood and serum from sharks, other fish and marine invertebrates for use in biochemical and immunochemical research.

Pacific Gas & Electric Company

77 Beale Street, San Francisco, CA 94106. Tel: (415) 972 7000

Recovering and treating biogas obtained from shallow landfills. Gas is scrubbed, compressed and injected into company's transmission lines.

Peninsula Laboratories Inc

611 Taylor Way, Belmont, CA 94002.

Tel: 415 592 5392/800 922 1516 Telex: 172511 Fax: 415 595

Manufactures biologically active peptides, enzymes, enzyme substrates, peptide hormones and fine chemicals including phosphotriesters, phosphoramidites and deoxyribonucleosides as well as offering a custom oligodeoxynucleotide and peptide synthesis service as well as custom radiolabelling and HF cleavage. Have developed a human parathyroid hormone-related protein radioimmunoassay kit for cancer research. Products under development include AIDS anti-viral.

Peptide Laboratory Inc

PO Box 8300, Berkeley, CA 94707. Tel: 415 262 0800 Fax: 415 262 9127

Offer custom synthesis of peptides. Developing resins, synthetic growth factors and AIDS related peptides.

Perkin Elmer Corp

Applied Science Division

2771 North Garey Ave, Pomona, CA 91767. Tel: 714 593 3581

Produces equipment for monitoring and analysis of fermentation reactions capable of handling inputs from up to 30 fermenters on a sequential basis determining levels of oxygen and carbon dioxide.

Pharmingen

11555 Sorrento Valley Rd, Suite E, San Diego, CA 92121.

Tel: 619 792 5730 Fax: 619 792 5238

Develop and market monoclonal antibodies.

Phenomenex Inc

Produce a wide range of chromatography equipment including ultra-high efficiency HPLC columns, affinity chromatography activated and immobilized supports, products for ion exchange, fraction collectors and sampling systems.

Phytogen Inc

101 Waverly Drive, Pasadena, CA 91105. Tel: 818 792 1802 Fax: 818 792 0823

Research and development company using recombinant DNA technology and tissue culture for improvement of cotton in respect of disease and pest resistance.

Plant Genetics Inc

1930 Fifth Street, Davis, CA 95616.

Tel: 916 753 1400 Telex: 882409 plantgen Fax: 916 753 6199

Research and development company engaged in production of improved commercial crop plants and seeds, including potatoes, hybrid vegetables (eg tomato, lettuce) and alfalfa, apply conventional breeding combined with in vitro techniques, such as somatic embryogenesis, cell fusion and tissue culture. Carry out basic research in plant molecular biology including aspects of recombinant DNA technology. Developing applications for patented water-based gel encapsulation system such as seed, agricultural chemical delivery, somatic embryos and biologicals including biopesticides. Merger agreement with Calgene Inc pending approval.

Porton Instruments

5445 Balboa Blvd, Suite 115, Encino, CA 91316. *Tel*: 818 995 2471/800 822 6333

18740 Oxnard St, Suite 303, Tarzana, CA 91356. Tel:818 996 0220 Fax: 818 342 9738

Manufacture protein sequencers.

Princeton/Montrose Partners

2331 Honolulu Ave, Suite G, Montrose, CA 91020. *Tel*: 818 957 3623

Investment company with interests in: Sungene Technologies Corp, Protein Database Inc, Neogen Corp, Plant Genetics Inc and Twyford International Inc, all US.

Progenx

10955 John Hopkins Drive, San Diego, CA 92121. Tel: 619 455 3900

Produce cancer diagnostic markers and therapeutics.

Protos Immunoresearch

1485 Bayshore Blvd, Suite 388, San Francisco, CA 94124. Tel: 415 467 3344

Produces the following immunological reagents: affinity purified antibodies, F(ab')2 fragments, FITC, rhodamine, Texas red, biotin, peroxidase and alkaline phosphatase conjugates; Fab'-peroxidase conjugates for immunohistochemistry; purified human immunoglobulins and human thyroxine binding globulin.

Qiagen Inc

11712 Moorpark Street, Studio City, CA 91604. Tel: 818 508 5258/800 426 8157 Fax: 818 508 5536

Supply solid phase rapid DNA extraction cartridges, tips and tubes.

Quidel Inc

10165 McKellar Court, San Diego, CA 92121. Tel: 619 552 1100 Telex: 910 380 4700 Fax: 619 453 4338

Developing improved diagnostics, moving from in vitro to in vivo techniques and carrying out basic research related to production of new therapeutics for treatment of serious diseases using hybridoma and monoclonal antibody techniques, diagnostic assays for pregnancy, fertility, Streptococcus A, allergies and infectious diseases.

R G Hansen

631 Chapala Street, Santa Barbara, CA 93101. Tel: 805 564 3388 Fax: 805 963 0733

Designs and manufactures a variety of cryogenic systems, accessories and components to support tissue and specimen cooling over the temperature range of 4 to 300 Kelvin. Offers standard and custom design systems.

RW Johnson Pharmaceutical Research Institute

PO Box 8289, La Jolla, CA 92038. *Tel:* 619 450 2015/2000

Carry out research and biotechnology in immunobiology and immunodiagnostics and the application of synthetic peptides to those fields. Developing a hepatitis B vaccine, crythropoietin and interleukin-2 as well as AIDS vaccines, anti-viral drugs and diagnostics. Also interested in growth factors, lymphokines and hormones. Division of Johnson & Johnson.

Radioassay Systems Laboratories/Immuchem

2015 E University Drive, Carson, CA 90746-6227.

Tel: 213 537 2141/800 421 2112 Telex: 910 346 7727 Fax: 213 608 0543

Supplies radioimmunoassay kits and other diagnostics for in vitro determination of hormone levels. Division of ICN Biomedicals Inc.

Radnoti Glass Technology Inc

227 West Maple Ave, Monrovia, CA 91016.

Produce tissue homogenizers.

Rael International

302 West 5th St, Suite 306, San Pedro, CA 90731. Tel: 213 547 5282

Offers services in the export of biotechnology products manufactured in the

Reactor Experiments Inc

963 Terminal Way, San Carlos, CA 94070-3278.

Tel: 415 592 3355 Telex: 345505 Fax: 415 598 9555

Manufacture shielding systems for protection from radiation such as x-rays, neutrons, radionuclides and accelerators including portable radionuclide carriers, door and wall shielding.

Reagents Applications Inc

8225 Mercury Court, San Diego, CA 92111.
Tel: (619) 569 8009/800 482 3914 Telex: 3710730 reagents

Produces diagnostic reagents and test kits for various clinical and laboratory tests, including triglycerides, albumin, cholesterol, glucose, protein, uric acid, enzymes etc, based on enzymatic UV and colorimetric assays.

Research & Diagnostic Antibodies

Box 8300, Berkeley, CA 94707. Tel: 415 262 9000

Offer services in antibody purification and characterization, immunization and monoclonal antibody development as well as custom immunoassay development and radioiodation. Products include diagnostic kits and monoclonal antibody reagents.

Rheodyne Inc

PO Box 996, Cotati, CA 94928.

Tel: 707 664 9050 Telex: 172992 Fax: 707 664 8739

Manufactures analytical apparatus including high performance liquid chromatography accessories including microbore sample injection systems capable of delivering samples of 0.2, 0.5 or 1.0 microlitre.

Riese Enterprises

PO Box 9523, San Jose, CA 95157-0523. Tel: 415 968 2922

Produce infectious waste disposal systems for use with biohazardous microbial products. A combined waste disposal bag and sterilization integrator indicates if the material has been properly sterilized for safe disposal.

Robbins Scientific Corp

814 San Aleso Ave, Sunnyvale, CA 94086-1411.

Tel: 408 734 8500/800 752 8585 Telex: 386642 Fax: 408 734 0300

Produces a hybridization incubator, HLA/tissue typing equipment and supplies, microcentrifuge tubes for PCR, pipette tips and other labware. Also supplies density gradient media and immunomagnetic beads for biomedical separations.

Rosemount Analytical Inc

2400 Barranca Rd, Irvine, CA 92714. Tel: 714 863 1181/800 854 8257 Telex: 678387

Manufacture pH electrodes and accessories as well as ion selective

Salk Institute Biotechnology Industrial Associates Inc

505 Coast Boulevard South, PO Box 85200, San Diego, CA 92138. Fax: 910 337 Tel: (619) 452 5892/619 452 4101 Telex: 697196 1772

Established to make practical use of results of basic research being carried out at Salk Institute, US in areas of yeast molecular cell biology, novel bioreactors, recombinant DNA technology, gene regulation and gene transfer using microinjection techniques and retrovirus vectors. A major part of its research is carried out under contract to Phillips Petroleum Co, US. Also developing growth hormones in conjunction with Sumitomo, Japan, and non-isotopic DNA probe diagnostics for oncogene products in collaboration with Skandigen AB, Sweden.

Salk Institute for Biological Studies

Tumor Virology Department

10010 North Torry Pines Boulevard, PO Box 1809, La Jolla, CA 92037.

Investigating the integration of mouse leukaemia virus and its expression in

Sartorious Filters Inc

30940 San Clemente St, Hayward, CA 94544. Tel: (415) 487 8220 Telex: 338534

Manufactures controlled porosity membrane filters and associated hardware.

Scantibodies Laboratory Inc

9336 Abraham Way, Santee, CA 92071. Tel: 619 258 9300 Telex: 695205

Produces optically clear antiserum, monoclonal antibodies, conjugated antibodies and antigens; antibodies available against enzymes, human blood groups, hormones, infectious agents, lectins histocompatibility complex antigens, serum proteins, steroids and tumour antigens.

Scripps Clinic & Research Foundation

10666 North Torrey Pines Road, La Jolla, CA 92037. Tel: 619 455 9100/619 457 8290

Carrying out basic research on mechanism of the immune response. Has a joint venture with Johnson & Johnson Inc, US to develop synthetic vaccines and related pharmaceutical products. In joint venture with the Animal Virus Institute, UK has produced an effective protection against foot and mouth disease by immunization with a synthetic peptide, the structure of which was predicted from the viral nucleotide sequence. Also working on the development of pH-sensitive linkers which facilitate drug release in cells for monoclonal/drug delivery systems.

Scripps Institution of Oceanography

Institute of Marine Resources

La Jolla, CA 92093. Tel: (619) 452 2230

Studying production of marine microalgae with a high lipid content as a means of trapping solar energy as cell biomass. Species include Phaeodactylum, Isochrysis and Dunaliella.

Scripps Laboratories Inc

9950 Scripps Lake Drive, San Diego, CA 92131. Tel: 619 566 3505 Telex: 255704 Fax: 619 566 1171

Manufacturer of bulk human proteins and enzymes including: human hormones (hPRL, hCG, hFSH, hGH, hLH, hTSH including alpha and beta subunits); human proteins (apoliproteins, CRP, CPK and LDH beta subunits); human proteins (apoliproteins, CRP, CPK and LDH isoenzymes, ferritins, HSA, IgE, IgM, alpha-1-microglobulin, beta-2-microglobulin, NSE, TBG, myoglobin, thyroglobulin); cancer tumour markers (AFP, CEA, PAP, PSA); clinical diagnostics/EIA enzymes (PEPC, GDH, alk phos, HRP, CE); immunodiagnostic biochemicals (avidin,/streptavidin, goat IgG, mouse IgG, ovalbumin, Protein A, Protein G); inactivated viruses (chlamydia, CMV, EBV, HBsAg subtypes adw.ayr, HSV-1, HSV-2, HSV-3, HIV-1, HTLV-1, Rubella, Varicella Zoster); psoralen inactivated plasma (HIV-1, HTLV-1). Also accepts custom manufacturing projects and provides contract production accepts custom manufacturing projects and provides contract production services.

Senetek plc

444 Castro St, Suite 710, Mountain View, CA 94011. Tel: 415 962 0925

Developing monoclonal antibody-based diagnostics including for Alzeimer's disease. Carrying out research on anti-aging therapeutics.

Sensorex

11661 Seaboard Circle, Stanton, CA 90680. Tel: 714 895 4344 Telex: 183123 I Fax: 714 895 4344

Manufacture combination pH electrodes capable of resisting high pressures up to 100 psig.

The Separations Group

17434 Mojave Street, PO Box 867, Hesperia, CA 92345. Tel: (619) 244 6107 Telex: 467341

Manufactures support materials for high performance liquid chromatography and solid substrates for use in nucleic acid and oligonucleotide synthesis.

Sepragen Corp

2126 Edison Ave, San Leandro, CA 94577. Telex: 287316 Tel: 415 636 0707 Fax: 415 636 9409

Produce radial-flow liquid chromatography columns for preparative and process scale purifications. Suitable for ion exchange, affinity, hydrophobic, and reversed-phase separations.

Sequoia Capital

3000 Sand Hill Rd, Bldg 4, Suite 280, Menlo Park Suite, CA 94025. Tel: 405 854 3927 Fax: 415 854 2977

Venture capital firm which invests in biotechnology and funds start up companies. Investments in Biotrack, Applied ImmuneScience, Salutar, Penederm, Vical, Somatix, Biosym Technologies.

Serex International Inc.

14435 Sherman Way, Suite 115, Van Nuys, CA 91405. Tel: 818 989 0611

Produce speciality plasma products. Developing a monoclonal syphilis diagnostic test.

Setec Inc

PO Box 3002, Livermore, CA 94550.

Tel: 415 449 1727 Telex: 4930375 Fax: 415 831 0880

Specializes in hollow fibre membrane technology for immobilized cell bioreactors and crossflow separation and purification applications in the pharmaceutical and biotechnology industries. Hollow fibre modules are thermally bonded by proprietary process and may be repeatedly sterilized, cleaned and reused.

Sibia

PO Box 85200, San Diego, CA 92138.

Tel: 619 452 5892

Carrying out research on veterinary and medical health care products.

Siska Diagnostics Inc

PO Box 85200, San Diego, CA 92138.

Fax: 619 457 2252 Tel: 619 452 5982 Telex: 697196

Developing clinical diagnostics.

SmithKline Bio-Science Laboratories

Esoteric Testing Center

7600 Tyrone Ave, Van Nuys, CA 91405.

Clinical reference laboratory offering clinical testing services.

Softshu

2250 Webster, Palo Alto, CA 94301. *Tel:* 415 321 7319

Produces computer software for use in genetic engineering including a product that features reverse translation with restriction for up to 1000 amino acids.

Sogetal

3872 Bay Center Place, Hayward, CA 94545. Tel: 415 785 1881 Fax: 415 782 4930

Carrying out research and development on hybrid wheat and other cereals. Developing chemical hybridizing agents.

Southern California University

School of Medicine Department of Microbiology

2025 Zonal Avenue, Los Angeles, CA 90033.

Investigating factors responsible for cell type-specific gene expression in differentiated cells using cultured hepatoma cells and somatic cell hybrids.

Spectra Physics Inc

Autolab Division

3333 N 1st St, San Jose, CA 95134. Tel: 408 432 3333/800 424 7666 Telex: 357460 Fax: 408 432 0203

Laser Analytics Division: 25 Wiggins Ave, Bedford, MA 01730. Tel: 617 275 2650 Tx: 923324

Provides complete range of equipment and accessories for gas and liquid chromatography, detection and quantitation of products: complete systems, fluorescent and spectrophotometric column monitors, range of capillary, glass, metal and prepacked columns, chromatographic data systems and electronic control systems for combined gas chromatography/mass spectrometry.

Spectrex Corp

3594 Haven Ave, Redwood City, CA 94063. Tel: 415 365 6567 Telex: 750589

Fax: 415 365 5845

Manufacture a laser-based particle counter and sizer based on the principle of near angle light scattering compatible with Apple or IBM/PC to provide complete data from in situ counting of sealed bottled liquids or flow through systems.

Spectrum Medical Industries Inc

60916 Terminal Annex, Los Angeles, CA 90060. Tel: 213 650 2100/800 634 3300 Telex: 181403 Fax: 213 650 8134

Manufactures and supplies equipment for the separation of biological materials. Products include vortex mixing cells for membrane filtration, suited for systems of MW from 500 to 1,000,000, vacuum regulators and multiple dialysis equipment for up to 16 samples as well as other hardware for static dialysis, flow dialysis, equilibrium dialysis, micro- and macro-filtration. A complete line of chromatography products for low pressure applications is also available.

SRI International

333 Ravenswood Avenue, Menlo Park, CA 94025. Telex: 334486/910 761 0593 Tel: 415 326 6200 Fax: 415 326 5512

Applying techniques of molecular biology to medical applications, including monoclonal antibodies and conversion of biomass to fuels and chemicals. Applying basic research on regulation of growth and differentiation supports to studies using cell culture and recombinant DNA technologies to produce biologically active peptides, including growth regulators, antiviral and antitumour compounds, as well as vaccines Biomass research relates to enzymic breakdown of cellulosic materials.

Stanford University

Department of Pathology

300 Pasteur Drive, Stanford, CA 94305.

Investigating structure of mitochondrial nucleic acid and isolation and characterization of eukaryotic centromeres, chromosome fragments etc.

Stanford University

Department of Biochemistry

Stanford, CA 94305.

Investigating chromosome structure and regulation of genetic information in animal chromosomes.

Stanford University

Department of Biological Chemistry

Stanford, CA 94305.

Studying structure and catalytic mechanisms of nitrate and sulphate reductases. Also investigating synthetic analogues of sirohaeme and iron-sulphur proteins.

Stanford University

Department of Medical Microbiology

Stanford, CA 94305.

Undertaking identification of components of specific immune response. Also studying DNA replication.

Stanford University

Department of Genetics

300 Pasteur Drive, Stanford, CA 94305.

Studying expression of prokaryotic genes using bacteria such as E coli, Rhodopseudomonas etc, and evolution of plasmids. Also studying the role of transposable genetic elements.

Stanford University

Department of Biological Science

Stanford, CA 94305-2493.

Tel: 415 723 2300

Carrying out research on techniques of plant genetics including aspects of recombinant DNA technology. Studies include the use of electroporation techniques to introduce DNA coding for genes such as that for kanomycin resistance into protoplasts isolated from maize.

Stanford University

Office of Technology Licensing

105 Encina Hall, Stanford, CA 94305.

Tel: 415 497 0651

Offer services and products of research carried out by the University.

Stanford University Plasmid Reference Center

School of Medicine, Department of Medical Microbiology

Stanford, CA 94305-2499.

Tel: 415 497 1772

Provide a plasmid depository.

Sterogene Bioseparations Inc

140 E Santa Clara St, Arcadia, CA 91006. Fax: 8118 446 9243 Tel: 818 446 9200/800 535 2284

Produces a large selection of fast flow affinity, ion exchange and gel filtration media for analytical and process scale use. Offers custom immobilization and process development. Has GMP facility and Drug Master File with FDA.

Stockwell Scientifc

20822 Currier Rd, Walnut, CA 91789.

Tel: 714 598 7237

Manufacture sample vials suitable for use in storage or transport of materials at very low (cryoscopic) temperatures. Available nonsterile or sterilized by gamma radiation. Also manufacture culture tubes, conical centrifuge tubes with screwcaps, pipette and many other laboratory disposable plastics.

Stratagene Cloning Systems

11099 North Torrey Pines Rd, La Jolla, CA 92037

Tel: 619 535 5420/800 424 5444 Telex: 910 380 9841 Fax: 619

Produce a range of reagents and kits for use in molecular biology including lambda packaging systems with no Eco K activity for cloning. Products available include sequencing systems based on phage, lambda systems for chromosome walking and probe preparation, transformation competent E coli ready for use, affinity purified DNase I etc. Also offer custom services in preparation of gene libraries and cDNA libraries, linkers for any restriction site and oligonucleotides. Also markets instruments and plasticware for molucular biology

Sungene Technologies Corp

2050 Concourse Drive, San Jose, CA 95129-1818.

Telex: 501887 Fax: 408 433 5239 Tel: 408 433 9800

Uses advanced tissue culture techniques, genetic engineering and plant breeding to develop improved crop plants including corn, sunflowe rapeseed, sesame and others. Improvements include increased yield, disease and pest resistance, modified oil, starch, protein and stress-tolerance.

Sybron/Gamajet

121 S Maple Ave, South San Francisco, CA 94080. Tel: 415 873 1750/800 356 7807 Telex: 349479

Fax: 415 873

Market a jet-washing system suitable for cleansing biochemical tanks, with a retraction design component to avoid contamination or escape of toxic

Synbiotics Corp

11011 Via Frontera, San Diego, CA 92127. Tel: 619 451 3770 Telex: 249075 Fax: 619 451 3826

Carrying out research and development of veterinary and human diagnostics, vaccines and monoclonal antibody-based therapeutics against infectious diseases. Veterinary products include tests for canine heartworm and rheumatoid arthritis. Also developing anti-idiotypes for use in drug

Syncor International Corp

20001 Prairie St, Chatsworth, CA 91311. Tel: 818 886 7400/800 423 5620 Tel Telex: 182627 syncor sylm R&D Biomedical Group: 1440 Fourth St, Berkeley, CA 94710.

Tel: 415 527 9400

Manufactures monoclonal antibody-based diagnostics for infectious diseases and radioactive isotopes.

Syntex Corp

3401 Hillview Avenue, Palo Alto, CA 94304. Tel: 415 855 5050 Telex: 925318 Fig. Fax: 415 855 5526

Major pharamaceutical and health care company with developments based on molecular biology in its subsidiaries Syntex Agribusiness Inc, US and Syva Co, US. Research includes diagnostics for infectious diseases and cancer including production of monoclonal antibodies to T-cell antigen receptor. Developing human vaccines to malaria and AIDS and has clinical

trials with prostaglandin E.

Synthetic Genetics Inc

10455 Roselle St, San Diego, CA 92121. Tel: 619 587 0320/800 562 5544 Fax: 619 587 2525

Developing DNA probes and primers for therapeutic use with applications in the treatment of RNA viruses and the development of an anti-viral AIDS drug. Carrying out contract work on attaching markers to DNA. Now licensed to produce primers and probes for the proprietary polymerase chain reaction by agreement with Perkin-Elmer Cetus Instruments.

Syntro Corp

10655 Sorrento Valley Rd, San Diego, CA 92121. Tel: 619 453 4000 Fax: 619 453 4022

Developing animal vaccines to be marketed through its subsidiary Syntro-Vet, US, human vaccines against malaria, cytomegalovirus and pseudo-rabies, and an AIDS therapeutic as well as carrying out gene synthesis to produce novel proteins.

Syva Co

900 Arastradero Road, PO Box 10058, Palo Alto, CA 94304. Tel: 415 493 2200

Supplies diagnostics for immunological screening of drugs (eg morphine, opium-derived drugs, barbiturates, cocaine etc) for therapeutic drug monitoring in relation to drug abuse and toxins. Developing monoclonal antibodies to T4 and theophylline. Has joint venture with Genetic Systems Corp, US to develop diagnostic method for detection of herpes viruses. Diagnostic test for AIDS virus is under development. Subsidiary of Syntex,

TAGO Inc

887 Mitten Road, PO Box 4463, Burlingame, CA 94011. Tel: 415 692 4015 Telex: 278517

Produce affinity isolated antibodies for use in monoclonal research. Offer services in custom immunization and conjugation.

Techniclone International Inc

14282 Franklin Ave, Tustin, CA 92680. Tel: 714 838 0500 Fax: 714 838 9433

Contract producer of mouse and human monoclonal antibodies and other eukaryotic bioproducts for independent investigators and companies conducting research, clinical trials or for companies requiring commercial quantities. Offer pilot and full scale cGMP mass cell culture and product purification; master drug file documentation; serum free media adaptation; consultation service for radiodiagnosis (imaging) anf immunotherapy procedures.

Teledyne Analytical Instruments

16830 Chestnut Street, PO Box 1580, City of Industry, CA 91749-1580. Tel: 818 961 9221 Telex: 910 584 1887 Fax: 818 961 2538 Manufactures chemical analyzers and ambient air analyzers.

Telios Pharmaceuticals Inc

2909 Science Park Rd, San Diego, CA 92121. Tel: 619 452 6180 Telex: 3508269 F

Fax: 619 535 8269

Produce synthetic peptides for research and pharmaceuticals.

Tri-Continent Scientific Inc

12555 Loma Rica Drive, Grass Valley, CA 95945. Tel: 916 273 8389/800 WE PIPET Telex: 49 Telex: 4991584 tricon

Manufactures laboratory electrophoresis equipment and automated

Triton Biosciences Inc

1501 Harbor Bay Blvd, Alameda, CA 94501.

Tel: 415 769 5200/800 874 8667 Telex: 171816 Fax: 415 769

Developing monoclonal antibody-based in vitro research diagnostics for detection of cancers and oncogenes as well as monoclonal antibody-based products for cancer therapy and beta-interferon. Subsidiary of Shell Oil Co, US.

Turner Designs

920 W Maude Ave, Sunnyvale, CA 94086. Tel: 408 749 0994

Supplies bioluminescence photometers and luminescence grade reagents specific for ATP for use in clinical and biomedical assays. Photometers have full microprocessor control and digital readout.

Twyford Plant Laboratories Inc

12545 Telegraph Rd, PO Box 664, Santa Paula, CA 93060. Tel: 805 525 7125/800 327 9988 Telex: 358231 Fax: 805 525

Produce flowers, ornamental plants and plants of importance as agronomic crops using cell/tissue culture techniques.

United States Analytical Instruments

1511 Industrial Road, San Carlos, CA 94070. Tel: 415 595 8200/800 437 9701

Supply sequencers, synthesizers and equipment for HPLC as well as for infrared and UV/VIS spectrometry etc.

UVP Inc

5100 Walnut Grove Avenue, PO Box 1501, San Gabriel, CA 91778. Tel: 818 285 3123/800 452 6788 Telex: 3716381 2940

Provides modular ultraviolet illumination systems for visualization of chromatographic and electrophoretic separations (254, 302 and 365 nm ultraviolet light in one system).

Vacumetrics Inc

5770 Nicolle St, Ventura, CA 93003. Tel: 805 644 7461/800 235 3333

Telex: 4991689 vacux 654 8759

Supply bacteriological filters.

Varian Associates Inc

Instrument Group

611 Hansen Way, Palo Alto, CA 94303.

Tel: 408 752 2152/800 231 8134 Telex: 348476 Fax: TWX: 910 373 1731

Manufactures laboratory instruments, accessories and supplies for chromatography and spectroscopy in particular. Produces gas chromatography/mass spectrometry and completely automated liquid chromatography systems including systems for separation of proteins and nucleic acids, nuclear magnetic resonance and ultraviolet/visible spectrophotometers, spectrofluorometers and atomic absorption systems.

Vector Laboratories Inc

30 Ingold Rd, Burlingame, CA 94010. Tel: 415 697 3600/800 227 6666 Telex: 172156 Fax: 415 697

Manufactures lectins, lectin conjugates, avidin and avidin conjugates, biotinylated antibodies, complement and enzymes and other biotin/avidin system reagents. Also produces immunoperoxidase histochemical staining kits for tissue sections. Offer services in custom biotinylation of proteins.

Fax: 805

Part III Colorado - CO UNITED STATES OF AMERICA

Vestar Inc

939 E Walnut St, Pasadena, CA 91106.

Tel: 818 792 6101 Telex: 510 600 8247 Fax: 818 792 9935

Carrying out contract research and development on in vivo applications of liposomes including targeted drug delivery.

VWR Scientific

PO Box 7900, San Francisco, CA 94120. Tel: 415 468 7150 Telex: 34227

Distributor of laboratory equipment and supplies used in the life sciences, such as cell culture, molecular biology and immunology, including products for electrophoresis, centrifugation, chromatography etc.

Vvdac

The Separations Group

17434 Mojave St, PO Box 867, Hesperia, CA 92345.

Tel: 619 244 6107/800 247 0924

Telex: 467341

Fax: 619 244

Manufactures prepacked columns for use in HPLC including those for separation of mixtures of proteins and peptides.

Walgene R & D Laboratories Inc

136 East Santa Clara Street, Arcadia, CA 91006. Tel: 818 445 3093

Manufactures animal serum immunoglobulins and other proteins.

West Coast Scientific Inc

2542 Barrington Court, Hayward, CA 94545-1133.

Tel: 415 732 1111/800 367 8462 Fax: 415 732 1131

Manufactures: disposable plasticware: pipette tips, microtubes, microtitration plate and tube systems, tissue culture plastics; liquid handling instruments: single and multichannel digital micropipettes; electrophoresis apparatus and DNA sequencing instruments.

Wizard Laboratories

1362 Monarch Lane, Davis, CA 95616. Tel: 916 753 6700

Carries out contract synthesis of radioactive and heavy isotope-labelled carbon compounds.

Xoma Corp

2910 Seventh St, Berkeley, CA 94710.

Tel: 415 644 1170 Telex: 856697

Developing monoclonal antibody-based therapeutic products for gram negative sepsis, immune-related disorders and cancer.

Fax: 415 644 0539

Zoecon Corp

975 California Ave, Suite 10975, Palo Alto, CA 94304. Tel: 415 857 1130

Carrying out research on improved plant strains and seeds.

Zymed Laboratories

Manufactures enzymes for research and analytical purposes, conjugated to affinity-purified antibodies and other reagents for use in enzyme immuno assays. Market a streptavidin-biotin amplification system utilizing enzyme-labelled streptavidin probes for detection and visualization of biotin-labelled DNA and RNA molecules, antibodies etc for immuno blotting, immuno histochemical and immunocytochemical staining techniques.

Colorado - CO

Adolph Coors Co

1221 Ford Street, Golden, CO 80401.

Tel: (303) 279 6565

One of the major US brewing companies. Carrying out research in brewing technology, fermentation, yeast metabolism, enzyme reactions and kinetics, analysis etc.

Advanced Mineral Technologies

5920 McIntyre St, Golden, CO 80403.

Tel: 303 279 6982

Ceased trading 31st December 1988. See Vistatech Partnership Ltd.

AllerTech Inc

7800 S Elati St, Suite 111, Littleton, CO 80120. Tel: 303 730 1414/800 628 8008

Supply aseptic contract packaging, and offer clinical trials.

Amgen Developments Inc

2045 32nd Street, Boulder, CO 80301.

Carrying out research on the use of recombinant DNA technology for production of veterinary, diagnostic and pharmaceutical products. Considering fluorescent and enzymatic labelling techniques compatible with Abbott instrumentation in the development of non-isotopic DNA probes for oncogenes, herpes, chlamydia and gonorrhea.

Avasco

9840 West 35th Avenue, Wheatridge, CO 80033.

Tel: 303 237 9353

Has developed a continuous fermentation process based on a horizontal rotating fermenter, suitable for yeast-based fermentation of monsaccharide feedstocks to produce fuel ethanol, along with all biochemical reactions and respective processes.

Biostar Medical Products Inc

5766 Central Ave, Boulder, CO 80301. Tel: 303 447 1605 Fax: 303 447 1851

Develop novel and innovative immunoassay techniques, including optical immunoassay (OIA), for the clinical laboratory, doctor's surgery and self-diagnostics. Also developing antigen-specific test kits for systemic Lupus erythematosus, rheumatoid arthritis and multiple sclerosis, as well as a complexed antibody class specific panel for discrimination of complexed antibodies.

Cell Technology Inc

1668 Valtec Lane, Boulder, CO 80301. Tel: 303 443 8155 Fax: 301 443 5590

Developing immunoresponse modulators and therapeutics for treatment of cancer, cardiovascular conditions, viral infections and burns.

Chemex Pharmaceuticals Inc

Carrying out product testing and evaluation on new skin drugs under licence including an anti-allergy and mast cell stabilizing product for development and marketing.

Cobe Laboratories

1185 Oak St, Lakewood, CO 80215-4407.

Tel: 303 232 6800 Telex: 432040 Fax: 303 233 9069

Supply health care products.

Colorado Serum Co

4950 York Street, PO Box 16428, Denver, CO 80216.

Tel: 303 295 7527 Fax: 303 295 1923

Offers services in custom production of animal blood-derived products, including isolated erythrocytes and serum as well as anticoagulants for veterinary treatments.

Colorado State University

Department of Agricultural and Chemical Engineering

Fort Collins, CO 80523. *Tel*: (303) 491 5252

Performing pilot-plant studies on ethanol production from cellulose based on chemical pretreatment, enzyme hydrolysis and yeast fermentation, using wheat or barley straw as feedstock. Investigating the mechanism of inhibition of growth of anaerobic bacteria (Clostridia) producing butanol, ethanol and acetone by such solvents, in particular, in relation to effects on properties and functions of cell membranes as well as isolation of strains

with higher solvent tolerance. Colorado State University

Department of Microbiology

Fort Collins, CO 80523. *Tel:* (303) 491 6136

Investigating production of animal feed single-cell protein by growth of fungi (Chaetomium cellulolyticum) on agricultural wastes and residues.

UNITED STATES OF AMERICA Connecticut - CT Part III

Colorado University

Department of Molecular Cellular & Developmental Biology 1200 University Avenue, Boulder, CO 80302.

Interests include analysis of gene rearrangements during macronuclear development in Oxytricha as well as organization and regulation of collagen genes in Caenorhabditis elegans (nematode).

Columbine Venture Fund II LP

6312 S Fiddler's Green Circle, Suite 260N, Englewood, CO 80111. Tel: 303 694 3222

Venture capital company with interests in biotechnology.

Coors BioTech Inc

12200 N Pecos St, Suite 100, Westminster, CO 80234. Tel: 303 451 1853

Applying microbiology to the manufacture of products related to human and animal nutrition including speciality chemicals and sweeteners. Products also include an industrial degreaser. A subsidiary of Adolph Coors Co. US.

Genetic Engineering Inc

136 Ave & N Washington St, Denver, CO 80233. *Tel*: 303 457 1311

Bull semen laboratories developing techniques for animal sex selection.

Manville International Corporation

Biochem Products & Services

PO Box 5108, Denver, CO 80217.

Tel: 303 978 2656/5080 978 2680 Telex: 454404 johnmanvl dvr Fax: 303

Manufactures custom carriers for biotechnical applications made of rigid, inorganic materials which provide thermal and chemical stability, mechanical strength and rigidity and microbial resistance. These incorporate high surface area, controlled porosity and surface modification for adsorption. They are suitable for use in enzyme and microbe immobilization, cell immobilization, cell cultures and filtration.

MKS Instruments Inc

5330 Sterling Drive, Boulder, CO 80301. Tel: 303 449 9861/800 345 1967 Fa. Fax: 303 442 6880

Manufacture vacuum equipment.

Scientech Inc

5649 Arapahoe Ave, Boulder, CO 80303-1399.

Tel: 303 444 1361/800 525 0522 Telex: 910 940 0994 Fax: 303

444 9229

Manufactures analytical and top-loading balances.

Solar Energy Research Institute

1617 Cole Boulevard, Golden, CO 80401. Tel: (303) 231 1000

Covers all aspects of research into direct and indirect use of solar energy by both laboratory and paper studies and reviews. Indirect aspects include production of fuels and chemicals from biomass using microbiological methods including fermentation and anaerobic digestion. Supervises alcohol (ethanol) fuel programmes of the Department of Energy, US including studies on use of cellulose and separation methods. Managed by the Midwest Research Institute, US for the Department of Energy as a government-owned contract research laboratory.

Synergen Inc

1885 33rd Street, Boulder, CO 80301.

Tel: 303 938 6200 Telex: 3720405 Fax: 303 938 6270

Research and development company working on applications of micoorganisms to enhanced oil recovery, production of speciality chemicals through fermentation and production of pharmaceuticals. Interests include veterinary diagnostics, therapeutics, fibroblast growth factor and research on lung disease.

Vipont Research Laboratories Inc

PO Box 460, Fort Collins, CO 80522

Engaged in development of periodontal treatment products involving innovative research processes such as controlled release implants and plant tissue culture systems. Subsidiary of Vipont Pharmaceutical Inc, US.

Western Chemical Research Corp

2300 North Highway 287, PO Box 1255, Fort Collins, CO 80522. Tel: 303 493 8474

Supplies bulk immunodiagnostic reagents and antiserums. Services include custom antiserum production, complete immunodiagnostic assay development, automated system development, competitive product evaluation, general consulting services and contract research and development.

Connecticut - CT

Aetna Life & Casualty Co

151 Farmington Avenue, Hartford, CT 06156. Tel: (203) 273 0123

Has investment interests in a number of biotechnology companies including Genentech Inc, US.

American Maize

41 Harbor Plaza Drive, Stamford, CT 06902-7441.

Telex: 3591020 Tel: 203 356 9000

Carrying out enzyme and microbial research in relation to maize and maize products including high fructose corn syrup.

AMF Biological & Diagnostic Products Co

Specialty Materials Group

400 Research Parkway, Meriden, CT 06450.

Tel: 203 237 5541 Telex: 962457

Manufactures diagnostics and clinical test kits as well as antiserums, calf-serum replacement and radioimmunoassays for medical and veterinary use. A subsidiary of AMF Inc, US.

AMF Molecular Separations

400 Research Parkway, Meriden, CT 06450. Tel: 800 243 6894 Cables: 962457

Produces cartridge chromatographic separation units based on DEAE, QAE or CM functionalities with flow rates from 0.125 to 12 litres per minute, with protein capacities of from 10 to 1400 grams. Division of AMF Inc, US.

Bio-Engineering Group Ltd

25 Science Park, New Haven, CT 06511.

Tel: 203 786 5055 Telex: 4948104 bio eng

Manufactures and markets portable, automated measurement systems with disposables for rapid bacterial detection, primarily for use in the food and dairy industries, as well as for veterinary and other clinical testing applications. Carrying out research on DNA probes and biosensors.

BioPolymers Inc

74 Northwest Drive, PO Box 1307, Farmington, CT 06034.

Telex: 316208 Tel: 203 793 9651

Supply cell and tissue products for use in ophthalmics as well as mollusc derived adhesives.

Bios Corp

291 Whitney Ave, New Haven, CT 06511. Tel: 203 773 1450 Fax: 203 562 9377

Supply equipment and materials for electrophoresis and blotting systems.

Biotix Inc

Commerce Park, Corporate Drive, Danbury, CT 06810-4130. Tel: 203 790 7880/800 288 2468

Manufacture products and equipment for molecular biology including electrophoretic equipment and materials, DNA sequencers and synthesizers.

Branson Sonic Power Co

Eagle Rd, Danbury, CT 06810.

Tel: 203 796 0400 Telex: 969640

Manufactures cell fractionators.

Part III Connecticut - CT UNITED STATES OF AMERICA

Business Communications Co Inc

25 Van Zant St, Norwalk, CT 06855. Tel: 203 853 4266 Fax: 203 853 0348

Biotechnology market analysis firm publishing independent technical-economic studies on all facets of biotechnology, from emerging products to industry supports, and providing confidential consulting services. Also publishes Applied Genetics News and hosts an annual conference on Commercial Biotechnology. It is cross-disciplined in all other areas of industry, technology and commerce.

Canberra Industries Inc

One State St, Meriden, CT 06450.

Manufacture radioimmunoassay equipment as well as frequency counters, ratemeters and radiation detectors.

Combined Sciences Corp

433 Boston Post Rd, Darien, CT 06820.

Manufactures amino acid analyzers.

Connecticut, University of

Department of Biochemistry

Farmington Avenue, Farmington, CT 06032.

Investigating glycolytic structural genes isolated on bacterial plasmids including studies on hybrid genes constructed in vitro from different segments of glycolytic genes.

Connecticut, University of, Health Centre

Department of Microbiology

Rm L2034, Farminton, CT 06032.

Tel: 203 674 2310

Carrying out research on the function of individual genes coding for various proteins produced by the herpes virus as a means of developing improved anti-viral compounds.

Cuno Inc

Manufactures filtration and purification products for affinity and ion exchange chromatography, positively charged nylon 66 transfer membrane, charge modified nylon filtration products, and prefilters.

Delco Scientific Resources

2315 Post Road, Fairfield, CT 06430. Tel: (203) 254 0652

Market research and technical consulting firm. Publishes regular studies on a wide range of biotechnology markets. Also undertakes group management and analysis, seminars and specialised consulting.

Deltown Chemurgic Corporation

191 Mason St, Greenwich, CT 06830.

Manufacture a wide range of peptones and protein hydrolyzates derived from animal tissues and plant sources using acid or enzymatic means. Suitable for use in formulation of culture medium, food products, cosmetics etc.

Dexter Corp

1 Elm Street, Windsor Locks, CT 06096. Tel: (203) 627 9051

Manufactures materials for coating and encapsulation, water treatment, plastic sheeting etc, as well as producing microbial and tissue culture media and clinical and research diagnostics through its subsidiary Gibco Division,

Diagnostic Chemicals Ltd (USA)

435 Main St, Monroe, CT 06468.

Supply enzymes and enzyme substrates. Distributor for Diagnostic Chemicals Ltd, Canada.

Dianon Systems Inc

555 Lordship Boulevard, Stratford, CT 06497-7124.

Tel: 203 381 4000/800 328 2666 Fax: 203 375 0221

Supply immunological products including antigens as well as polyclonal or monoclonal antibodies against enzymes. Offer services in cytology testing including prostate fine-needle aspiration biopsy kit and cytopathology as well as in vitro tumour marker systems.

Dorr-Oliver Inc

Supplies preparative and production-scale chromatography systems for protein, peptide and organic synthesis product isolation including inert, sanitary, high pressure and explosion-proof designs.

E R Butts International Inc

555 Clinton Ave, PO Box 3337, Bridgeport, CT 06605-0337. Tel: 203 333 4943 Fax: 203 334 0654

Biotechnology regulatory consultants. Have obtained registration for two Trichoderma containing microbial pesticides on behalf of Binab, US.

IBM Instruments Inc

PO Box 332, Danbury, CT 06810. Tel: 203 796 2500

Manufactures laboratory computer systems, spectrophotometers, liquid chromatographs and columns for molecular weight analysis and other gel permeation equipment.

International Biotechnologies Inc

25 Science Park, New Haven, CT 06511.

Tel: 203 786 5600/800 243 2555 Telex: 643993 Fax: 203 624

Supplies apparatus, reagents and other products for molecular biology including restriction and modifying endonucleases, ultrapure reagents, as well as nucleic acid, cloning, genome analysis, electrophoresis and sequencing apparatus and technical information. Division of Eastman Kodak, US.

John Brown E & C Inc

Major engineering company with considerable experience in construction of biotechnology-related plant and facilities in areas of production of antibiotics, dextran and other polysaccharides, single cell protein, ethanol and enzymes. Services include consultancy, process evaluation and development and project execution (see also Constructors John Brown, UK, CJB Developments, UK, and John Brown Engineering & Constructors, UK).

Kali-Chemie Corp

41 West Putnam Avenue, Greenwich, CT 06830.

Tel: 203 629 7900/212 949 1651 Telex: 4750062 Fax: 203 629 9074

Products include peptides, amino acid derivatives and salts, reagents for peptide synthesis such as protected amino acids and trifluoroacetic acid, protein hydrolyzates, enzymes, adsorbents and carrier systems including silica microspheres.

Leybold Technologies Inc

120 Post Road, Enfield, CT 06082. Manufacture freeze drying systems.

MicroGeneSys Inc

400 Frontage Rd, West Haven, CT 06516-4147.

Tel: 203 932 3203 Telex: 4937180 Fax: 203 932 6944

Research and development company engaged in aspects of biological control, as well as the production of vaccines and therapeutics for use in both humans and other animals. Products under development include insecticides based on baculovirus, as well as research products such as AIDS retrovirus envelope proteins manufactured using recombinant insect cells modified using baculovirus as the vector to introduce the required genes to code for the foreign protein, and diagnostics to detect HIV antibodies. Have reached Phase 1 of development of an AIDS vaccine.

UNITED STATES OF AMERICA Delaware - DE Part III

Molecular Diagnostics Inc

400 Morgan Lane, West Haven, CT 06516. Tel: 203 934 9229 Telex: 221949

Markets diagnostic products. Developing DNA probes for thalassemia and sickle cell anaemia as well as monoclonal antibody based diagnostics for diabetes, cancer, infectious and human genetic diseases. Subsidiary of Bayer AG, Germany.

Novo Laboratories Inc

33 Turner Rd, Danbury, CT 06810. Telex: 964385

Manufacturing division of Novo Biolabs, US producing enzymes for converting corn starch to ethanol and high fructose corn syrup.

Paliflex Inc

Kennedy Drive, Putnam, CT 06260. Tel: (203) 928 7761

Manufacture filtration membranes and equipment.

Perkin-Elmer Cetus Instruments

761 Main Avenue, Norwalk, CT 06859-0251. Tel: 203 762 1000/800 762 4001 Telex: Telex: 965954

Developing instrument and reagent systems for microassay and molecular biology research including: automated liquid handling system and data analysis software for automation of ELISAs etc; DNA amplification system for automation of the polymerase chain reaction; biocompatible liquid chromatography system and columns for rapid separation and purification of DNA, proteins etc; UV/VIS and fluorescence spectrophotometers, fluorescence microplate reader and applications software for DNA quantitation and sample analysis.

Perkin Elmer Corp

Analytical Instruments

761 Main Avenue, Norwalk, CT 06859-0012. Tel: 203 762 1000/800 762 4000 Telex: 965954 Fax: 203 762 6000

Manufactures laboratory instrumentation for spectroscopy, chromatography and thermal and elemental analysis. Products include: complete systems for gas, high performance liquid and liquid chromatography; atomic absorption, inductively coupled plasma and inductively coupled plasma-mass spectrometry; gas chromatography-mass spectrometry; and UV/Visible and fluorescence spectroscopy, including microprocessor systems, video display, data-processing capabilities as well as a complete line of accessories and supplies for these systems.

Peter R Bahn

744 New Britain Ave, Farmington, CT 06032.

Patent attorney and biochemist specializing in biotechnology patent law.

Pfaltz & Bauer Inc

172 E Aurora St, Waterbury, CT 06708. Fax: 203 574 3181 Tel: 203 574 0075 Telex: 996471

Supplies a very wide range of over 30,000 different research chemicals including organic, inorganic and organometallic compounds as well as biochemical reagents.

Phase Separations Inc

140 Water Street, Norwalk, CT 06854. Tel: 203 852 1797 Telex: 4759018

Fax: 203 852 6921

Manufacture accessories for chromatography as well as liquid chromatographs, HPLC systems, chromatography pumps, chromatography supports and media etc.

Publicker Industries

777 West Putnam Avenue, Greenwich, CT 06830. Tel: (203) 531 4500

Manufactures industrial chemicals. Has experience of large-scale fermentation to produce products such as butanol, acetone and acetic acid, although such activities have largely declined due to competition from petrochemical alternatives.

Quadrex Corp

PO Box 3881, New Haven, CT 06525. Telex: 510 101 2584 Tel: 203 393 3112 Supply equipment for gas chromatography.

Stauffer Chemical Co

Nyala Farm Road, Westport, CT 06881. Tel: (203) 222 3000

Manufactures yeast for food and animal feed. Producing hybrid corn, sorghum and sunflower seed. Using tissue culture and genetic engineering techniques to develop new products.

Theta Corp

Theta Building, Middlefield, CT 06455. Fax: 203 349 1227 Tel: 203 349 1054

Carries out market research reports and consulting in those areas of biotechnology likely to affect medical diagnostic industries.

Tridak

Division of Indicon Inc

1120 Federal Rd, Brookfield, CT 06804.

Tel: 203 775 1287

Manufactures dispensing systems for applying precise quantities of fluids and pastes in manual or automated mode and nanolitres to litres.

Union Carbide Corp

Old Ridgebury Road, Danbury, CT 06817. Tel: (203) 794 5300 Telex: 420542

Corporate Research Department, Tarrytown Technical Center, Tarrytown, NY 10591

Manufactures bulk chemicals for use as antifreeze, polyester fibres, polyethylene, toiletries, cosmetics, packaging for processed food and agricultural products. Carrying out applied studies in recombinant DNA technology, with emphasis on new routes to production of industrial chemicals

University Patents Inc

1465 Post Road East, PO Box 901 Westport, CT 06881.

Licenses developments in molecular biology such as monoclonal antibodies for use as therapeutics or in diagnostics.

Delaware - DE

Analtech Inc

75 Blue Hen Drive, PO Box 7557, Newark, DE 19711. Tel: (302) 737 6960 Telex: 835329

Manufactures and supplies plates and accessories for thin layer chromatography.

Digital Instruments Corp

PO Box 9901, Newark, DE 19714-9901. Tel: 215 255 4149

Supply densitometers, image analyzers and associated software.

Du Pont Company

Biotechnology Systems

P16-2130, G-51731, Wilmington, DE 19880-0016. Tel: 302 992 4136/800 551 2121 Fax: 302 992 Fax: 302 992 6448/5159

Research, develop and manufacture a wide range of instruments and reagents for use in life science research, including automatic systems for DNA synthesis and analysis, a complete line of centrifuges, chromatography columns, radiolabelled compounds and reagents for cancer, virus, neuroendocrine, immune system and drug screening research.

E I Du Pont De Nemours & Co Inc

1007 Market St, Wilmington, DE 19898. Tel: 302 774 2421

331 Treble Cove Rd, North Billerica, MA 01862. Tel: 800 225 1572

Major chemical company with increasing interests in agricultural and medical markets. Developing plant growth regulants. Involved in research on plant physiology and plant genetics as well as the development of interferon and other therapeutic products from molecular biology. Markets products of Biotech Research Labs Inc. US.

Engineered Systems & Designs Inc

3 S Tatnall Street, Wilmington, DE 19801. Tel: (302) 571 1195

Manufacture pH electrodes and pH meters.

Part III Florida - FL UNITED STATES OF AMERICA

Hercules Inc

910 Market Street, Wilmington, DE 19899. Tel: (302) 575 5000 Telex: 835431

Manufactures a wide range of resins, films, fibre and plastic products, water-soluble polymers, flavours and fragrances, chemicals for water treatment and electronic products.

Monkman-Rumsev

5720 Kennett Pike, PO Box 3760, Centreville, DE 19807. Tel: (302) 658 75807

Provides consultancy in the following areas: patents, licensing and joint ventures, market and technology studies, business venture plans, strategy and long-range planning, for both US and international clients in fields which include biotechnology, chemicals, energy, electronics, health care pharmaceuticals and plastics.

District of Columbia - DC

Alpha 1 Biomedicals Inc

777 14th St NW, Suite 410, Washington, DC 20005. Tel: 202 628 9898 Telex: 4948446 alpha 1 Fax: 202 737 3328

Manufactures therapeutic products based on genetic engineering techniques such as biologically active peptides. Products include thymosin alpha 1 peptide for use in treating lung cancer which is also undergoing trials for use in increasing the effectiveness of vaccines to influenza and hepatitis. Also carrying out research on AIDS vaccines in collaboration with Cel-Sci Corp, US (formerly Interleukin-2).

Bioscan Inc

Fax: 202 333

Supplies laboratory instrumentation including radiation counters and detectors, DNA sequencing gel readers, equipment for thin layer chromatography and electrophoresis transfer and accessories.

Energy Service Co

B200 Walker Bldg, 734 15th Street NW, Washington, DC 20005. Tel: 202 737 6018

Manufacture cell disintegrators, fractionators and pumps.

Foundation on Economic Trends

1130 17th St NW, Suite 630, Washington, DC 20036. Tel: 202 446 2823

Carries out economic and technical studies as well as monitoring aspects of biotechnology such as legislation on the release of genetically manipulated organisms.

J F Coates Inc

3738 Kanawha Street, Washington, DC 20015. Tel: (201) 966 9307

Consultants. Produced a report on implications of biotechnology for the National Bureau of Standards which covers certification of organisms and equipment, databanking of genetic information etc, and a report for the United States Environmental Agency on the consequences of regulation on the commercialization of biotechnology.

Peptide Technologies Corp

125 Michigan Ave NE, Suite 368, Main, Washington, DC 20017-1004. Tel: 202 234 3384

Carry out research and custom synthesis of peptides, chromatography and amino acid analysis. Developing chromatography equipment and synthetic neuropeptides.

SGN USA

2550 M Street NW, Suite 400, Washington, DC 20037. Tel: 202 857 0713 Telex: 0892605

Liaison office offering engineering services and project management over a wide area of interests including computer integrated manufacturing and biotechnology systems. Products and processes include continuous anaerobic fermentation using fixed bed systems, aerobic waste treatment processes using bacterial filters, deep shaft systems, filtration, floation, floculation, and specialized processes for the food industries.

Viral Technologies Inc

777 14th St NW, Suite 747, Washington, DC 20005. Tel: 202 628 9898

Have developed an AIDS vaccine based on a synthetic peptide.

Florida - FL

ABC Research Corp

3437 SW 24th Avenue, Gainesville, FL 32607. Tel: 904 372 0436 Telex: 4930335 Fax: 904 378 6483

Manufactures custom cultures for food processing including lactic acid starter cultures, bacterial receptor proteins and biological products. Offers analytical services and undertakes contract research.

Agrogene Plant Science Inc

5299 Lantana Rd, Lake Worth, FL 33463. Tel: 305 969 0802 Telex: 317470

Supply plantlets of tropical crop plants produced by tissue culture. Carrying out research on embryogenesis and recombinant DNA technology techniques for gene insertion and cloning of tropical crop plants and ornamentals.

American Dade

PO Box 520672, Miami, FL 33152. Telex: 441295 Tel: (305) 592 2311

Supplies a wide range of products for clinical laboratories including blood-typing serums, laboratory control reagents, diagnostic reagents, speciality laboratory ware and instrumentation and radioimmunoassays. Division of American Hospital Supply Corp, US.

American Radiochemical Corp

PO Box 1938, Sanford, FL 32771.

Tel: 305 365 3581

Supplies radioactive chemicals and other radioactive products.

Applied Genetics Labs Inc

1335 Galeway Drive, Suite 2001, Melbourne, FL 32901. Tel: 305 768 2048

Develop and market DNA probes and a genetic toxicity test.

Baxter Healthcare Corp

Dade Division

PO Box 520672, Miami, FL 33152.

Tel: 305 592 2311 Telex: 441295 Fax: 305 591 5552

Manufactures and markets reagents, controls and test systems for clinical laboratories and blood bankers worldwide including products for immunohaematology, haemostasis, haematology, chemistry and respiratory controls, radioimmunochemistry and immunoassay testing. Also offers liquid handling products and benchtop laboratory equipment.

Bio Safe Corporation

6435 SW 85th Street, PO Box 432835, Miami, FL 33143. Tel: 305 661 9587

Produce anaerobic culture equipment and biological filters.

BioAnalytics Inc

PO Box 388, Palm City, FL 33490. Tel: 305 287 3340 Telex: 709252

Supply reagents for automated analyzer systems.

Biotelemetrics Inc

6520 Contempo Lane, Boca Raton, FL 33433. Tel: 407 394 0315

Engineering contractors offering research and development services in biotechnology.

Butler Research International

4900 SW 72nd Avenue, Miami, FL 33155.

Offers engineering, scientific and financing services as well as construction, procurement, management, staffing and training in industrial, mechanical, structural and civil engineering in areas which include fermentation and distillation for the production of chemicals and other products from carbohydrates. Projects include the production of fuel ethanol from corn, molasses and cane.

UNITED STATES OF AMERICA Florida - FL Part III

CD Medical Inc

Manufacture hollow fibre systems for the continuous production and recovery of secreted products from cell cultures.

Coral Springs Improvement District

10300 North West 11th Manor, Coral Springs, FL 33065. Tel: (305) 753 0380

Investigating use of water hyacinth as a wastewater treatment system as well as studies on production of methane gas by anaerobic digestion of water hyacinth.

Coulter Corp

Epics Division

PO Box 4486, Hialeah, FL 33014-0486.

Design and manufacture flow cytometry instrumentation, cell sorters, computer data sytems and analytical software.

Coulter Electronics Co

PO Box 2145, Hialeah, FL 33012-0145.

Manufactures and distributes equipment for counting and sorting cell types using light scattering or fluorescence techniques. Using a laser light source and multichannel data acquisition system analysis (based on any six of possible parameters) can sort up to 5000 cells per second, with results displayed on high-resolution graphic systems. Also supplies monoclonal antibodies of high specificity.

Coulter Immunology

440 West 20th St, Hialeah, FL 33010. Tel: 305 883 6880/800 327 3778

Supplies immunological products including antibodies to human blood factors, B-cells, tumour antigens etc. Products include monoclonal and polyclonal antibodies. Division of Coulter Corp, US.

Cyclo Corp

7500 North-West 66th Street, Miami, FL 33166. Tel: (305) 592 6700 Telex: 512374

Produces esters and other derivatives of fatty acids for cosmetic and toiletry

Davy McKee Corp

5300 South Florida Avenue, PO Drawer 5000, Lakeland, FL 33813. Tel: 813 646 7100 Telex: 522412 Fax: 813 646 7339 (see Davy McKee Corp, IL).

Diamedix Corp

formerly Cordis Laboratories Inc

2140 North Miami Ave, PO Box 37048, Miami, FL 33127.

Tel: 305 324 2300/800 327 4565

Telex: 441346

Fax: 305 324

Supplies laboratory diagnostic kits and immunological products for infectious and autoimmune diseases, ELISA test kits, complement and antiserums.

Dvorkovitz and Associates

PO Box 1748, Ormond Beach, FL 32074. *Tel*: (904) 677 7033

Acts as an exchange for licence of technology on a subscription basis in areas of science and technology which include biotechnology and genetic engineering.

E-C Apparatus Corp

3831 Tyrone Blvd N, St Petersburg, FL 33709-4198.

Tel: 813 344 1644/800 EC RANGE Telex: 514736 Fax: 813 343 5730

Supply equipment for electrofocusing, electrophoresis, DNA sequencing and immunodiffusion as well as densitometers and associated software.

EC Apparatus Corp

3831 Tyrone Boulevard North, St Petersburg, FL 33709.

Tel: 813 344 1644 Telex: 4736 hala Fax: 813 343 5730

Produces power packs for electrophoresis with high stability for high-resolution separations (up to 6000 V, 150 mA, 300 W).

Florida, University of

Institute of Food & Agricultural Research Department of Plant Pathology Gainesville, FL 32611.

Tel: 904 392 3631

Carrying out research in biological control methods including the screening of microorganisms for the production of pesticidal compounds. Also evaluating the efficacy of fungal species, such as Cercospora rodmani, for use against water hyacinth.

Florida, University of

Department of Agricultural Engineering

9 Roger's Hall, Gainesville, FL 32611.

Tel: (904) 392 1864

Studying recycling of nutrients through growth of algal biomass on manure from a swine unit of 300 animals as well as investigating algal biomass as a source of protein feed or as raw material for biogas (methane) generation by anaerobic digestion.

Florida, University of

Agricultural Experimental Station Department of Biochemistry & Molecular Biology

Gainesville, FL 32601.

Studying mode of action of cytoplasmic determinants conditioning male sterility in corn and sorghum and relationship to disease susceptibility. Also developing tissue culture methods and somatic hybridization and isolating episomal DNA from maize.

Germfree Laboratories Inc

Equipment Manufacturing Division

7435 NW 41 St, Miami, FL 33166. Tel: (305) 592 1780 Telex: 515138

Manufactures bacterial confinement systems.

Goodwin Institute for Cancer Research Inc

1850 NW 69th Avenue, Plantation, FL 33313. Tel: 305 587 9020

Offers contract service in production of murine custom monoclonal antibodies.

Harbor Branch Institution

Centre for Marine Biotechnology

RR1 Box 196-A, Fort Pierce, FL 33450.

Tel: (305) 465 2400

Investigating the growth of marine algae for use in the production of biomass for energy as well as for wastewater treatment and for the production of polysaccharides, animal feed and fertilizers.

Immunomed Corp

5910-G Breckenridge Parkway, Tampa, FL 33610. Tel: 813 621 9447

Produce vaccines including a rabies vaccine and immunotherapeutics.

Key Pharmaceuticals Inc

18425 North-West Second Avenue, PO Box 694307, Miami, FL 33169. Tel: (305) 652 2276

Specializes in drug-delivery systems aimed at increasing effectiveness and safety of use.

Life Sciences Inc

2900 72nd St N, St Petersburg, FL 33710. Tel: 813 345 9371

Carrying out research on animal genetics as well as viruses and interferon.

Part III Georgia - GA UNITED STATES OF AMERICA

Milton Roy Co

LDC Division

PO Box 10235, Riviera Beach, FL 33404. Tel: 407 844 5241/800 LDC HPLC Telex: 513479

Manufactures liquid chromatography equipment including high performance liquid chromatography pumps, detector systems, sample injectors and data recording and integration devices and software.

Modern Talking Pictures

5000 Park St North, St Petersburg, FL 33709. Tel: 813 541 5736

Produce educational films and documentaries including coverage of biotechnology in agriculture.

Molecular Genetic Resources Inc

6201 Johns Road, Suite 8, Tampa, FL 33634. Tel: 813 886 5338 Telex: 49934867

Manufactures enzymes and products for genetic engineering including reverse transcriptase of high purity, transferase and an mRNA analysis kit.

Munters Corporation

PO Box 6428, Fort Myers, FL 33911. Tel: (813) 936 1555 Telex: 52785

Manufactures fixed film anaerobic digesters for treatment of potato and vegetable wastes on a commercial scale.

North American Biologicals Inc

16500 North-West 15th Avenue, Miami, FL 33169. Tel: 305 625 5303/800 327 7106 Telex: 519301

Collects and manufactures human blood and blood products for the therapeutic and diagnostic markets. Developing tissue culture products.

PCP Inc

2155 Indian Rd, West Palm Beach, FL 33409-3287. Tel: 305 683 0507

Supply oxygen analyzers, chromatography equipment and electrodes. Offer research and development services.

Petroferm Inc

Markets polysaccharide, known as emulsan, for use in dispersal of oil spills, personal care products, emulsion stabilizer etc. Developing the use of microbial organisms in producing improved fuels. Subsidiary of Petroleum Fermentations NV, Netherlands Antilles.

Radiomatic Instruments & Chemical Co Inc

5102 S Westshore Blvd, Tampa, FL 33611. Tel: 813 837 1090 Fax: 813 839 3418

Manufacture analyzers and detectors including a flow detector for HPLC.

United States Department of Agriculture

Horticultural Research Laboratory

2120 Camden Road, Orlando, FL 32803.

Producing improved varieties of citrus trees with better resistance to disease and pests and higher tolerance to environmental conditions using conventional hybridization as well as genetic analysis, protoplast fusion etc.

University Genetics Co

5299 West Lantana Rd, Lake Worth, FL 33463. Tel: 305 969 0802 Fax: 305 969 0804

Technology-funding company which finances university research in genetic engineering. Assists in filing patents and negotiating licences with industry. Developing monoclonal cells and embryos for cloning and culturing plants.

USA Scientific Plastics Inc

PO Box 3565, Ocala, FL 32678.

351 2057

Supply equipment and reagents including products for electrophoresis, blotting, cell and tissue culture, DNA and RNA sequencing, filtration and centrifugation as well as labware and liquid handling apparatus.

Viragen Inc

2243 West 76th St, Hialeah, FL 33016. Tel: 305 557 6000

Developing techniques for radioimmunoassay of cancers and other disorders as well as hybridoma technology and production of antiviral and antitumour products including interferon, peptides and therapeutics.

Georgia - GA

Advanced Technology Development Center

430 Tenth St NW, Suite N116, Atlanta, GA 30318. Tel: 404 894 3575 Fax: 404 894 4545

Technical innovation center situated at the Georgia Institute of Technology includes Athens Research and Technology, developing human and veterinary diagnostics, and Horizon MicroEnvironments, developing gas permeable, non-porous, continuous surface membranes impermeable to bacteria or viruses.

Alcott Chromatography Inc

5300 Oakbrook Parkway, Suite 100, Norcross, GA 30093. Tel: 404 279 2521 Telex: 6827018 Fax: 404 279 9153

Supply liquid chromatography and HPLC columns and accessories, sample handling equipment and high pressure valves as well as UV, visible and UV/visible spectrophotometers.

Biopool International

3850 Holcomb Bridge Rd, Suite 430, Norcross, GA 30092. Tel: 404 729 9277/800 343 7478 Fax: 404 729 8868

Develops, manufactures and markets in vitro diagnostic test kits for use in measuring components of the fibrinolytic and vascular systems. Such tests can also be used to evaluate patients with clotting disorders and those at risk of cardiovascular disease.

Biosystems Inc

762 US Highway 78, Loganville, GA 30249. *Tel*: 404 466 1511

Research and development company offering services in microbiology as well as the production of monoclonal antibodies.

Chromatix Inc

2558 Mountain Industrial Blvd, Tucker, GA 30084. Tel: (404) 493 7000 Fax: TWX: 810 766 8099

Manufactures analytical laboratory equipment, including instruments for light-scattering measurement, gel permeation and liquid chromatography.

CTC Organics

PO Box 6933, Atlanta, GA 30315. Tel: (404) 524 6744 Telex: 542250

Supplies organic reagents for DNA and RNA synthesis, including phosphorylating agents, protecting and deprotecting agents, coupling agents, nucleosides and reagents for solid phase synthesis of oligonucleotides. Agents for Tokyo Chemical Industry Co Ltd, Japan.

Georgia Institute of Technology

Engineering Experiment Station

Atlanta, GA 30332. Tel: (404) 894 3589

Developing a cellulose-to-ethanol process using yeast fermentation of feed material obtained by 'steam explosion' of wood to yield lignin cellulose and hemicellulose components followed by acid hydrolysis.

Immucor Inc

3130 Gateway Drive, Norcross, GA 30071. Tel: 404 441 2051 Telex: 543641

Products include blood bank reagents, assay systems to detect antibodies to platelets and unexpected antibodies to red cells. Using recombinant DNA and hybridoma/cell fusion techniques to develop monoclonal antibodies to human blood groups as well as diagnostic tests for infectious diseases.

Interchem Inc

2859 Paces Ferry Rd, Suite 600, Atlanta, GA 30339. Tel: 404 434 1333 Fax: 404 433 1067

Manufacture surfactants as well as natural gum products for the food industry. Part of RTZ Corp.

UNITED STATES OF AMERICA Illinois - IL Part III

Lee Laboratories

1475 Highway 78 SW, Grayson, GA 30221. Tel: 404 972 4450 Telex: 550567

Produce vaccines against bacterial disease and offer custom services in production of bacterial antigens, bacterial immunization and small animal

Micromeritics Instrument Co

1 Micromeritics Drive, Norcross, GA 30093-1877. Telex: 6827018 Tel: (404) 448 8282

Manufactures amino acid analyzers, chromatography accessories and detectors.

Murex Corp

3075 Northwoods Circle, PO Box 2003, Norcross, GA 30071. Tel: 404 662 0660

Developing diagnostics, monoclonal antibody reagents and antibody kits.

Rhone Merieux Inc

117 Rowe Rd, Athens, GA 30601. Fax: 404 548 9292 Tel: 404 548 9292

Carrying out research on vaccines and therapeutics.

SEAI Technical Publications

PO Box 590-E, Madison, GA 30650. Tel: 404 342 9638

Consultancy organisation producing multiclient studies and technical reports on areas such as biosensors.

Southern Micro Instruments Inc

120 Interstate North Pkwy East, Suite 308, Atlanta, GA 30339. Tel: 404 956 0343/800 241 3312 Fax: 404 953 4490 Tel: 404 956 0343/800 241 3312

Manufacture a wide range of optical microscopes and accessories including fluorescence, hot stage, operating, phase contrast, stereo and student

United States Department of Agriculture

R B Russell Agricultural Research Center

PO Box 5677, Athens, GA 30604.

Investigating physiology and biochemistry of photosynthesis and establishing differing traits among plant species which may then be used as a base for increasing crop productivity and quality through genetic engineering. Investigating regulation of synthesis of carboxylases using immunochemical techniques

Universal Scientific Inc

2935 B Amwiler Rd, Atlanta, GA 30360. Fax: 404 441 3402 Tel: 404 441 1134

Manufactures silica gel and alumina adsorbents for preparative LC, HPLC and TLC as well as speciality HPLC and simple preparative columns.

Hawaii - HI

Hawaii Biotechnology Group Inc

99-193 Aiea Heights Drive, Aiea, HI 96701. Tel: 808 487 5561

Offer contract research in immunochemistry of natural products and viral vaccine development using techniques of molecular biology and monoclonal antibodies. Market monoclonal antibodies which recognize DNA-RNA

Hawaii, University of

Department of Agricultural Engineering

Honolulu, HI 96822. Tel: (808) 948 8111

Developing continuous fermentation systems based on cell recycle for production of alcohol using yeast and molasses or sugar cane juice as raw material. Also undertaking laboratory studies on anaerobic digestion of local seaweeds.

Hawaii, University of

Department of Plant Pathology

3190 Maile Way, Honolulu, HI 96822.

Tel: 808 948 8111

Investigating the mechanisms of enhanced plant growth resulting from associations between roots and populations of bacteria such as Pseudomonas which excrete iron chelators such as the peptide pseudobactin.

Hawaiian Research Ltd

PO Box D, Kaunakaki, Molokai, HI 96748.

Offer contract services in field trials for new strains of crop plants.

Hawaiian Sugar Planters Association

99-193 Aiea Heights Drive, PO Box 1057, Aiea, HI 96701. Tel: (808) 487 5561

Research and development association for the cane sugar industries in Hawaii. Activities include cane breeding and long established group carrying out work on plant tissue culture of sugar cane, disease resistance, photosynthesis and transport of sucrose in plants.

Idaho - ID

Idaho, University of

Department of Chemical Engineering

Moscow, ID 83843.

Tel: (208) 886 6793

Developing a continuous two-stage fermentation process for the production of fuel alcohol from starchy raw materials and food-processing wastes such as those from the potato process industry.

Idaho, University of

Department of Bacteriology

Moscow, ID 83843.

Tel: (208) 886 6793

Undertaking selection of yeast mutants with high alcohol tolerance and ability to form flocs for use in continuous alcohol production systems.

Illinois - IL

A E Staley Manufacturing Co

2200 East Eldorado Street, Decatur, IL 62525. Tel: 217 423 4411

Manufactures glucose and high fructose glucose syrups and other corn products. Has investment in Bio-Technical Resources Inc, US. Carrying out research on enzymes, speciality chemicals and protein isolates.

Abbott Laboratories

14th Street & Sheridan Road, North Chicago, IL 60064. Tel: 312 937 6100

Rtes IL 43 & IL 137, Abbott Park, IL 60064.

Tel: 312 937 0201/800 323 9100

Produces pharmaceutical, immunological and other health-care products and agrochemicals including antibiotics (penicillin, erythromycin), plant growth hormones (gibberellins), biological control agents (Bacillus thuringiensis, insecticides) and other microbiological products such as soil inoculants, with applications in agriculture and forestry. Has research group in genetic engineering looking at applications in pharmaceuticals, diagnostics, agricultural and nutritional products, and enzymes including human urokinase. Developing diagnostics and therapeutics based on monoclonal antibodies. Major supplier of assays for drug abuse tests, AIDS tests for NIH screening and hepatitis B.

Alltech Associates Inc

2051 Waukegan Rd, Deerfield, IL 60015.

Tel: 312 948 8600 Telex: 6871132 altec Fax: 312 948 1078

Applied Science Division: PO Box 440, State College, PA 16804. Tel: 814 238 2406 Fax: 814 234 3594

Supplies reagents, standards, adsorbents, accessories etc, for gas/liquid, liquid, high performance liquid and thin layer chromatography and pharmaceuticals.

Part III Illinois - IL UNITED STATES OF AMERICA

American Hospital Supply Corp

One American Plaza, Evanston, IL 60201. Tel: 312 866 4000 Telex: 724341 (see American Dade, US).

Amersham Corporation

2636 South Clearbrook Drive, Arlington Heights, Illinois 60005 Tel: 312 593 6300 Telex: 984623 Amersham USA UD Fax: 312 593 8236/312 593 1044

Supplies radioactive and non-radioactive products for research in life sciences and health care. (See Amersham International plc, UK.)

Amoco Research Center

PO Box 400 MF F-2, Naperville, IL 60566. Tel: 312 420 5111

Developing speciality chemicals by fermentation and biomass/energy systems. Also developing databanks and programs.

Analytic Parameters

PO Box 25035, Chicago, IL 60625 Tel: (312) 728 2152 Telex: 705587

Supplies a wide range of scientific and analytical equipment including chromatographic accessories and detectors, densitometers, apparatus for electrophoresis, electrofocusing and immunoelectrophoresis, apparatus for immunodiffusion; radioautographic equipment, sample applicators, ultraviolet scanners etc.

APV Crepaco Inc

8303 W Higgins Rd, Chicago, IL 60631. Tel: 312 693 4000

Supplies fermenters and bioreactors including large scale air lift systems for culture of animal cell lines. Subsidiary of APV International (UK).

Archer Daniels Midland Co.

4666 Farles Parkway, PO Box 1470, Decatur, IL 62525. Tel: (217) 424 5700

Produces glucose syrups and large-scale ethanol as fuel alcohol from corn. Using and researching enzyme methods of saccharification including studies of immobilized systems. Investigating improved fermentation systems for large-scale alcohol production.

The Austin Company

Process Division

2001 Rand Road, Des Plaines, IL 60016. Tel: 312 694 4300

Corporate Headquarters: 3650 Mayfield Rd, Cleveland, OH 44121

Offers services in design, engineering, procurement, and construction of fermentation facilities for food, pharmaceuticals, agrochemicals, enzymes, genetically engineered products and amino acids.

Ball Biotech Inc

250 Town Rd, West Chicago, IL 60174. Tel: 312 231 3600 Telex: 4994983

Produce crop plants and ornamentals by tissue culture.

The Barnant Co

28 W 902 Commercial Ave, Barrington, IL 60010. Tel: (312) 381 7050

Manufactures pH electrodes and meters. Division of Cole-Parmer Instrument Co. US.

Baxter Healthcare Corp

One Baxter Parkway, Deerfield, IL 60015. Tel: 315 948 2000 Telex: 724497 Fax: 312 948 3948

Major producer of pharmaceutical products, including diagnostics distributed through its Clinical Assays Division which produces radiommunoassay kits. Carrying out R&D in cell biology and medical areas related to immunological products. Has joint agreement with Genetics Institute, US to develop recombinant DNA processes to produce blood-clotting factor VIII. Products under development include AIDS diagnostics, monoclonal antibodies, TPA, gamma-interferon, interleukin-2 and alpha-foetoprotein radioimmunoassay kit.

Baxter Healthcare Corp

Pandex Division

909 Orchard Street, Mundelein, IL 60060. Tel: 312 949 6700/800 472 6339

Markets equipment for screening of hybridomas based on fluorometric immunoassav.

Baxter Scientific Products

1430 Waukegan Road, McGaw Park, IL 60085. Tel: 312 689 8410

Supplies a wide range of equipment and reagents for life sciences including equipment and media for bacterial and cell culture, disinfectants and antibiotics, colony counters, sterilizers, analytical balances etc. Part of Baxter Healthcare Corp.

Bernard Wolnak & Associates

180 North Michigan Avenue, Suite 1016, Chicago, IL 60601. Tel: 312 782 4926

Management consultancy firm specializing in the economics and technology of fermentation and biotechnology products, eg antibiotics, enzymes, vitamins, acids, polysaccharides and proteins, based on rDNA technology.

Biohytech International Inc

10 West 35th St, IIT Research Institute, Chicago, IL 60616.

Tel: 312 225 6477 Telex: 272477 biohy ur

Carrying out research on cancer diagnostics based on monoclonal antibodies. Developing latex and enzyme immunoassay tests for infectious and autoimmune diseases.

BioLabs Inc

15 Sheffield Court, Lincolnshire, IL 60015. Tel: 312 945 2767

Offer consulting services in biotechnology.

BW Biotec Inc

3570 North Avondale Ave, Chicago, IL 60618. Tel: 312 588 5600/800 992 0704

Research and development company offering contract services to the genetic engineering, pharmaceutical, chemical, food and life sciences industries through a fully equipped lab scale and pilot plant facility. Services are organized in four technical groups; mammalian cell culture, microbial process development, separations technology process design and economics. Experience includes media development for special applications and the adaptation of anchorage-dependent cells for growth in suspension culture as well as production of therapeutics and monoclonal antibodies.

Carbohydrates International Inc

150 N Michigan Ave, Suite 1225, Chicago, IL 60601. Tel: 312 781 6210

Developing diagnostic and therapeutic products, including monoclonal antibodies based on biologically active carbohydrates and glycoproteins. Market a test for E coli identification. Carrying out research on applications in blood grouping, monoclonal antibody-based diagnostics for cancer, bacterial diagnostics and pesticides. Subsidiary of Medicarb, Sweden.

Chicago University

Pritzker School of Medicine Department of Biochemistry 5801 South Ellis Avenue, Chicago, IL 60637. Studying expression of insulin genes in neoplasia.

Coal Biotech Corp

800 S Milwaukee, Suite 170, Libertyville, IL 60048. Tel: 312 362 5620

Employing microorganisms to desulphurize coal.

Cole Parmer Instrument Company

Fax: 312 647

Manufacture a range of multichannel peristaltic pumps with precise digital control which allows repeatable flow at rates as low as 0.001 ml per minute, with 4, 8, 12 or 16 channels. Other products include affinity chromatography supports, columns and accessories for gas chromatography and HPLC, automated sampler preparation systems, densitometers and electrophoresis equipment and gels.

UNITED STATES OF AMERICA Illinois - IL Part III

Continental Grain Co

10 South Riverside Plaza, Chicago, IL 60606. *Tel*: (312) 930 1050

Shareholder in Calgene Inc, US which is investigating applications of molecular biology techniques to agriculture.

Culligan International Corporation

1 Culligan Pkwy, Northbrook, IL 60062. Tel: (312) 498 2000 Fax: TWX: 800 451 3260

Manufacture membrane filters and ultrafiltration equipment as well as systems for deionized water.

Davy Mckee Corp

(see individual State entries).

International engineering and construction company serving the process industries with extensive specialist experience in food, biotechnology and pharmaceutical projects. A full range of services includes feasibility studies, process development and project execution and validation up to the turnkey level. R&D and pilot plant facilities are available for commercial development work.

Dekalb-Pfizer Genetics

3100 Sycamore Road, Dekalb, IL 60115. Tel: 815 756 3671/7333 Telex: 210097 kal ur

International researcher, producer and marketer of corn, soybeans, alfalfa, Sudax and forage sorghum. The company is involved in developing new technology to improve the efficiency of field breeding efforts and eventually to make genetic improvements which are not possible with traditional methods including hybrid seeds.

The Dial Corp

Glycerine Department

2000 Aucutt Road, Mongomery, IL 60538. Tel: (312) 892 4381 Telex: 720497

Produces glycerol and fatty acids. Subsidiary of The Greyhound Co, US.

Diosynth Inc

3432 West Henderson Street, Chicago, IL 60618. Tel: (312) 583 3134/800 621 1509 Telex: 255209

Supplies bulk pharmaceutical raw materials including peptides and steroids such as testosterone, pancreatin, insulin, gonadotrophin and hydrocortisone.

Farmers Manufacturing Co Inc

Rural Rte 1, Dorsey, IL 62120. Tel: 618 377 6237

Produce bacterial soil inoculants.

Fertility and Genetics Research Inc

135 La Salle Street, Suite 616, Chicago, IL 60603. Tel: (312) 236 5492

Developing techniques of non-surgical human ovum transfer.

Finnsugar Bioproducts Inc

Markets industrial and medical diagnostic enzymes, including immobilized glucose isomerase, catalase and glucose oxidase. Manufactures heat-stable alpha amylose and glucoamylose. Offers technical services in product application and process improvement. Subsidiary of Cultor Ltd, Finland (formerly the Finnish Sugar Co).

G D Searle & Co

4711 Golf Rd, Skokie, 1L 60076. Tel: 312 982 7000

Products under development include aspartame, tissue plasminogen activator, atrial peptides and interferon-beta.

Gaertner Scientific Corp

1201 Wrightwood Ave, Chicago, IL 60614. Tel: (312) 281 5335 Telex: 206136 Manufactures light microscopes.

Gas Research Institute

8600 West Bryn Mawr Avenue, Chicago, IL 60631. Tel: 312 399 8229

Funds and manages programmes on: anaerobic digestion of biomass and waste materials to form high BTU biogas; bioremediation of contaminated soils; above-ground and in-situ water treatment processes; biocorrosion and hydrogen sulphide production in gas production, transportation and storage systems; biological production of chemicals from methane; probe/sensor development for laboratory and field applications.

Griffith Laboratories Inc

1 Griffith Center, Alsip, IL 60658. Tel: (312) 371 0900 Telex: 254413

Produces seasonings and ingredients for the food industry.

Henkel Corp

5325 South 9th Ave, La Grange, IL 60525.

Tel: (312) 579 6150 Telex: 4330913 hnkc ui

Produces natural vitamin E, tocopherol, antioxidants and soya sterols.

ICN Biomedicals Inc

ImmunoBiologicals Division

Supplies enzymes and reagents for molecular biology and diagnostic use including immunohistochemical staining kits, chlamydia kits for research use, protein A produced by recombinant DNA technology, lectins and monoclonal antibodies etc, as well as enzymes including collagenase for use in analysis and research.

IIT Research Institute

10 West 35th St, Chicago, IL 60616-3799. Tel: 312 567 4850 Telex: 282472

Carrying out research in areas of host resistance, immunomodulation, carcinogenesis, AIDS, immunotoxicology and inhalation toxicology as well as working in areas of regulatory and experimental toxicology.

Illinois Water Treatment Co

4669 Shepherd Trail, Rockford, IL 61105.

Tel: 815 877 3041 Telex: 257441/910 631 3438 Fax: 815 877

Supplies equipment for reverse osmosis, ultrafiltration and deionized water systems.

Illinois, University of

Department of Dairy Science and Microbiology

Urbana, IL 61801. Tel: (217) 333 2090

Studying microbiology of anaerobic degradation of organic matter. Isolating and documenting new species of bacteria which use volatile fatty acids and/or generate methane.

Institute of Gas Technology

3424 South State Street, Chicago, IL 60616.

Tel: 312 567 3650 Telex: 256189 Fax: 312 567 5203

Applies biotechnology research to the needs of the energy industries. Conducts laboratory research on such environmental issues as the removal of organic sulphur from coal and oil shales, degradation of heavy organic chemicals in soil and the decontamination of soil and ground water. Energy utilization research focuses on the production of chemicals and liquid fuels. Also conducts pilot-plant studies on production of gaseous fuels from biomass and wastes via anaerobic digestion and other processes. Organizes annual conferences on energy from biomass and wastes and on gas, oil and coal biotechnology.

Ion Exchange Products Inc

4500 N Clark St, Chicago, IL 60640. Tel: 312 784 4100 Telex: 270477

Manufacture equipment for production of pure water, including ultra-violet systems with built in water quality monitoring.

Iso-Data Inc

1500 Hicks Road, Rolling Meadows, IL 60008. Tel: (312) 259 8999 Telex: 206689 mgdx palt

Manufactures radioisotope counters and immunoassay data production software.

Part III Illinois - IL UNITED STATES OF AMERICA

Lab-Line Instruments Inc

15th & Bloomingdale Avenues, Melrose Park, IL 60160. Tel: 312 450 2600/800 323 0257 Telex: 687102 Fax: 312 450 0943

Manufactures instruments and equipment for culture of tissues and cells, including biological shakers, microprocessor controlled carbon dioxide incubators and environmental chambers and rooms.

Mazer Chemicals Inc.

3938 Porett Drive, Gurnee, IL 60031. Tel: (312) 244 3410 Telex: 253310

Produces antifoams, emulsifiers and surfactants for food, pharmaceutical and cosmetic use.

Miles Inc

Diagnostics Division

195 West Birch St, Kankakee, IL 60901.

Telex: 215094

Fax: 815 937 8285

Manufactures and distributes blood proteins and growth enhancement media supplements including aqueous lipoproptein cholesterol, transferrins, albumins and globulins.

Monterey Landfill Gas Corp

c/o Palmer Capital Corp, 6300 Sears Tower, Chicago, IL 60606.

Developing landfill gas extraction systems with gas used for electricity generation using internal combustion engines.

The Nutrasweet Co

Box 730 - 1751 Lake Cook Rd, Deerfield, IL 60015. Tel: 312 940 9800/800 323 5321 Telex: 240330 nutra ur Fax: 312 405 7812

R&D Division, 601 E Kensington, Mt Prospect IL 60056. Tel:312 577 0770

Manufactures aspartame, a high intensity sweetener sold under the brand name 'NutraSweet'. A subsidiary of Monsanto, US.

Packard Instrument Co

2200 Warrenville Road, Downers Grove, IL 60515. Tel: (312) 969 6000 Telex: 270061

Manufactures liquid scintillation counting equipment, gamma-counters, gas chromatography (GC), including GC/mass spectroscopy systems and microprocessor-controlled systems. Supplies chemicals for scintillation counting as well as instruments and accessories for liquid chromatography.

Pambec Laboratories

36533 N Streamwood Drive, Gurnee, IL 60031. Tel: 414 963 8594

Carry out custom and contract work in genetically engineered prokaryotes and eukaryotes, DNA probes, polypeptides, polynucleotides, conjugate synthesis and consulting.

Parr Instrument Co

211 53rd Street, Moline, IL 61265. Fax: TWX: 910 225 1753 Tel: (309) 762 7716

Manufacture cell disintegrators.

Petrogen Inc

2452 East Oakton, Arlington Heights, IL 60005. Tel: 312 952 1309

Developing biosurfactants.

Pfanstiehl Laboratories Inc

1219 Glen Rock Avenue, PO Box 439, Waukegan, IL 60085-0439. Tel: 708 623 0370 Telex: 253672 pfanlab Fax: 708 623 9173

Produces rare and simple sugars, polysaccharides, deoxysugars, sugar alcohols, glycosides and blocked sugars, diagnostic chemicals, pharmaceutical intermediates and research biochemicals.

Pierce Chemical Co

PO Box 117, Rockford, IL 61105.

Tel: 815 968 0747/800 8 PIERCE Telex: 910 631 3419

Produces a wide range of resins, buffers and standards for amino acid analysis, protein sequence analysis, peptide synthesis and chemical modification of proteins, as well as products for affinity chromatography and electrophoresis. Also supplies media, standards, derivatization reagents, accessories, glass vials and closures etc, for thin layer, high performance liquid and gas chromatography.

Pioneer Hi-Bred International Inc

700 Capital Sq 400 Locust, Des Moines, IL 50309.

Tel: 515 270 3311

Microbial Genetics Division: 6800 Pioneer Parkway, PO Box 258,

Johnston, IA 50131. Tel: 515 270 3692 Fax: 515 270 3156

Major producer and marketer of hybrid corn. Developing corn with herbicide resistance as well as improved seed including corn and sunflower. Also has microbial genetics division which produces microbial cultures with agricultural applications including silage, Rhizobium and ruminant inoculants.

Polyfoam Packers Corp

2320 S Foster, Wheeling, IL 60090. Tel: 312 398 0110

Manufacturer of stock insulated shipping containers and protective packaging, custom packages and temperature maintenance accessories.

PolyScience Corp

7800 Merrimac Ave, PO Box, 48312 Niles, IL 60648.

Tel: 312 965 0611/800 323 7569

Supply a wide range of analytical standards for use in chromatography, spectrometry and melting point determinations.

Precision Scientific Group

Markets a wide range of laboratory equipment including constant temperature incubators. Marketing a system of electric field fusion for use with biological cell systems applicable to the formation of giant cells, hybridization and encapsulation of materials in cells, or for processes such as monoclonal antibody production and gene transfer.

Prochrom

1160 Hornaday Rd, Brownsburg, IL 46112. Tel: 317 852 4654 Fax: 317 852 4655

Supplies production scale systems for liquid and gas chromatography and HPLC. Offers services in development, design and start up.

Regis Chemical Co

8210 N Austin Ave, Morton Grove, IL 60053.

Tel: 312 967 6000/800 323 8144 Telex: 910 223 0808 Fax: 312

967 5876

Manufacture chromatography columns, packing material and reagents for HPLC.

Research Products International Corp

410 N Business Center Drive, Mount Prospect, IL 60056. Tel: 312 635 7330 Telex: 282595

Supplies chemicals and vials for liquid scintillation counting.

RITA Corp

PO Box 556, Crystal Lake, IL 60014. Tel: 815 455 0530

Offers custom synthesis of rare chemicals.

Sargent Welch Scientific Co

7300 N Linder Ave, PO Box 1026, Skokie, IL 60076.

Tel: 312 677 0600 Telex: 724442/910 223 4541 Fax: 312 677

0624

Manufactures incubators, UV/visible spectrophotometers, reflectance spectrophotometers and general purpose laboratory centrifuges.

Sera Products Inc

21797 West Highway 176, Mundelein, IL 60060. Tel: (312) 566 5200

Produces diagnostic reagents including purified serum components. Offers custom service for production of conjugates, derivatives and radiolabelled compounds.

SLM Instruments Inc

810 W Antony Drive, Urbana, IL 61801.

Tel: 217 384 7730 Telex: 206079

Fax: 217 384 7744

Manufactures cell disintegrators, fluorometers and UV/visible spectrophotometers. Division of American Instrument Co, US.

UNITED STATES OF AMERICA Indiana - IN Part III

Standard Oil Co of Indiana

200 East Randolph Street, Chicago, IL 60601. Tel: 312 856 6111

Amoco Research Centre: PO Box 400, Naperville, IL 60566. Tel: 312 420 5111

At Amoco Research Centre undertaking studies on a wide range of biological subjects, including microbiology, enzymology, fermentation, immunochemistry, photosynthesis and genetic engineering. Has significant investment in Cetus Corp, US.

Strategic Technologies International Inc

1204 Allanson Rd, Mundelein, IL 60060.

Tel: 708 362 5620 Telex: 550182 strategic intl Fax: 708 362 5669

Management consulting firm providing professional services in market research and planning, strategic planning, technology and business opportunity assessments, product and process licensing, acquisition evaluations and liaison services to biotechnology companies worldwide in the following industries: pharmaceutical, chemicals, petrochemicals and polymers, speciality chemicals, pesticides, veterinary products, enzymes, laboratory and medical instruments, clinical diagnostics and food additives.

Technology Marketing Group

950 Lee Street, Des Plaines, IL 60016. Tel: (312) 297 1404

Consultants in areas of marketing research and development. Has carried out studies on interferon, recombinant DNA technology and biotechnology.

Unimetrics Corp

501 EArl Rd, Shorewood, IL 60436.

Telex: 206775 Tel: 815 741 1370 Fax: 815 741 8418

Supply laboratory equipment and instruments including tubing flangers.

United Agriseeds Inc

PO Box 4011, Champaign, IL 61820.

Tel: 217 373 5300 Telex: 358210 agriseeds cu

Keltgen Seed Co:, PO Box 143 Olivia, MN 56277.

Tel: 612 523 1331

Producing seedcorn, soy-beans and wheat using cell and tissue culture to develop new strains. Subsidiary of Dow Chemical, US.

United Dairy Industry Association

Dairy Center 6300 N River Rd, Rosemont, IL 60018.

Tel: 312 696 1860

Developing milk based carbonated beverages.

United States Department of Agriculture Northern Regional **Research Center**

NRRL/ARS Culture Collection

1815 North University Street, Peoria, IL 61604.

Tel: (309) 685 4011

Culture collection and patent depository for strains of agriculturally and industrially important bacteria, yeasts, moulds and actinomycetes (except for certain pathogens and moulds which cannot be preserved by lyophilisation).

United States Department of Agriculture

Northern Regional Research Center

1815 North University Street, Peoria, IL 61604. Tel: (309) 685 4011

Investigating use of lignin-degrading white-rot fungus (Pleurotus ostreatus) to improve accessibility of cellulose in production of glucose syrups from wheat straw.

UOP Inc

10 UOP Plaza, Des Plaines, IL 60016.

Tel: (312) 391 2000

Develops and licenses processes related to petroleum refinery including fermentation and enzyme applications. Has a research programme in recombinant DNA technology related to production of food and chemical products.

UTI Tect Inc

2233-F Northwestern Ave, Waukegan, IL 60087. Tel: (312) 249 1212

Produces equipment for immunoelectrophoresis and immunodiffusion analysis as well as UV/visible spectrophotometers.

Vitamins Inc

200 East Randolph Drive, Chicago, IL 60601. Tel: (312) 861 0700 Telex: 254717

Manufactures vitamins and protein concentrates for pharamaceutical, food and animal feed applications. Operates solvent and supercritical fluid extraction facilities

Wright Chemical Corp

4328 N United Parkway, Schiller Park, IL 60176. Tel: (312) 678 4806 Telex: 206682

Supply reverse osmosis and ultrafiltration equipment for downstream processing of fermentation liquors by membranes. Products range from laboratory units to industrial plants.

Indiana - IN

Agdia Inc

30380 County Road 6, Elkhart, IN 46514.

Tel: 219 264 2014 Telex: 910 2502141 agdia mnuq Fax: 219 264

Produce diagnostic kits for detection of pathogens in agricultural and ornamental plants.

American Monitor Corp

PO Box 68505, Indianapolis, IN 46268.

Tel: (800) 428 1437

Supplies instruments and reagents for diagnostic laboratories.

Bangs Laboratories Inc

6 Sue Springs Court, Carmel, IN 46032. Tel: 317 844 7176 Telex: 910 250 9 Telex: 910 250 9653 Fax: 317 575 8801

Manufacture latex particles for diagnostic tests.

Bio-Trol Inc

PO Box 29176, Indianapolis, IN 46229.

Tel: 317 894 7536 . Telex: 6713997

Supplies serums.

Bioanalytical Systems Inc

2701 Kent Ave, Purdue Industrial Research Park, West Lafayette, IN

Tel: 317 463 4527

Telex: 276141

Fax: 317 497 1102

Supply accessories for analytical chromatography including system for detection of trace metabolites and peptides and amino acids below picomole concentration levels. Researching assay systems based on mammalian cell culture products.

Bioproducts for Science Inc

PO Box 29176, Indianapolis, IN 46229.

Tel: 317 894 7536 Telex: 6713997 Fax: 317 894 4473

Produce growth factors for use in cell culture as well as monoclonal and polyclonal antibodies, including those reactive against cell surface markers and receptors, complement components, cytoskeletal proteins, enzymes, human blood group antigens, immunoglobulins, infectious agents, histocompatability complex antigens, muscle proteins, serum proteins, steroids, tumour antigens etc. Distribute products of Serotec Ltd, UK.

Boehringer Mannheim Biochemicals

9115 Hague Rd, PO Box 50414, Indianapolis, IN 46250. Tel: 317 849 9350/576 7431/800 428 5433 Telex: 6 Telex: 6711626 Fax:

Supplies fine chemicals and reagents for research and analysis including a range of biologically active peptides, serum-free media supplements, antiserums, purified attachment, growth and transport factors, digoxin, restriction enzymes, DNA cloning kits, interleukin-2, nick translation kit, dissociating and harvesting enzymes for animal cell tissue culture and animal and plant diagnostics. Also produce affinity purified and monoclonal antibodies for sale in US only. Subsidiary of Boehringer Mannheim GmbH, Germany.

Bristol-Myers Co

US Pharmaceutical and Nutritional Group (USPNG)

2400 Pennsylvania Street, Evansville, IN 47721.

Tel: 812 429 5000

Manufacturer of pharmaceutical and nutritional products.

Part III Iowa - IA UNITED STATES OF AMERICA

Consolidated Biotechnology Inc

1413 W Indiana Ave, PO Box 2086, Elkhart, IN 46515.

Research and development company with interests in the utilisation of biomass and starch for food products and ascorbic acid production.

Eli Lilly & Co

307 East McCarty Street, Indianapolis, IN 46285. Tel: 317 261 2000/800 227 7853

Major pharmaceutical company producing cephalosporins, hygromycin, penicillins and tetracyclines, as well as plant growth substance (gibberellins) by fermentation using strains improved by mutation and selection. Interested in further improvements involving recombinant DNA technology as well as in production of human insulin in conjunction with Genentech Inc, US and its subsidiary Dista Products Ltd. Also has long term agreement with the International Plant Research Institute, US. Products under development include, human growth factor, pro-insulin, vaccines, diagnostics and antibiotics. Have joint venture agreements with Genentech, Collagen Corp, California Biotechnology, Bio-Response, Damon Biotech, Hybritech and Synergen, all US.

Eli Lilly & Co

Elanco Division

Lilly Corporate Center, Indianapolis, IN 46285. Tel: 800 227 7853 Telex: 276051 Fax: Fax: 317 276 6876

Manufacture insulin products.

Endress & Hauser Inc

2350 Endress Place, Greenwood, IN 46143. Tel: 317 535 7138/800 428 4344 Telex: 272195 Fax: 317 535

Supply moisture analyzers, flow meters and level controllers.

Glas-Col Apparatus Co

711 Hulman St, PO Box 2128, Terre Haute, IN 47802-2128. Tel: 812 235 6167 Fax: 812 234 6975

Manufactures laboratory shakers, stirrers, mixers, temperature controllers and pumps

IMCERA Bioproducts Inc

PO Box 207, Terre Haute, IN 47808. Tel. 812 232 0121/800 345 3843 Telex: 810 356 2125 1810 Frontage Rd, Northbrook, IL 60062.

Tel: 800 345 3843

Produce and market recombinant serum growth factors and related products for the animal and human health pharmaceutical industries. Market IGF-I (somatomedin-C) for use in cell culture as a means of reducing or eliminating serum requirements, manufactured using a genetically engineered E coli K-12. Developing adhesion peptides. A wholly owned subsidiary of International Minerals and Chemical Corporation, US previously known as the Imcell Products Division of IMC.

Indiana Biolab

RR 2 Box 407, Palmyra, IN 47164-9427. Tel: 812 364 6739

Produces virus-free plants for agriculture using tissue culture techniques and microbial cultures for reference and research.

Miles Laboratories Inc

1127 Myrtle Street, Elkart, IN 46514. Tel: 219 264 8111 Telex: 258450

Manufactures and distributes biochemicals for research, clinical and industrial use. Products include enzymes for immunoassays, peroxidase, alkaline phosphatase and conjugates with a variety of antigens from human and other animal sources, industrial enzymes (amylases, pectinases, proteases, glucose isomerase, glucose oxidase), research and analytical enzymes, starter cultures for the dairy industry, coagulants, organic acids prepared by fermentation (citric acid and sodium citrate) and monoclonal antibodies. Has extensive research programme in fermentation rDNA technology and other molecular biology techniques. Division of Bayer, US.

Phyto Dynamics Inc

624 South 775 East PO Box 5418, Lafayette, IN 47903. Tel: 317 296 3497 Telex: 298526

Supplies unique field crop inbreds and hybrids to the seed industry. Does contract research with all types of corn as well as with other plant species.

Pitman-Moore Inc

Research & Development

1331 South First St, Terre Haute, IN 47802. Tel: 812 232 0121

Corporate Headquarters: 2315 Sanders Rd, Northbrook, IL 60062.

Manufactures fermentation products, fertilizers, animal feed ingredients, additives including bacitracin, supplements and antibiotics as well as veterinary products based on genetic engineering, and other related research techniques, for all aspects of reduction of subclinical infections and promotion of growth in food-producing animals including biopolymers, growth hormones, non-hormonal steroidal anabolic compounds and controlled release implant carriers.

Purdue University

Laboratory of Renewable Resources Engineering

West Lafayette, IN 47907. Tel: (317) 749 2591

Studying production of ethanol 1,2,3-butanediol and other chemicals by fermentation of chemical and enzyme hydrolysis of cellulose and woody materials. Also carrying out investigations on methods of downstream processing including separation of alcohols using absorbents.

Seradyn Inc

PO Box 1210, Indianapolis, IN 46206. Tel: 317 266 2000 Telex: 810 260 1940

Manufacture latex particles for agglutination or immunoassay tests.

Seragen Diagnostics

PO Box 1210, Indianapolis, IN 46206. Tel: 317 266 2955 Telex: 810 260 1940

Manufactures diagnostics including immunological systems. Subsidiary of Seragen Inc, US.

SynChrom Inc

802 Columbia St, PO Box 310, Lafayette, IN 47902-0310.

Tel: 317 423 4694 Telex: 757756

Manufactures chromatography column packings and columns for preparative and HPLC.

US Development Corp

One Airport Road, West Lafayette, IN 47906. Tel: 317 494 6456 Fax: 317 494 7953

Commercializing technology, developed in the Department of Food Science at Purdue University, using heat and sonic waves to produce low temperature dried natural product powders including fruit juices, tomato, milk, sauces and flavours as well as high fructose corn syrup and pharmaceuticals.

Iowa - IA

Ambico Inc

PO Box 522, Route 2, Dallas Center, IA 50063. Tel: 515 992 3747 Telex: 3791826

Produces a range of vaccines, some of them unique, for the control of transmissible diseases of pigs in particular. Conducts contract research in the development of methods of biological control of disease in animals for pharmaceutical companies. Areas of research include virology, tissue culture, bacteriology, immunology, parasitology and haematology. Carries out preclinical and clinical evaluation of pharmaceuticals and vaccines on animals.

Barnstead/Thermolyne

Sybron Corp

PO Box 797, 2555 Kerper Blvd, Dubuque, IA 52001. Tel: 319 556 2241/800 553 0039 Telex: 284767 Fax: 319 556

Supplies equipment including for purification of water by distillation, reverse osmosis, ultra-violet irradiation and filtration for both industrial and laboratory applications as well as a range of general laboratory equipment. Division of Sybron Corp, US.

UNITED STATES OF AMERICA Kentucky - KY Part III

Diamond Scientific

2538 Southeast 43rd Street, Des Moines, IA 50303. Tel: (515) 262 9341

Produces immunobiologicals and pharmaceuticals for veterinary use. Involved in research and development for both human and animal health. Primary involvement in immunomodulating adjuvants and advanced virus inactivation technology. Subsidiary of Agrion Corp, US.

Diamond V Mills Inc

PO Box 4408, Cedar Rapids, IA 52407. Tel: 319 366 0745

Produces yeast cultures.

Fermented Products Inc

PO Box 1483, Mason City, IA 50401. Tel: 515 423 1460

Manufacture lactic fermentation products.

Iowa State University

Department of Energy

Ames Laboratory, Ames, IA 50011.

Tel: 515 294 3483

Developing separation methods based on use of sorbents, such as hydrophobic molecular sieves, for separation of alcohols from fermentation

Iowa, University of

Biocatalysts Research Group

318 Pharmacy Building, Iowa City, IA 52242. Tel: 319 335 8842

Carrying out research in biocatalysts with agricultural applications. Interests include chemistry, materials engineering, microbiology, botany, natural product chemistry and medicine. Applications include development of bioseparation methods, enzyme based probes for analytical applications, new fermentations, biological pesticides, enzyme production and sugar esters as well as aspects of the degradation of chemical pesticides and

Salzman Corporation

herbicides

308 East River Drive, Davenport, IA 52801.

Tel: 319 324 1028 Telex: 6711608 salz uw

Fax: 319 324 6221

Supplies highly purified blood serums for use in cell culture, growth media and diagnostic assays, including foetal bovine serum, for pharmaceutical, vaccine and research use. Also supplies animal cells and tissues and culture

Soil Technologies Corp

51 West Adams St, Fairfield, IA 52556.

Tal: 515 472 3963 Fax: 515 472 4477

Produce a microalgae-based soil conditioner. Developing microalgal cultures for land reclamation.

Thermolyne Corp

2555 Kerper Blvd, PO Box 797, Dubuque, IA 52001.

Tel: (319) 556 2241 Telex: 468545

Manufactures incubators, hot plates, water baths and other temperature regulation equipment. Subsidiary of Sybron Corp, US.

Kansas - KS

Biotechnica Agriculture Inc

7300 W 110th St, Suite 540, Overland Park, KS 66210. Tel: 913 661 0611 Fax: 913 661 9273

Carrying out research in plant genetics to introduce disease and pest resistance in major food and feed crops including corn, wheat, soybean and grass as well as to improve the quality and yield. Developing microbial agricultural products including improved nitrogen fixation.

Clinical Biotechnologies

11842 W 85th St, Lenexa, KS 66214. Tel: 913 492 3652

Offers services in development and production of in vitro assays based on EIA. Products developed include clinical assays for food allergies. Carrying out research on immunomodulators, interleukins and lymphokines.

Grinsted Products Inc

PO Box 26, Industrial Airport, KS 66031.

Tel: 913 764 8100 Telex: 437295 grindsinc olat

Supplies food additives and industrial enzymes (see Grinsted Products AS, Denmark).

Hazleton Biologics Inc

13804 W 107th St, PO Box 14848, Lenexa, KS 62215. Tel: 913 469 5580 Telex: 437055 Fax: 913 469 5584

Supply culture media and supports for cell and tissue culture.

HRA Inc

4510 W 89th, Prairie Village, KS 66207.

Fax: 913 341 3625 Tel: 913 341 1155 Telex: 42335 hesintl

Biotechnology consultants offering market research and analysis.

Kansas State University

Department of Chemical Engineering

Manhattan, KS 66506.

Tel: (912) 532 5585

Developing methods for extraction of ethanol from fermentation beers using liquid/liquid extraction with petroleum (gasoline) in a countercurrent system.

KC Biologicals Inc

PO Box 14848, Lenexa, KS 66215. Tel: (913) 888 5020/800 255 6032 Telex: 437055

Manufactures serum and other media for cell culture in research and production of vaccines.

Monoclonal Production International

Twentieth and Sydney Streets, Fort Scott, KS 66701.

Tel: 316 223 4230

Produce monoclonal antibodies formed in the uterus of sheep or cows.

Remel

12076 Santa Fe Drive, Lenexa, KS 66215.

Tel: 913 888 0939/800 255 6730

Manufactures prepared media for bacteriological cultures and animal blood products etc, as well as microbiological stains and reagents.

Syngene Products

15 & Oak, PO Box 338, Elwood, KS 66024.

Tel: 800 255 6829

Developing veterinary and human health care products.

Tech America

PO Box 338, Elwood, KS 66024.

Tel: (913) 365 9076

Manufactures veterinary products. Has research and development agreement with Cetus Corp, US covering development of animal health products including antigens for use as vaccines in cattle. Manufacture monoclonal antibody based in vitro diagnostics against animal virus diseases, leukemias and anaemias.

Kentucky - KY

Alltech Inc

3031 Catnip Hill Pike, Nicholasville, KY 40356.

Telex: 31276

Specializes in supplying enzymes, fermentation equipment, plant design etc, for the production of alcohol as fuel from corn in particular as well as silage inoculants, cultured yeast, mould depressant and probiotics. Organizes seminars on power alcohol and related technology. Carrying out research on animal feeds, flavours and enzymes.

Aquionics Inc

Kenton Lands Rd, Box 18395, Erlanger, KY 41018.

Manufactures advanced industrial water treatment systems capable of disinfecting up to 50 million gallons per day of raw or partially treated process water or final waste water treatment effluent using ultraviolet radiation.

Part III Maine - ME UNITED STATES OF AMERICA

Kentucky, University of

Department of Biochemistry

Medical Center, Lexington, KY 40506.

Studying structural analysis of the arginine gene and its regulation using wild-type and synthetically altered cells. Investigating DNA transcription and provirus in mouse leukaemia and restriction analysis of cRNA tumour virions. Also studying sites of nucleotide metabolism, drug-DNA interactions and DNA turnover.

Peptides International Inc

10101 Linn Station Road, Suite 445, Louisville, KY 40223. Tel: 502 425 8765 Telex: 797493 Fax: 502 425 8771

Supplies a full line of peptide related products such as amino acids, enzyme inhibitors and substrates, biologically active peptides and peptide synthesis accessories.

Louisiana - LA

Clyde Engineering Service

3601 Texas Drive, Apt 720, New Orleans, LA 701174.

Developing methods for production of ethanol by fermentation using Zymomonas mobilis immobilized on fibres. Offer engineering services.

Gelco Diagnostics

Produce diagnostic tests and antiserums. Carrying out research on monoclonal antibodies.

Imreg Inc

144 Elk Place, Suite 1400, New Orleans, LA 70112. Tel: 504 523 2875

Research and development company working on immunological products including immunoregulators with clinical applications in cancer, AIDS and arthritis treatments.

Louisiana Biologicals Inc

PO Box 1417, Opelousas, LA 70570. Tel: (318) 948 3044

Manufactures human blood plasma products.

Louisiana State University

Department of Microbiology

Baton Rouge, LA 70803.

Tel: (504) 388 2211

Studying methods of immobilization of yeast cells using agar beads for alcohol production in a plug-flow reactor.

Louisiana State University

Department of Chemical Engineering

Baton Rouge, LA 70803.

Tel: (504) 388 1426

Investigating anaerobic digestion as a means of treating potato-canning wastes.

Microbe Masters

11814 Coursey Blvd, Suite 285, Baton Rouge, LA 70816. Tel: 504 665 1903

Developing industrial wastewater treatment using stress acclimatized bacterial products.

Tulane University

Department of Microbiology

1430 Tulane Avenue, New Orleans, LA 70146. Tel: (504) 588 5150

General Information, Tel: (504) 865 4000.

Undertaking studies on virally induced mammary tumours in mice and primates and organization of proviral DNA. Isolating DNA-binding proteins.

Maine - ME

Agritech Systems Inc

100 Fore St, Portland, ME 04101.

Tel: 207 774 4334 Telex: 910 380 7069

Developing immunoassays and medical and veterinary diagnostic tests for the detection of contaminants in animal feed and foods.

Atlantic Antibodies

Manufactures blood-grouping serum of nephelometric quality, human serum standards, immunoglobulin fractions, antiserums, affinity-purified antibodies, Staphylococcus cells, antiserums to various antibiotics and drugs, monoclonal antibodies and diagnostic test kits. Offers custom immunization service. Carrying out research on novel monoclonal antibody purification systems. Company is associated with Foundation for Blood Research, Scarborough and the Centre for Blood Research, Boston, US. Subsidiary of Incstar, US.

Baker Co Inc

Sanford Airport, Department B, Drawer E, Sanford, ME 04073. Tel: 207 324 8773

Manufactures and supplies a wide range of biological safety cabinets as well as fume hoods.

Binax Inc

95 Darling Ave, South Portland, ME 04106. Tel: 207 772 3544/800 323 3199

Developing monoclonal antibodies, diagnostic test kits and veterinary diagnostics. Merger between Bioclinical Systems and Diagnostic Design,

BioDesign Inc

432 Beachwood Ave, Kennebunkport, ME 04046.

Tel: 207 967 4173 Fax: 207 967 4014

199 South Los Robles Ave, Suite 270, Pasadena, CA 91101.

Tel: 818 793 0151 Fax: 818 793 8098

Develop immunological reagents including antiserums. Products include antigens and monoclonal and polyclonal antibodies. Produce molecular modelling software for protein design.

Delta Biochem

Kidder Point Rd, PO Box 414, Searsport, ME 04974. Tel: (207) 548 2525

Produce chemicals, including ammonium sulphate, for culture media and isolation media of biological materials.

FMC Corp

Marine Colloids Division, Bioproducts Department

5 Maple St, Rockland, ME 04841.

Supplies equipment, chemicals and accessories for gel electrophoresis and other applications of gels including agarose for electrophoresis and electrofocusing. Also have developed a non-radioactive DNA labelling and detection kit.

ImmuCell Corp

966 Riverside St, Portland, ME 04103.

Tel: 207 878 2770 Fax: 207 878 2117

Carry out research, development, manufacturing and marketing of animal diagnostics and therapeutics and human diagnostics; research contract in collaboration with Bristol-Myers.

ImmunoSystems Inc

8 Lincoln St, PO Box AY, Biddeford, ME 04005.

Tel: 207 282 4158/4146

Developing enzyme immunoassays including pesticide and herbicide detection kits.

Ventrex Laboratories Inc

217 Read Street, Portland, ME 04104.

Markets biologicals, diagnostics, clinical tests and pharmaceuticals, as well as equipment including bioreactors for the culture of cells. Other products include immunoregulatory compounds for research use, allergy diagnostics, serum-free media and gelatin microcarriers.

UNITED STATES OF AMERICA Maryland - MD Part III

Maryland - MD

Acumedia Manufacturers Inc

3651 Clipper Mill Road, Baltimore, MD 21211.
Tel: 301 467 3200 Telex: 904059 wsh Fax: 202 861 0621

Supplies dry products for cell culture and diagnostics including peptones and other materials for bacterial culture media as well as anaerobic culture systems and antibiotic sensitivity test systems.

Advanced Biotechnologies Inc

9108 Guilford Rd, Columbia, MD 21046.

Tel: 301 792 9779/800 426 0764 Fax: 301 497 9773

Produces: purified viruses, viral proteins, viral and cellular nucleic acids, selected cell components purified for research purposes, in particular AIDS-related research; mass cell culture (BSL-3 laboratory facilities; virusand human retrovirus research reagents. Complete molecular biology services include: plasmid DNA purification, insert isolation, transformation, labelling and sequencing. Products for cell, tissue and bacteriological culture include: media, human and animal serums, buffered and balanced salt solutions, growth and attachment factors (human IL-2) and antibiotics/antimycotics for cell culture. Carrying out contract R&D and provide other custom biological services.

American Biotechnology Co

7658 Standish Pl, Suite 107, Rockville, MD 20855. Tel: 301 294 9553

Develop and market medical products including growth factors and immunomodulators.

American HistoLabs Inc

7605F Air Park Rd, Gaithersburg, MD 20879. Tel: 301 330 1200

Offer contract services in histology.

American Type Culture Collection

12301 Parklawn Drive, Rockville, MD 20852-1776.

Tel: 301 881 2600/800 638 6597 Telex: 908768 atcc rove Fax 301 231 5826

One of the most diverse culture collections in the world with over 42,000 different strains of authentic cultures of bacteria, fungi, yeasts, algae, protozoa, viruses, cell lines, plant tissues, actinomycetes, recombinant DNA materials and antiserums, with departments of bacteriology, cell culture, molecular biology, mycology, protistology and virology. Has initiated a collection of hybridoma cell lines, under contract to National Institute of Allergy and Infectious Diseases. Official depository for strains involved in patentable processes recognized by the US, European Patent Office and other countries.

Andrulis Research Corp

7315 Wisconsin Ave, Suite 650N, Bethesda, MD 20814. Tel: 301 657 1700

Developing drug conjugates and targeted drug delivery systems.

Anmed Biosafe

7642 Standish Place, Rockville, MD 20855.

Tel: 301 762 0366

Offer contract services in cell line and monoclonal antibody product safety and evaluation testing.

Becton Dickinson & Co

Microbiology Systems Division

PO Box 243, 250 Schilling Circle, Cockeysville, MD 21030. Tel: 301 771 0100/800 638 8663 Telex: 87823 Fax: TWX:710 862 2636

Products include anaerobic culture equipment, bacteriological media and bacteriological detection, susceptibility and identification systems as well as antiserums. Also supply rapid diagnostic test kits for syphilis, rubella, cytomegalovirus, group A strep.RSV and meningitis testing.

Bell-More Labs

4030 Gill Avenue, Hampstead, MD 21074. Tel: 301 239 7554

Offers services in custom manufacture of pharmaceuticals particularly freeze-dried preparations.

Bio-Clinical Systems

9130 B Guilford Rd, Columbia, MD 21046. Tel: 301 498 9550

Manufacture plated culture media and diagnostic kits including a rapid test for urinary infections for surgery or clinical testing.

Bioclinical Systems Inc

9130 B Guilford Rd, Columbia, MD 21046. Tel: 301 498 9550

Carrying out research on bioluminescence and photometric instrumentation.

Biodynamics

2211 Lewis Avenue, Rockville, MD 20851.

Tel: 301 801 2450 Telex: 287296 trci Fax: 301 230 0813

Distributor for Janssen Biochimica, Belgium.

Biofluids Inc

1146 Taft Street, Rockville, MD 20850. Tel: 301 424 4140/800 972 5200

Manufactures sterile cell and tissue culture media, buffers for cell biology and molecular cloning as well as animal serums including foetal bovine serum.

Biomedical Research and Development Labs Inc

8561 Atlas Drive, Gaithersburg, MD 20877. Tel: 301 948 6506 Telex: 898083

Manufacture a multi-probe cell harvester for membranes, cells and tissues, a microharvester, plate washers, beta radiation shields, scintillation vials and components.

Bionetics Research Inc

1330-A Piccard Drive, Rockville, MD 20850-4373.

Tel: 301 258 5200/921 0422 Telex: 898369 Fax: 301 840 2161 5516 Nicholson Lane, Kensington, MD 20895.

Tel: 301 881 5600

Biomedical R&D organization focused on cause, detection and treatment of cancer and allied diseases, developing cancer diagnostics and therapeutics, and developing diagnostic assays for use in blood banks, clinical laboratories and the food industry. Offer contract research support, specializing in recombinant DNA technologies, hybridoma development, radiolabelling, assay development, cell culture production, virus testing and coronary disease studies.

Bioqual Inc

11 Taft Court, Rockville, MD 20850. Tel: 301 251 0633

Carrying out research on hybridomas and monoclonal antibodies.

BiospHerics Inc

12051 Indian Creek Court, Beltsville, MD 20705. Tel: 301 369 3900 Telex: 898072

Offers services in monitoring and toxicology testing, industrial hygiene, environmental microbiology and treatment of wastewaters using bacterial systems at pilot plant level. Licenses technology for removing phosphorus from industrial waste water. Developing Lev-O-Cal sweetener. Provides information services.

Biotech Research Laboratories Inc

1600 East Gude Drive, Rockville, MD 20850.

Tel: 301 251 0800 Telex: 4972498 btrl Fax: 301 762 1327

Carrying out contract research, for US government in particular, in chemical carcinogenesis, cytogenetics, immunology, tissue culture, virology, viral oncology and recombinant DNA technology. Specific projects include work on human T-cell growth factor, beta-endorphin, aflatoxin, cytomegalovirus and interleukin-2. Major producer of AIDS tests for use in NIH screening programmes. Other virodiagnostic test kits include hepatitis and herpes. Developing monoclonal antibodies, western blotting systems, probes and dip-stick tests as alternative methods of AIDS detection. Also manufactures and markets veterinary products such as IGG test kits and supplements.

Biotronex Laboratory Inc

4225 Howard Avenue, Kensington, MD 20895. Tel: 301 564 1200

Design and manufacture electromagnetic blood flowmeters.

Part III Maryland - MD UNITED STATES OF AMERICA

Biotronic Systems Corporation

15225 Shady Grove Road, Suite 306, Rockville, MD 20850. Fax: 301 258 1960 Tel: 301 921 0031

Carrying out research and development in genetic engineering. Interests include biosensors and hybridomas.

B/R Instrument Corp

PO Box 7, Pasadena, MD 21122.

Tel: 301 647 2894/800 922 9206 Telex: 3717918 Fax: 301 544 7644

Manufacture solvent recycling systems, distillation systems and liquid scintillation vial crushers.

Braton Biotech Inc

1 Taft Court, Rockville, MD 20850.

Tel: 301 762 5301

Developing immunodiagnostics, hybridoma technology, growth factors, AIDS tests, veterinary tests, computer imaging systems.

Cell Enterprises Inc

15719 Crabbs Branch Way, Derwood, MD 20855. Tel: 301 330 8162/800 423 8357

Manufactures and supplies serum-free and protein-free tissue culture media as well as supplements for the growth of cells under defined conditions. Has collaborated with Gibco/BRL for production of AIM V used in LAK therapy.

Cellmark Diagnostics

20271 Goldenrod Lane, Germantown, MD 20874.

Tel: 301 428 4980/800 USA LABS

Developing DNA probes for genetic testing and DNA fingerprinting for use in paternity testing and criminology. Subsidiary of ICI Americas Inc.

Cerex Corp

18709 Mooney Drive, Gaithersburg, MD 20879.

Tel: 301 330 1010

Offer engineering services in packaging design and production including computer software control.

Ceva Laboratories Inc

PO Box 6, Berlin, MD 21811.

Tel: 301 641 2060

Market veterinary products including vaccines against common poultry diseases, antibiotics, pesticides and reproduction controls as well as feed additives

ChemGen Corp

2501 Research Boulevard, Rockville, MD 20850. Tel: 301 948 8889 Fax: 301 948 5866

Offer research and development services in bioprocessing for the production of industrial and speciality chemicals.

Chesapeake Biological Laboratories

6000 Metro Drive, Suite 100, Baltimore, MD 21215.

Tel: 301 358 9600

Carrying out research, development and marketing of naturally occurring pharmaceuticals including products for wound care.

Chesapeake Genetics Inc

26 Talbot Landing, Easton, MD 21601.

Tel: 301 820 7600

Supply cattle embryos and semen.

Crop Genetics International Corp

7170 Standard Drive, Hanover, MD 21076.

Fax: 301 796 1104 Tel: 301 621 2900 Telex: 380988

Developing plant vaccine that will enable crops to produce their own pesticides. Also sell disease-free sugarcane. Projects include inserting Bt in endophytes living on target plants.

Custom Laboratories

930 West Baltimore St, Baltimore, MD 21223.

Tel: 301 539 8857

Manufacture glucose tolerance testing kits.

Design Engineering & Manufacturing Co Inc

4906 46th Ave, Hyattsville, MD 20781. Tel: 301 277 7676

Manufacture custom research equipment.

Diagnon Corp

15215 Shady Grove Road, Rockville, MD 20850. Tel: 301 258 8477 Fax: 301 258 8902

Life sciences contractor, primarily for the NIH. Research contracts relate tohepatitis, influenza, AIDS, cancer, immunological studies and transgenics.

Digene Diagnostics Inc

Bldg 334 University of Maryland, College Park, MD 20742. Tel: 301 454 7874

2301 B Broad Birch Drive, Silver Springs, MD 20910. Tel: 301 454 7874

Markets diagnostics based on a non-radioactive, enzyme, labelling system for DNA probe and viral detection kits. Research tests available for human papilloma virus, cytomegalovirus, herpes simplex virus etc.

Dynamac International Corp

11140 Rockville Pike, Rockville, MD 20852.

Tel: 301 468 2590 Telex: 248838 Fax: 301 468 2581

PO Box 13706, Research Triangle Park, NC 27709. Tel: 919 544 6428

Carry out contract research in relation to health and environmental safety including the application of diagnostic techniques to product and process

Electro-Nucleonics Inc

Diagnostics Division

7101 Riverwood Drive, Columbia, MD 21046.

Tel: 301 381 4800/800 346 4364 Telex: 908370

Produces immunodiagnostic kits against infectious diseases such as herpes, chlamydia, cytomegalovirus and respiratory viruses. Also produces antigens and supplies virus cultures.

Electro-Nucleonics Inc

Cell Science Institute

12050 Tech Road, Silver Spring, MD 20904-1912.

Tel: 301 622 4218/800 422 2236

Telex: 908332

Fax: 301 622

Provides biotechnology reagents, clinical instrumentation and services in the following areas: centrifugal separation of viruses; cell membranes and components; monoclonal antibody production; protein purification and electrophoresis. Produces human lymphoblast interferon and immunodiagnostics, including radioimmunoassay kits.

EpiGene Inc

PO Box 4817, Baltimore, MD 21211.

Tel: 301 235 2375

Products include an electro-transfer system of nucleic acid recovery and electrophoretic equipment.

Filterite

2033 Greenspring Drive, Timonium, MD 21093.

Manufactures cartridge filters and housings.

Genetic Therapy Inc

19 Firstfield Rd, Gaithersburg, MD 20878.

Tel: 301 590 2626

Develop techniques for animal and human gene therapy. Produce therapeutics, retroviral vectors and targeted delivery systems.

Genex Corp

16020 Industrial Drive, Gaithersburg, MD 20877.

Fax: 301 926 1221 Tel: 301 258 0552 Telex: 908775

Research and product development company working under contract on proprietary lines of speciality chemicals for use in agriculture, food processing and waste treatment. Areas of activity: development of adhesive biopolymers, genetically engineered vaccines and diagnostics, including recombinant antibody-binding Protein G, vitamin B12, enzymes, alkaline proteases used in liquid and powdered laundry detergents and drain cleaner. Interests include applications of single chain antibody technology and protein crystallography.

UNITED STATES OF AMERICA Maryland - MD Part III

Gentronix Inc

PO Box 34244, Bethesda, MD 20817. Telex: 510 100 4434 intermet Tel: 301 299 2037

Developing biochips and biomolecular electronics.

Harvey S Price

Biotechnology Advocate & Consultant 10001 Dellcastle Rd, Gaithersburg, MD 20879. Tel: 301 330 8859

Offers consultancy in legal aspects of biotechnical developments.

Hazleton Laboratories America Inc

1330B Piccard Drive, Rockville, MD 20850. Telex: 899436 Fax: 301 258 1047 Tel: 301 670 9600

Undertake contract product safety evaluation including in vivo and in vitro testing. Offer consultation services in new product registration.

Hem Research Inc

12280 Wilkins Ave, PO Box 2245, Rockville, MD 20852.

Tel: 301 770 5700

Developing cell culture, gene amplification and cloning technology.

Hosho-Somerset Corp

PO Box 759, Crisfield, MD 21817. Tel: 301 623 2277 Fax: 301 623 2277

Manufacture chitin and chitosan as well as fertilizer and feed from crabs.

IBF Biotechnics Inc

8510 Corridor Rd, Savage, MD 20763. Tel: 301 498 0511/800 752 5277 Telex: 229870 Fax: 301 490 4802

Manufactures and markets products for separation and cell culture Product range includes liquid chromatography systems, affinity ion exchangers, gel filtration and adsorption chromatography media, preparative and process HPLC systems. Also markets foetal calf serum substitute for cell culture.

Igen

1530 E Jefferson St, Rockville, MD 20852. Tel: 301 984 7964 Fax: 301 230 0158

Undertake contract research in the production of monoclonal antibodies for human pathogens.

Igene Biotechnology Inc

Fax: 301 730 0540

Collaboration with Molecules Naturelles, France, to develop and manufacture fermentation and other natural ingredients for food, feed, flavour and fragrance industries. Products include natural flavourings from fermentation of whey and beet sugar, polysaccharide gums from fermentation of sucrose, non-fat dry milk and egg white replacer as well as calcium and mineral food supplements derived from whey, natural protein food flavouring derived from crab meat, nematocides, chitin-based pesticides and products specifically for fish farming. Fermentation is carried out using genetically selected, non-pathogenic microorganisms and a proprietary process.

ImmuQuest Laboratories Inc

2 Taft Court, Suite 101, Rockville, MD 20850. Tel: 301 762 7193

Offer contract reseach and testing services in immunology, virology and cell biology including monoclonal antibody development. Projects include development of diagnostics for breast cancer.

Inovar Chemicals Inc

7831 Cessna Ave, Gaithersburg, MD 20879. Tel: 301 963 1890

Supply foetal bovine serum and growth supplements for cell culture media, thyroid hormones, custom organics and purified plant viruses.

Instrumed Inc

PO Box N, Union Bridge, MD 21791.

Manufactures multiple tip pipette systems suitable for use with pathogen organisms.

Integrated Diagnostics Inc

1901 Sulphur Spring Rd, Baltimore, MD 21227. Tel: 301 247 2570

Supply histocompatibility products, latex agglutination kits, HTLV-III antigen assay and clinical test kits.

Inter-American Research Associates Inc

18919 Premier Court, Gaithersburg, MD 20879. Tel: 301 926 0713 Telex: 4994466

Manufactures reagents for research and diagnostics including purified antigens, antiserums, monoclonal and polyclonal antibodies, blood products and latex reagents. Offers services in custom made diagnostic kits.

Johns Hopkins University

Applied Physics Laboratory

Johns Hopkins Road, Laurel, MD 20180. Tel: (202) 953 3720

Developing field-testing methods for assessing resource potential of landfill methane gas sites. Modelling gas generation and processing. Analyzing legal, environmental and socioeconomic effects of landfill gas recovery and

Kirkegaard & Perry Laboratories Inc

2 Cessna Court, Gaithersburg, MD 20879. Tel: 301 948 7755/800 638 3167 Tele Telex: 4997901 kplab Fax: 301 948 0169

Specializes in manufacturing and marketing research reagents for immunology, microbiology and biochemistry including affinity purified antibodies and substrates for ELISA and Western blots. Biotin-strept-avidin and chromogenic staining reagents are available for immunohistochemical procedures. Other products include poultry and related veterinary diagnostics. Also offered are hybridoma screening systems and custom antibody production and conjugation.

Life Technologies Inc

Bethesda Research Laboratories

PO Box 6009, 8717 Grovemont Circle, Gaithersburg, MD 20877. Tel: 301 840 8000/800 638 8992 Telex: 64210 brlgarguw Fax:

Develop and supply instruments, cell culture media, restriction enzymes and other reagents for genetic manipulation or molecular biology. Products include small-format electrophoresis apparatus for high resolution nucleic acid separation, cell culture products (lammin, human chondronectin and mouse type IV collagen) to promote rapid attachment of cells to plastic substrates during culture, blot transfer kits and restriction enzymes supplied with compatible core buffer. Research is carried out on restriction enzymes, recombinant DNA technology and on hybridoma technologies for clinical diagnostics and research purposes including kits for translation in wheat germ extract or reticulocyte lysate, eukaryotic transcription systems, reverse transcription, hepatitis B hybridization and P32 end labelling systems. Products are sold under the Gibco and BRL brand names.

Martek Corp

6480 Dobbin Rd, Columbia, MD 21045. Tel: 301 740 0081 Fax: 301 740 2985

Produce stable isotope-labelled biochemicals and radiolabelled lubricants as well as amino acids.

Maryland Plastics Inc

251 E Central Ave, Federalsburg, MD 21632. Tel: (301) 754 5566

Manufactures disposable labware.

Maryland, University of

College Park, MD 21228

Formed a center for advanced research in biotechnology, a marine biotechnology unit and a university-wide programme in biotechnology to include an institute for biotechnology to be established with the National Bureau of Standards and Montgomery County, at the Shady Grove Life Sciences Center Industrial Park. Overall research includes plant sciences, animal sciences, vaccine development, biosensors and marine biotechnology producing pharmaceuticals, novel chemicals, pollution control systems and biomass from the sea.

Part III Maryland - MD UNITED STATES OF AMERICA

Maryland, University of, Baltimore County

Department of Chemistry

Catonsville, Baltimore, MD 21228.

Undertaking biochemical characterization of DNA repair and recombination pathways, studies of intermediate DNA structure and role of non-replicating lambda-phage DNA in E coli. Developing assays for measuring repair of DNA and recombination.

Maryland, University of, Baltimore County

Department of Biological Sciences

Catonsville, Baltimore, MD 21228.

Studying the possibilities of increasing photosynthetic productivity by plant cell transformation.

Maryland, Unversity of

Maryland Biotechnology Institute

3300 Metzerott Rd, Adelphi, MD 20783.

Comprises five centres: Advanced Research in Biotechnology; Marine Biotechnology; Medical Biotechnology; Agricultural Biotechnology; Programme for Public Issues in Biotechnology. Established to carry out basic research, provide training and work with industry to promote biotechnology. Projects include cloning of growth hormones and development of new vaccines.

Microbiological Associates Inc

Life Sciences Center

9900 Blackwell Road, Rockville, MD 20850. Fax: 301 738 1036 Tel: 301 738 1000

Perform biological testing and research services for the biotechnology and chemical industries. Also a major NIH contractor. For biopharmaceuticals offer cell characterization, retrovirus, final product and process validation testing for FDA submissions. For microbial pesticides, perform mammalian toxicology testing. Also offer general and genetic toxicology assays for evaluating chemicals and develop, evaluate and perform in vitro toxicity

National Cancer Institute

9000 Rockville Pike, Bethesda, MD 20892. Tel: 301 496 4000

Conducts and sponsors research into the cause of cancer and to prevent, diagnose and treat including research and development on chemo-prevention and cancer control, as well as into AIDS including virologic, immunologic, epidemiologic, genetic and therapeutic aspects Carries out basic, preclinical and clinical studies of synthetic and purified agents that modify the response to cancer cells. Areas of research have also included the organization of genes coding for mouse polypeptide antigens and the promoter for human globulin genes and inheritance and structure of rDNA in Drosophila.

National Institute of Allergy and Infectious Diseases (NIAID)

Room7A-03 Westwood Bldg, Bethesda, MD 20205. Tel: 301 496 7985

Supplies source material for culture of virus and mycoplasma as well as allergenic extracts and antiserums against human immunoglobulins, viruses and mycoplasma.

Nova Pharmaceutical Corp

6200 Freeport Center, Baltimore, MD 21224-2788. Tel: 301 522 7000 Fax: 301 522 7199

Carrying out research on the relationship between structure and function in analogues of neurotransmitters and hormones using receptor technology Research is aimed towards pharmaceutical development concerning cardiovascular and neuro-degenerative diseases. Offers a research service for molecular screening of chemical compounds. Developing products for treatment of cold symptoms, novel drug delivery system for treatment of brain cancer and bradykinin-blocking pain killing drugs.

Oncor Inc

209 Perry Parkway, Suite 7, PO Box 870, Gaithersburg, MD 20884. Tel: 301 963 3500 Telex: 6711699 Fax: 301 926 6129 Telex: 6711699

Manufactures and markets products for nucleic acid analysis using Southern, Northern, in situ and dot/slot hybridization systems. Products include a patented system for integrated electrophoresis and vacuum transfer of DNA/RNA and all associated accessories and reagents for DNA extraction (organic and non-organic), restriction enzymes, electrophoresis and transfer buffers, nylon membranes and detection systems (non-isotopic and isotopic). Probes, primers, genomic DNAs and markers are available for B- and T-cell gene rearrangements, human papillomavirus, HIV in situ and DNA fingerprinting for parentage and forensic analyses.

Otsuka Pharmaceutical Co

9900 Medical Center Drive, Rockville, MD 20850. Tel: 301 424 9055 Fax: 301 424 9054

Carrying out cell immunology research. Subsidiary of Otsuka Pharma,

Oxoid USA Inc

9017 Red Branch Road, Columbia, MD 21045. Tel: (301) 997 2216 Telex: 908259

Supplies hydrolyzates, peptones and agars as well as complete formulations in a dehydrated form for laboratory culture of microorganisms, tissue culture, and plant and animal cell lines. Also supplies antibiotic susceptibility testing discs.

P & S Biochemicals

7879 Cessna Avenue, Gaithersburg, MD 20879. Tel: 301 670 9078 Fax: 301 963 7026

Manufacture products for use in molecular biology and genetic manipulation including DNA labelling systems for construction of single stranded probes from restriction fragments as well as restriction enzymes, lambda packaging systems and nucleotide synthesis systems. Also produce reagents for electrophoresis, separation technologies, monoclonal and polyclonal antibodies as well as disposable pipette tips and centrifuge tubes.

Pharmacia LKB Instruments Inc

9319 Gaither Road, Gaithersburg, MD 20877. Tel: 301 963 3200 Telex: 64634 Fax: Fax: 301 963 7780 3337 Vincent Rd, Pleasant Hill, CA 94523. Tel: 800 421 0572 Tx: 89682

Specializes in instruments for biomedical research and separation of macromolecules by chromatographic and electrophoretic methods as well as for detection and counting of radioactive samples. Also produces equipment for ultra microtomy. Supplies bioluminescence reagents and culture media. Subsidiary of LKB-Produkter AB, Sweden.

PharmaKinetics Laboratories Inc

104 East 25th Street, Baltimore, MD 21218. Tel: 301 366 2001/800 237 5088 Fax: 301 235 0727

Provides comprehensive services in clinical trials for drug approval including phased clinical plan development, protocol design and implementation, laboratory and statistical analysis, study report compilation and regulatory affairs follow-up.

Rhone-Poulenc Research Center

8510 Corridor Rd, Savage, MD 20763. Tel: 301 497 1000

Carrying out research on proteins, antibodies and immobilized enzymes.

Sandy Spring Instrument Co Inc

20271 Goldenrod Lane, Suite 101, Germantown, MD 20874. Tel: 301 428 4901

Manufacture micro titration and dispensing, liquid transfer mechanisms for filling slides, cards, strips, vials and plates for clinical and research use.

Scientific Specialities Service Inc

PO Box 352, Randallstown, MD 21133. Tel: (301) 962 0512 Telex: 650 232 3167

Supplies filters and other products for contained environments in medical and industrial laboratories.

UNITED STATES OF AMERICA Massachusetts - MA Part III

Spiral System Instruments Inc

4853 Cordell Ave, Suite A-10, Bethesda, MD 20814. Tel: 301 657 1620

Produce equipment for microbiology including colony counters and platers.

Survival Technology Inc

8101 Glenbrook Rd, Bethesda, MD 20814.

Telex: 892694 Fax: 301 656 3032 Tel: 301 656 5600

Developing drug delivery systems for proteins, peptides and enzymes.

University Micro Reference Laboratory Inc

611 P Hammonds Ferry Rd, Linthicum, MD 21090. Tel: 301 789 3636/800 468 4876

Holds microbial culture collections including bacterial reference strains. Carries out batch processing of microbial strains.

Varex Corp

12227 Parklawn Drive, Rockville, MD 20852.

Fax: 301 984 7766 Tel: 301 984 7760 Telex: 383276

Manufacture HPLC equipment.

Westinghouse Bio-Analytic Systems Co

2096 Gaither Rd, Rockville, MD 20850.

Tel: 301 670 0688

Manufacture biosensors

Whittaker Bioproducts

8830 Biggs Ford Road, Walkersville, MD 21793-0127.

Tel: 301 898 7025/800 638 8174 Telex: 6919009 mabio uw

301 845 8291

Supplies quality cell culture media and serums, clinical diagnostic test kits and reagents for viral and other related diseases, cell cultures, endotoxin detection kits based on Limulus amoebocyte lysate (LAL), fluorescent immunoassays and EIA kits.

WR Grace & Co

Research Division

7379 Route 32, Columbia, MD 21044. Tel: 301 531 4000 Telex: TWX 710 862 1886 Fax: 301 531 4367

Manufacture speciality chemicals using genetic engineering in pharmaceutical and veterinary medicine including products for bovine improvement as well as bull semen. Produce a mammalian cell culture system using hollow fibre cell culture reactors, improved membranes for diagnostic kits, artificial organs from membranes, mammalian cells and monoclonal antibodies.

Massachusetts - MA

A/G Technology Corp

34 Wexford St, Needham, MA 02194-2912

Tel: 617 449 5774 Telex: 315138 Fax: 617 449 5786

Manufacture ultrafiltration, microfiltration, hollow fibre crossflow liquid cartridges suitable for use in cell harvesting and gas separation products for nitrogen generation or oxygen enrichment.

Abcor Inc

850 Main Street, Wilmington, MA 01887.

Tel: (617) 657 4250

Manufactures ultrafiltration membranes and units for use in water treatment, separation of oil/water emulsions, tannery effluents and the chemical industry.

Adaps Inc

300 Greenlodge Street, Dedham, MA 02026. *Tel*: (617) 326 6935

Supplies medical electronic equipment, including automatic processor for bioassays with cell harvester and disposable chambers.

Advanced Magnetics Inc

61 Mooney St, Cambridge, MA 02138. Tel: 617 497 2070/800 343 1346

Telex: 910 240 1608 Fax: 617

497 6927

Produces immunodiagnostics and immunoreagents including polyclonal antibodies, cell separation media, immobilized antibodies and conjugated antibodies as well as bacterial products such as Staphyloccocus protein A and reagents for EIA and radioimmunoassay kits. Supplies magnetic particles for affinity separation applications.

AEM Consultants

30 Federal Street, Salem, MA 01970. Tel: (617) 744 5923

Management consultancy firm serving high technology industries on an international basis. Provides information, process evaluation, custom studies, marketing and operational reports. Experience includes large-scale fermentation and other biotechnology facilities, market evaluation of filtration systems, systems analysis of microprocessor control requirements, product assessment of control instrumentation, evaluation of heat transfer systems, market planning for process industries etc.

Alfa Products

152 Andover Street, Danvers, MA 01923. Tel: 617 777 1970/800 343 0660 Tel

Telex: 951360

Supplies organic, inorganic and organometallic research chemicals, ultra-pure chemicals, pure metals and alloys, and analytical standards, including plant growth hormones and analogues.

Alko Diagnostics Corp

333 Fiske St, Holliston, MA 01746. *Tel*: 617 429 4600

Developing membrane-assay technology. Subsidiary of Alko, Finland.

Allied Instrumentation Laboratory

113 Hartwell Avenue, Lexington, MA 02173.

Manufactures an integrated analytical instrument which uses multiple detection techniques including absorbence, light scatter, fluorescence and potentiometry at the same time. Suitable for analysis of proteins and therapeutic drugs.

American BioAnalytical Inc

10 Huron Drive, Natick, MA 01760. Tel: 617 235 2373/800 443 0600

Supply ultrapure chemicals and products for electrophoresis and cell

American Bio-Technologies Inc

359 Allston St, Cambridge, MA 02139. Tel: 617 547 5535/800 542 2281

1850 NW 69th Ave, Suite 3, Plantation, FL 33313.

Tel: 305 792 4786

Supply cell and tissue culture media. Offer custom services in molecular biology and immunology including hybridoma and monoclonal antibody production, cDNA and genomic library construction and screening, DNA sequencing and synthesis.

American Holographic Inc

521 Great Rd, PO Box 1310, Littleton, MA 01460.

Tel: 508 486 9621 Telex: 466194 Fax: 508 486 9080

Supplies a wide range of analytical instruments including ultra violet, infra red and visible spectrophotometers, fluorometers and clinical analyzers.

American International Chemical Inc

27 Strathmore Rd, Natick, MA 01760.

Tel: 508 655 5805/800 238 0001 Telex: 948342 Fax: 508 655

0927

Supply purification reagents, custom peptides, biological buffers, enzymes, diagnostic reagents and biologicals. Products include culture media, both serums and serum substitutes, affinity chromatography media electrophoretic reagents, immunodiagnostic tests including AIDS, controls, stains and nucleic acids.

American Lewa Inc

132 Hopping Brook Rd, Holliston, MA 01746.

Fax: 508 429 8615 Tel: 508 429 7403 Telex: 948420 amlewa

Supply liquid chromatography equipment and accessories as well as pumps.

Part III Massachusetts - MA UNITED STATES OF AMERICA

Amicon

Division of W R Grace & Co

24 Cherry Hill Drive, Danvers, MA 01923. Tel: 617 777 3622/800 343 1397 Tele.

Telex: 275192 Fax: 617 777

6204

Manufactures and supplies a wide range of products related to separation technology including ultrafiltration, microfiltration, membrane separation and affinity chromatography. Membranes include a wide range o semipermeable types, filter supports and membranes with standard microporosities, sterile and disposable filter units, and filters resistant to a variety of solvents. Materials for affinity chromatography include phenyl boronate agarose and other activated supports and ready to use immobilized ligands. Also produces glass and metal open tubular columns in a wide variety of sizes.

Andonian Cryogenics Inc

26 Farwell St, Newtonville, MA 02160.

Tel: 617 969 8010/800 446 3553 Fax: 617 969 0334

Manufacturer of cryogenic storage equipment, research cryostats and gas handling equipment.

Angenics Inc

100 Inman Street, Cambridge, MA 02139.

Tel: 617 876 6468 Telex: 4974826 Fax: 617 876 7965

Carrying out research and development of rapid easy to use on-site immunodiagnostics based on a latex agglutination delivery system. Products currently available include a test for oestrus in cows, marketed by Alfa-Laval, and a test for drug abuse being test marketed by Roche Diagnostic Systems.

Applied bioTechnology Inc

80 Rogers Street, Cambridge, MA 02142. Tel: 617 492 7289 Fax: 617 492 8438

Developing vaccines based on viral vectors. Human vaccines include AIDS, TB and leprosy. Marketing an in situ diagnostic kit for HIV for the research market. Other in situ kits for viral and genetic testing are being developed. Has joint venture with Du Pont-Oncogenetics, US in cancer research. Using monoclonal antibodies and DNA probes for diagnostic and therapeutic uses in relation to cancer and the expression of oncogenes.

Applied Protein Technologies Inc

Fax: 617

Offer services in protein and peptide purification, custom synthesis and sequencing, amino-acid specific reagents for separation, analysis and immobilization, DNA probes and automated peptide synthesizers as well as developing new sequencing techniques.

APV Gaulin Inc

44 Garden St, Everett, MA 02149-4512

Fax: 617 387 4431 Tel: 617 387 9300

Manufactures a complete line of laboratory scale, pilot plant and industrial homogenizers and pumps.

Aquaculture Research Corp

PO Box AC, Dennis, MA 02638. Tel: 617 385 3933/800 334 1380

Carry out research in lobster and shellfish genetics.

Arthur D Little Inc

25 Acorn Park, Cambridge, MA 02140.

Tel: 617 864 5770

Contract research and consulting organisation offering a wide range of services including aspects of biotechnology and systems for simulation and modelling of costs associated with scale up of production systems.

Atlantex & Zieler Instrument Corp

PO Box 518, Avon, MA 02322.

Tel: 508 580 0080

Offers customized microscope service and accessories.

Autochrom Inc

PO Box 207, Milford, MA 01757-0207.

Tel: (617) 478 2670

Manufacture equipment for preparative high performance liquid chromatography.

Balston Inc

703 Massachusetts Ave, Box C, Lexington, MA 02173. Tel: 617 861 7240/800 343 4048

Supply equipment and accessories for gas and liquid chromatography and HPLC, filtration, spectrometry and vacuum evaporation.

Baxter Healthcare Corp

Clinical Assays Division

620 Memorial Drive, Cambridge, MA 02139. Tel: (617) 492 2526/800 225 1241 Telex Telex: 921461

Manufactures radioimmunoassay diagnostic test kits for use in research and clinical laboratories.

BBN Software Products Corp

10 Fawcett St, Cambridge, MA 02238.

Tel: 617 864 1780

Supplies computer software for use in experimental design and data analysis including facilities for selection and application of statistical methods and the interpretation of statistical results.

Betagen Corp

100 Beaver St, Waltham, MA 02154. Tel: 617 899 3400/800 421 4213 Fax: 617 899 7063

Supply autoradiographic equipment, blot analyzers, image analysis computers and software.

Bio-Rad Laboratories

Microscience Division

19 Blackstone St, Cambridge, MA 02139. Tel: 617 864 5809/800 444 1422 Tele Telex: 510 601 7315 Fax: 617

Supply a wide range of microscopy accessories for preparation and staining, fluorescence microscopes and reagents as well as vacuum apparatus.

Bioengineering Associates Inc

44 Mechanic Street, Newton, MA 02164.

Tel: 617 890 0018 Telex: 755709

Supplies a range of fermentation equipment for laboratory use of between 1.2 and 10 litres, with automatic control of pH, dissolved oxygen, temperature and foam formation, as well as larger fermenters of up to 90 litres capacity. Agent for Marubishi Inc, Japan. Subsidiary of Biotechnology Development Corp, US.

Biofish Associates

11 Lakeridge Drive, Georgetown, MA 01833.

Tel: 617 352 7015

Written requests: PO Box 1598, Gloucester, MA 01931

Offer fish tissues and organs on a custom basis for use in immunological and biochemical studies.

Biogen Inc

14 Cambridge Center, Cambridge, MA 02142. Tel: 617 864 8900 Telex: 710 320 1178

Using molecular biology and genetic techniques aimed at the production of pharmaceuticals and chemicals, including interferon, vaccines, insulin and ethanol. Interests include development of fibrinolectins, blood factor VIII, somatomedin C, alpha, beta and gamma interferons, lymphokines including interleukin-2 and tumour necrosis factor, erythropoietin, lipomodulin, human serum albumen, human vaccines to viral infections, foot and mouth disease vaccines, animal growth hormones and herbicides. Have developed DNA sequences, recombinant DNA molecules and processes for production of bovine growth hormone-type polypeptides.

Biomeasure Inc

11-15 Avenue E, Hopkinton, MA 01748.

Tel: 617 435 6863 Telex: 754867

Offer services in custom synthesis of peptides and speciality chemicals and screening. Developing peptide based drugs.

UNITED STATES OF AMERICA Massachusetts - MA Part III

Biomedical Technologies Inc

378 Page St, Stoughton, MA 02072. Tel: 617 344 9942 Telex: 910 240 3255 Fax: 617 341 1451

Manufactures protein hormones and other proteins and peptides, including insulin, calmodulin, EGF, TGF-beta, LDL, and cell growth factors, as well as monoclonal and polyclonal antibodies, radiolabelled compounds and isotopes, and materials and kits for radioimmunoassay. Offer custom services in protein purification, radioiodination and antiserum production.

Biopure

68 Harrison Ave, Boston, MA 02111.

Tel: 617 350 7800

Offer custom services in fermentation for production of monoclonal antibodies and chemicals.

BioSurface Technology Inc

One Kendall Square, Building 200, Cambridge, MA 02139. Tel: 617 494 8484

Developing the production of human skin tissue culture for repair therapy.

Biotage Inc

Riverside Technology Center, 840 Memorial Drive, Cambridge, MA 02139

Tel: 617 354 6883 Fax: 617 354 6983

Products include HPLC column packings.

Biotal Inc

Suite 2244, 222 Third St, Cambridge, MA 02142. Tel: 617 547 0300 Fax: 617 354 4957

Subsidiary of Biotal Ltd, UK.

BioTechnica Diagnostics

61 Moulton St, Cambridge, MA 02138. Tel: 617 576 1966/800 433 0364

Products include a DNA-probe test for periodontal disease. Carry out analysis of DNA-probe tests. Subsidiary of BioTechnical International.

BioTechnica International

85 Bolton St, Cambridge, MA 02140. Tel: 617 864 0040

Carrying out research and development based on genetic engineering in the following areas: plant genetics, bacterial systems, biocatalysis, industrial enzymes, yeast, fermentation technology and cell cloning. Interests include DNA probes, protein supplement for animal feed, improved yeasts for production of beers and other alcoholic beverages, herbicide resistant seeds, silage inoculants, nitrogen fixing bacteria, microbial pesticides, waste treatment processes for decontaminating toxic waste sites and waste treatment producing energy including whey fermentation for ethanol and landfill gas production. Also developing dental diagnostics and vaccines.

Biotechnology Development Corp

44 Mechanic Street, Newton, MA 02164. Tel: 617 965 7255 Telex: 755709

Fax: 617 965 6952

Supplies equipment for biotechnology including microfluidizers for production of liposomes and microemulsions as well as drug delivery systems. Developing an AIDS vaccine.

Biotrend Marketing Associates

1215 Stearns Hill Road, Waltham, MA 02154. Tel: (617) 899 0484

Provides specialist consultancy services, including business planning, market research, technology assessment and growth strategies for companies engaged in biotechnology/biochemistry markets in the US.

BBN Systems and Technologies Corp

10 Moulton Street, Cambridge, MA 02138. Tel: 617 873 3000 Telex: 921470

Tel: 617 873 3000 Fax: 617 873 3776

Supplies graphics workstation software for research data management, analysis, visualization, information sharing and database access. Includes tools for statistics, biomath modelling, genetic sequence handling and molecular modelling.

Boston Biomedical Consultants

100 Fifth Avenue, Waltham, MA 02154. Tel: 617 890 5060 Telex: 5106018023

545 Middlefield Rd, Suite 160, Menlo park, CA 94025. Tel: 415 326 5060 Tx: 4937544 Fax: 415 326 1758

Provides management consulting services to the biomedical industry. Assists clients in reaching strategic market planning and business development decisions, as well as technological assessments of new products and processes. Additionally, the company conducts appraisals of potential acquisition, licensing and divestiture candidates for investment organizations and has participated in some of the major acquisition decisions in the industry.

Brandeis University

Department of Biology

415 South Street, Waltham, MA 02154.

Investigating DNA sequences in micronucleus of Tetrahymena, regulation of gene expression during cell growth cycle of yeasts, regulation of differentiation in Bacillus, control of cell type and differentiation in yeast and in studies of mating genes, and synthesis of oocytes in RNA sequences.

Brandeis University

Rosenstiel Center, Medical Sciences Research Center 415 South Street, Waltham, MA 02254.

Tel: 617 736 2461

Studying organization of ribosomal gene expression in yeast. Using microencapsulation technology in industrial strain improvement by cell culture and selection.

Brandeis University

Institute for Photobiology

Waltham, MA 02154.

Studying hydrogen metabolism in intact green algae Chlorella and Chlamydomonas.

Brookfield Engineering Laboratories Inc

240 Cushing Street, Stoughton, MA 02072.

Tel: (617) 344 4310 Telex: 924497 Manufacture viscometers and accessories.

Cambridge Analytical Associates

1106 Commonwealth Ave, Boston, MA 02215. Tel: 617 232 2207 Fax: 617 731 1358

Develop microbial cultures for treatment of hazardous wastes including methane-utilizing bacteria.

Cambridge Bioscience Corp

365 Plantation St, Worcester, MA 01605.

Tel: 508 797 5777/800 637 8376 Telex: 3725782 camb bio wor

Research and development company. Working in area of veterinary and human vaccines and related diagnostic products, including diagnostic kits for AIDS antibody, adenovirus, rotavirus, feline-leukemia antigen and Clostridium toxin. Carrying out research on AIDS vaccine.

Cambridge Diagnostics Inc

359 Allston St, Cambridge, MA 02139.

Tel: 617 661 0961

Products include monoclonal and polyclonal antibody-based radioimmunoassays for hormones and steroids.

Cambridge Isotope Laboratories

20 Commerce Way, Woburn, MA 01801. Tel: 617 938 0067/800 322 1174 Tel Telex: 951935 Fax: 617 932

Manufacture a wide range of stable isotope labelled biochemical research products including amino acids, lipids and fatty acids, steroids and sugars labelled with carbon (13C), deuterium, oxygen (17O and 18O) and nitrogen (15N). Also offer custom synthetic services.

Part III Massachusetts - MA UNITED STATES OF AMERICA

Cambridge Medical Diagnostics Inc

575 Middlesex Turnpike, PO Box 88, Billerica, MA 01865. Telex: 710 347 1849 Tel: 617 935 4050/800 225 0850 Fax: 617 667 8651

Develop and manufacture kits and components for radioimmunoassays and automated immuno-coating as well as reagents for enzyme, biochemical and histochemical research and monoclonal and polyclonal antibodies.

Offer custom iodination, lyophilization and antiserum production. Subsidiary of Cambridge Medical Technology, US.

Cambridge Neuroscience Research Inc

1 Kendall Square, Cambridge, MA 02139. Tel: 617 225 0600

New research and development company working on new neuroscience products such as anti-psychotic and stroke drugs. Using techniques of molecular biology to characterize and express specific cell receptor systems as well as to model the molecular processes involved.

Cambridge Technology Inc

23 Elm Street, Watertown, MA 02172-2821.

Tel: 617 923 1181 Telex: 910 250 7539 Fax: 617 924 8378

Produces apparatus for cell and tissue culture, microplate readers and a cell harvester for direct use with liquid scintillation techniques.

Center for Blood Research

Product Development

800 Huntington Avenue, Boston, MA 02115. Tel: 617 731 6470/800 437 8222

Manufactures and supplies human serum proteins, normal human plasma, serum etc, as well as hepatitis-positive plasma. Carries out research on blood factors and clinical testing as well as viral screening.

Charles River Biotechnical Services Inc

251 Ballardvale Street, Wilmington, MA 01887 Tel: 508 657 6500/800 356 2544 Telex: 947433 Fax: 508 658

A full service bioprocessing company for large scale production of monoclonal antibodies and other biomolecules from mammalian cell cultures using in vivo and in vitro procedures. Manufactures range of automated scalable bioreactors in which cells grow to high densities immobilized on ceramic matrices. Provides biotechnology testing in accordance with good laboratory practices including MAP and RAP testing for murine viruses. A Bausch & Lomb, US company.

Chemgenes Corp

925 Webster St, Needham, MA 02192. Tel: 617 449 5051/800 666 6669

Telex: 940536

Produce intermediates for DNA synthesis, phosphoramidites, nucleosides, DNA-based diagnostics and RNA intermediates. Developing DNA-probe diagnostics and biologically active peptides.

Chesnut Hill Consultants Inc

55 Hallwood Road, Chesnut Hill, MA 02167.

Consultants in the area of immunology.

Ciba-Corning Diagnostics Corp

63 North St, Medfield, MA 02502 Tel: 617 359 7711/800 255 3232

Manufactures reagents, human clinical diagnostics and kits for quality control in cell growth systems using simple isoenzyme electrophoresis. Have developed an automated monoclonal assay for thyroid hormones involving chemiluminescence and magnetic separation techiques. Subsidiary of Ciba-Geigy, Switzerland and Corning Glass, US.

Collaborative Research Inc

2 Oak Park, Bedford, MA 01730.

Tel: 617 275 0004/800 343 2035 Telex: 710 326 7601

Products include growth factors, hormones, enzymes etc, for support of mammalian cells under defined medium conditions, defined sequence oligonucleotides, linkers, nucleotide cellulose and restriction enzymes etc, for recombinant DNA technologies. Entering into long-term commercial cooperations with major companies and government agencies to develop products in the health-care, agricultural and industrial fields. Offer clinical services in the use of DNA probes for bone marrow, cystic fibrosis, paternity testing and polycystic kidney disease. Licenses and sells DNA probes for use in paternity testing and forensic analysis.

Connecticut Valley Biological Supply Co Inc

82 Valley Rd, Southampton, MA 01073. Tel: 413 527 4030/800 628 7748

Supply cultures of microorganisms including bacteria, yeasts, fungi and both marine and fresh water algae.

Consolidated Stills and Sterilizers

76 Ashford St, PO Box 297, Boston, MA 02134-0297.

Tel: 617 782 6072 Telex: 951521 Fax: 617 787 5865

Manufacture sterilizers and stills.

Consulting Resources Corporation

CONRESCO

Six Northbrook Park, Lexington, MA 02173.

Telex: 220883 Tel: 617 863 1222

Provides business research and analysis services in biotechnology commercial development within the fields of agriculture, chemicals, foods, pharmaceuticals and pollution control.

Control Equipment Corp

171 Lincoln St, Box 2154 Lowell, MA 01851. Tel: 508 459 0573

Manufacture a tangential flow filter system based on a tubular ceramic filter cartridge of 0.2 micron pore size suitable for use in liquid phase sampling from mixtures with solids in suspension or for concentration of solids.

Costar Corp

205 Broadway, Cambridge, MA 02139. Tel: (800) 492 1110 Fax: TWX: 710 320 0885

Supplies a wide range of disposable laboratory ware ranging from culture dishes to well clusters and pipettes, microtitration plates, assay plates and strips designed for use in hybridoma studies.

Creative Biomolecules Inc

35 South St, Hopkinton, MA 01748. Tel: 617 435 9001

Carry out contract research and development. Products under development include peptides, tissue plasminogen activator and epidermal growth factor.

Cyborg Corp

97 Bridge St, Newton, MA 02158. Tel: 617 964 9020 Fax: 710 335 7706

Produce combined hardware and software systems with recorder, data logger, alarm monitoring, automatic data collection and data reduction facilities designed for use in the monitoring of processes, waste and effluent production, energy use, etc, in food, pharmaceutical and chemical industries. Also suitable for accumulation and analysis of data from repeated laboratory procedures with scans of up to 64 parameters and frequencies varying from minutes to days. Calculations include first and second derivatives, areas under curves and statistical treatments.

Damon Biotech Inc

119 Fourth Avenue, Needham Heights, MA 02194. Tel: 617 449 0800/800 225 7786 Telex: 200228

Manufactures and markets cell products on a contract basis. One of the largest suppliers worldwide of monoclonal antibodies to industry and the medical community. Conducts research on development of proprietary biological and pharmaceutical delivery products, AIDS diagnostics and TPA. Has patented system to encapsulate living cells. Subsidiary of Damon Corp, US.

Damon Corp

115 Fourth Avenue, Needham Heights, MA 02194. Tel: 617 449 0800

Manages a large network of independent clinical laboratories. Manufactures laboratory instruments and carries out product engineering and development.

Dan Kar Corp

PO Box 279, Reading, MA 01867. Tel: (617) 944 1550

Produces electrophoresis apparatus for nucleic acid research, electrophoresis supports, gel moulds, power supplies and accessories.

UNITED STATES OF AMERICA Massachusetts - MA Part III

Digital Equipment Corp

1 Iron Way MRO 2-2/8B2, Marlboro, MA 01752. Tel: (617) 467 6878

Produces a range of computers, microcomputers and interfaces for data acquisition and management designed for locally controlled real time input/output functions without the need to access the host computer, suited to automated laboratory uses.

Diversified Biotech

46 Marcellus Drive, Newton Centre, MA 02159. Tel: 617 965 8557

Manufacture prestained electrophoresis standards either in the form of kits (high range or low range) or as individual standards from 3 to 200 Kdaltons. Unstained kits are also available.

Du Pont-NEN Research Products

549 Albany Street, Boston, MA 02118. Tel: 617 482 9595/800 225 1572 Telex: 940996

Biotechnology Centre: 85 Wells Avenue, Newton Center MA 02159 Tel: 617 964 9550, Nuclear Medical & Technical Complex: 331 Treble Cove R, North Billerica MA 01862 Tel: 617 964 9531

Manufactures radioactive chemicals for research, pharmaceuticals for diagnosis and radioactive and nonradioactive products for calibration. Provides custom synthesis and tritiation services. Over 1000 radioactive chemicals available including amino acids, steroids and nucleotides labelled with 14C, 3H, 32P and 125I as well as radioiodination kits, scintillation fluids, tissue and gel solubilizers, radioactivity decontaminants, vials and pipettes.

Dynatech Corp

Research & Development

99 Erie Street, Cambridge, MA 02139. *Tel*: (617) 868 8050

Manufactures medical laboratory instrumentation, data communication systems and diagnostic supplies. Provides research, development and consulting services under contract to industry and government in areas of chemical and mechanical engineering, including electrochemical conversion of biomass feedstocks and wastes to liquid and gaseous fuels.

East-Acres Biologicals

236 Blackmer Rd, PO Box 822, Southbridge, MA 01550. Tel: 617 765 9580 Fax: 508 765 1288

Produce antibodies against cell surface markers, chemicals, cytoskeletal proteins, hormones, infectious agents, peptides, serum proteins etc. Offer services in custom immunization

ECO Instruments

One Bridge St, Newton, MA 02158.

Produces ion specific electrodes.

EG & G Biomolecular Inc

4 Tech Circle, Natick, MA 01760.

Tel: 508 650 1180/800 248 3464 Fax: 508 651 3250

Supply DNA sequencers and reagents, electrophoretic sequencing equipment and reagents, and associated software.

Elkay Products Inc

800 Boston Turnpike, PO Box 5247, Turnpike Station, Shrewsbury, MA

Tel: 617 845 2116 Telex: 6810102

Manufactures disposable plastic ware including cuvettes for spectrophotometry, fluorometry and nephelometry with 70% transmission at 340 nm, cell culture equipment, test tubes and pipettes, as well as dialysis membranes.

EMCorp

Electron Microscope Supplies Division PO Box 67285, Chesnut Hill, MA 02167-0004. Tel: 617 965 6340/800 528 5252

Supplies, diamond knives, stains and histology reagents for use in electron microscopy as well as autoradiography enhancers.

Endogen Inc

451 D Street, Boston, MA 02210. Fax: 617 439 0355 Tel: 617 439 3250

Developing monoclonal antibodies and quantitative diagnostic assays including ELISA kits for monitoring tumour necrosis factor alpha, interleukin-1 alpha and interferon gamma as well as ultrapurified cytokines and monoclonal and polyclonal antibodies to cytokines.

Enprotech Corp/BEA

1 Westinghouse Plaza, Hyde Park, MA 02136. Tel: 617 361 5700/800 433 6433 Telex: 510 601 3130 361 5708

Supply a wide range of fermentation equipment, shakers, probes, computerized controllers, computer software, protein separation equipment for pilot plant or production facilities, electrophoresis equipment, DNA sequencers, electrodes, gels and associated software. Agents for Infors, SWitzerland and B E Marubishi, Japan.

The Enzyme Center Inc

36 Franklin Street, Malden, MA 02148. Tel: 617 322 4885 Telex: 940195

Carries out large scale fermentation to produce a wide range of enzymes for research use.

ESA Inc

45 Wiggins Ave, Bedford, MA 01730.

Supplies analytical chromatography equipment including HPLC systems, detectors etc, as well as chemical and elemental analyzers.

Extech International Corp

150 Bear Hill Rd, Waltham, MA 02154. Tel: (617) 890 7440 Telex: 940913

Supplies portable meters for measurement of temperature, pH, conductivity and dissolved oxygen.

Filtron Technology Corp

50 Bearfood Rd, Northboro, MA 01532. Tel: 508 393 1800/800 FILTRON Telex: 857531

Fax: 508 393 1874

Manufactures ultrafiltration and microfiltration membranes and related products for critical separations in the laboratory and pilot and production scale process market. Products are suited to pharmaceutical and biotechnological applications.

The Foxboro Co

Bristol Park, Foxboro, MA 02034.

Telex: 927602 Tel: 617 543 8750 Fax: TWX: 710 346 7630

151 Woodward Ave, PO Box 5449, S Norwalk, CT 06856-5449. Tel: 203 853 1616 Tx: 710 468 3054 Fax: 203 838 2731

Manufactures chromatography equipment and supplies, references and standards, capillary columns, environmental air monitoring equipment, hydrocarbon-in-water analyzers, spectrophotometers and liquid chromatography detectors.

Gene-Trak Systems

31 New York Ave, Framingham, MA 01701. Tel: 617 872 3113

Joint venture between Integrated Genetics Inc and Amoco to develop a non-radioactive DNA probe using the biotin-avidin system as well as radioactive DNA probes for Salmonella and Listeria.

Genetics Institute Inc

87 Cambridge Park Drive, Cambridge, MA 02140-2387. Tel: 617 876 1170 Telex: 948219 Fax: 617 876 1504

Commercial research and development company applying recombinant DNA technology to human health care and agricultural and chemical products. Activities include DNA sequencing, fermentation technology, gene expression, mammalian enzymology, gene cloning, immunology, microbial physiology, nucleic acid and protein chemistry. Has a contract for development of blood-clotting factor VIII. Developing DNA probes, fibrinolectics, nerve growth factor, interferon, interleukin-3, TPA, AIDS therapeutics, human serum albumin, granulocyte macrophage colony stimulating factor (immuno-modulator for AIDS and related diseases), and improved seed and corn varieties. Have developed a method of purification of erythropoietin and related products.

Part III Massachusetts - MA UNITED STATES OF AMERICA

Genica Pharmaceutical Corp

The Neuromuscular Disease Company

Two Biotech Park, 373 Plantation St, Worcester, MA 01605. Tel: 508 756 2886

Developing diagnostics and therapeutics for neuromuscular diseases. Have produced a diagnostic test for muscular dystrophy based on dystrophin that differentiates between Duchenne's and Becker's muscular dystrophy, and expect to offer a carrier test for muscular dystrophy based on dystrophin in late 1989.

Gentest

6 Hershaw Street, Woburn, MA 01801. Tel: 617 935 5115

Carrying out research on effects of mutagens on specific cell lines and developing DNA probes specific for mutagen-induced changes in relation to detection of mutagen effects of industrial chemicals.

Genzyme Corp

Research Division

75 Kneeland St, Boston, MA 02111. Tel: 617 451 1923/800 332 1042 Telex: 201223 Fax: 617 451 2454

Manufactures enzymes and other products for use in diagnostic reagents and for human health care including eye and skin products, surfactants and monoclonal antibodies. Produces lymphocyte activating factor as ultra-pure interleukin-1, free from mitogens, endotoxins and other lymphocyte products. Developing hyaluronic acid, glucocerebrosidase, glycoproteins and test kits including oligosaccharide assay in glycoproteins with research applications

Harris Manufacturing Co

Puffer-Hubbard Division

PO Box 38, N Billerica, MA 01862.

Tel: 800 221 4201 Telex: 577449 Fax: 704 645 3368

Manufacture cryogenic equipment, freezers and refrigerators, chromatography columns and temperature controllers.

Hemagen Diagnostics Inc

34 Bear Hill Rd, Waltham, MA 02154. Tel: 617 890 3766/800 722 2730

Telex: 294116

Supplies a range of diagnostic kits for screening and semi-quantitation of auto-antibodies associated with connective tissue disorders.

HNU Systems Inc

160 Charlemont St, Newton, MA 02164.

Supply laboratory equipment including gas chromatographs, chromatography detectors and ion specific electrodes.

Hygeia Sciences

330 Nevada St, Newton, MA 02160-1432. Tel: 617 964 0200 Telex: 920407

Using hybridoma techniques for the development of monoclonal antibodies for diagnostics. Products include ovulation and pregnancy test kits. Subsidiary of Tambrands Inc, US.

Immunetics

380 Green St, Cambridge, MA 02139. Tel: 617 492 5416/800 227 4765 Telex: 153264385 Fax: 617 868

Supply electrophoresis equipment. Also supply viral antigens.

Immunogen Inc

148 Sidney St, Cambridge, MA 02139. Tel: 617 661 9312

Developing conjugated antibodies for therapeutic and diagnostic use in cancer treatment. Working with Sidney Faber Cancer Research Institute, US. Two initial products are in clinical trials at the Dana-Farber Cancer Institute for the treatment of the most common forms of lymphoma and leukemia.

Immunotech Corp

90 Windom Street, PO Box 860, Boston, MA 02134. Tel: 617 787 1010/800 343 0555 Telex: 948179 Fax: 617 787

Supplies medical diagnostics and immunodiagnostic test kits based on enzyme immunoassay methods. Offers custom conjugation to enzymes and proteins.

Ingold Electrodes Inc

261 Ballardvale St, Wilmington, MA 01887. Tel: 508 658 7615/800 352 8763 Telex: 296996 Fax: 508 658

Manufactures pH and dissolved oxygen electrodes, industrial probes, sensors and ion specific electrodes as well as pH and dissolved oxygen

Instrumentation Laboratory Inc

Developing and marketing medical diagnostics. Part of Allied Corp, US.

Integrated Chemical Sensors Corp

44 Mechanics St, Newton, MA 02164. Tel: 617 965 6950

Developing diagnostics which combine the use of piezoelectric crystals with the specificity of monoclonal antibodies. Reaction between the sensor and the target molecule results in a change in the frequency at which the crystal vibrates under the influence of an electric current enabling the sensor to be used in screening for specific proteins or use in clinical tests, in environmental monitoring or in process control.

Integrated Genetics Inc

31 New York Avenue, Framingham, MA 01701. *Tel:* 617 875 1336. *Telex:* 948654 ingn

Research and development company interested in the application of recombinant DNA technology to medical, agricultural and chemical fields. Has a joint venture with Serono SpA, Italy. Offers a clinical service in the use of radioisotope DNA probes for cystic fibrosis, polycystic kidney disease, sickle cell anaemia, thalassemia, haemophilia B and retinoblastoma. Maintains a genetic disease reference library. Developing a radioisotope DNA probe for Salmonella and a non-isotopic DNA probe for Campylobacter. Has produced a vector encoding hepatitis B surface antigen, diagnostics for food toxins, cancer and AIDS, TPA, human chorionic gonadotrophin and erythropoietin. About to merge with Genzyme, US.

Integrated Separation Systems

One Westinghouse Plaza, Hyde Park, MA 02136. Tel: 617 361 5700 Telex: 510 60113130

Supplies products related to electrophoresis, 2-D electrophoresis and western blotting specializing in pre-cast gradient poly-acrylamide gels (Sepragels) with reproducible characteristics which are available in a number of different gradients for separation of protein of various types and

International Equipment Company

Telex: 174299 Fax: 617 449

Manufactures a wide range of laboratory centrifuges including ultracentrifuges and refrigerated systems as well as bench-top and clinical types. Also supplies a full range of accessories and tubes.

Ionics Inc

65 Grove St, Watertown, MA 02172 Tel: (617) 926 2500 Telex: 922473

Produces electrodialysis systems for simultaneous desalting and concentration of protein solutions, Karl Fisher titrators, automatic titrators, electrofocusing apparatus etc.

Jackson Laboratory

600 Main St, PO Box 258, Bar Harbor, MA 04609-0800. Tel: 207 288 5845 Telex: 950065 Tel: 207 288 5845

Carrying out studies on activity of the Rous sarcoma virus by means of infection of cultured mouse cells to characterize mechanisms of transfection and effects of proviral sequences on transcription of flanking cellular genes.

Jeol USA Inc

11 Dearborn Road, Peabody, MA 01960. Tel: (617) 535 5900 Telex: 6853525

Supplies electronmicroscopes and nuclear magnetic resonance spectrophotometers.

UNITED STATES OF AMERICA Massachusetts - MA Part III

Koch Membrane Systems

850 Main St, Wilmington, MA 01887. Tel: 800 343 0499

Supply multi-tube and spiral-wound membrane modules for ultrafiltration and microfiltration.

Laboratory Devices

PO Box 6402, Holliston, MA 01746. Tel: 508 429 1716 Fax: 508 429 6583

Supply sample handling equipment including sample dryers.

Laboratory Technologies Corp

400 Research Drive, Wilmington, MA 01887. Tel: 508 657 5400 Telex: 989695 Fa

Fax: 508 658 9972

Supplies process monitoring software for acquisition and manipulation of laboratory data.

Leeman Labs Inc

600 Suffolk St, Lowell, MA 01854

Tel: 508 454 4442 Telex: 324509 Fax: 508 452 7429

Manufacture fully automated spectrometers.

LET Corp

359 Allston Street, Cambridge, MA 02139.

Carrying out research and development in the area of human immune cell receptors and growth modifiers for the production of novel therapeutics for the treatment of immune system diseases.

Lidex Technologies Inc

4 Alfred Court, Bedford, MA 01730.

Tel: (617) 275 4480

Supplies analytical chromatographs and accessories, HPLC systems, filters, precipitators, multiple samplers for radioassay etc.

Luft Instruments Inc

3 Hillside Rd, PO Box 214, Lincoln, MA 01773.

Tel: 617 259 9215 Telex: 247316

Supplies pH controllers, process and metering pumps and automatic

Malvern Instruments Inc

10 Southville Road, Southborough, MA 01772.

Tel: 508 480 0200 Telex: 311397 Fax: 508 460 9692

Manufacture particle size analyzers including laser analyzers capable of measuring particles or droplets in the range 0.003-1800 microns.

Massachusetts Institute of Technology

Department of Nutrition & Food Science

Cambridge, MA 02139.

Studying production of chemicals by fermentation of cellulosic material by anaerobic and thermophilic organisms including clostridia for ethanol and butanol.

Massachusetts Institute of Technology

Department of Biology & Cell Culture Center

77 Massachusetts Avenue, Cambridge, MA 02139.

Tel: 617 253 6430

Researching into molecular genetics of eukaryotes and prokaryotes using plasmids and bacteriophage. Also studying RNA initiation and processing in adenovirus and murine leukaemia virus oncogenesis.

Massachusetts Institute of Technology

Department of Microbiology

Cambridge, MA 02139.

Constructing chromosome maps of Bacillus thuringiensis. Carrying out identification of sporulation and crystal-forming genes with assessment of the role of phage in crystal formation.

Massachusetts Institute of Technology

Biotechnology Process Engineering Center Rm 66-472-MIT, Cambridge, MA 02139.

Tel: 617 253 8428

Undertakes joint research projects with industry.

MediSense Inc

128 Sidney St, Cambridge, MA 02139-4239.

Tel: 617 492 2373 Telex: 951131 Fax: 617 576 6560

Manufactures and sells a blood glucose monitoring system for diabetic blood glucose management. Carrying out research and development of advanced biosensors and diagnostics in the US and UK.

Microfluidics Corp

44 Mechanic Street, Newton, MA 02164. Tel: 617 965 7255 Telex: 755709

Manufacture microfluidizers for the production of liposomes and emulsions. Division of Biotechnology Development Corp, US.

Micron Separations Inc

135 Flanders Road, PO Box 1046, Westboro, MA 01581-1046. Tel: 508 366 8212/800 444 8212 Telex: 4974298 Fax: 508 366 5840

Manufactures nylon, nitrocellulose and cellulose acetate membranes and filters in pore sizes from 0.1 to 20.0 microns, with applications in the biotechnology membrane, diagnostic media, microfiltration and process markets. Incorporate these filter membranes in a broad range of devices and filter units.

MilliGen/Biosearch

Division of Millipore Core

186 Middlesex Turnpike, Burlington, MA 01803.

Tel: 617 229 2870/800 872 0071 Telex: 508487

2459

Fax: 617 229

Established to develop and produce instrumentation, reagents and control systems for the synthesis and sequencing of biomolecules. Products include small and large scale DNA and RNA synthesizers, covalent protein sequencers and automated peptide synthesizer systems, incorporating continuous flow instruments, and reagents. Currently developing multiplex DNA sequencing technology.

Millipore Analytical

80 Ashby Rd, Bedford, MA 01730.

Tel: 617 275 9200

Distribute instruments for use in molecular biology including equipment and reagents for peptide synthesis. Division of Millipore Corp.

Millipore Corp

80 Ashby Road, Bedford, MA 01730.

Tel: 617 275 9200/800 225 3384 Telex: 4430066 Fax: 617 275

5550/5553

Supplies a wide range of membranes and filtration equipment, including the CX ultrafilter for concentration, desalting and dialysis of macromolecular solution of 1 to 100 ml without shearing or polarization and without sample loss; available in 10,000 and 30,000 molecular weight cut-offs. Also supplies a range of defined porosity filters, microbial filters, water treatment systems etc, peptide synthesizers and analyzers, enzymes and diagnostic kits. Produces equipment for liquid chromatography through its subsidiary Waters Associates Inc, US.

MJ Research Inc

215 Fifth St, Kendall Square, Box 363, Cambridge, MA 02142. Tel: 617 354 0016 Fax: 617 354 7763

Supply electrophoresis equipment.

MKS

Six Shattuck Rd, Andover, MA 01810. Tel: 508 975 2350/800 227 8766

Telex: 508 975 0094 Fax: 508

Manufacture closed-loop process oxygen, nitrogen and carbon dioxide flow control products for fermentation and cell culture systems.

The Nest Group

45 Valley Road, Southboro, MA 01772.

Tel: (617) 481 6223

Supply equipment for packing high performance liquid chromatography

Part III Massachusetts - MA UNITED STATES OF AMERICA

New England Biolabs Inc

32 Tozer Road, Beverly, MA 01915. Tel: 508 927 5054/800 632 5227 Telex: 6817316 Fax: 508 921 1350

Has over 130 different restriction endonucleases available. Also offers ligases, polynucleotide kinases, polymerases, nucleases, methylases, DNA sequencing vectors, DNA samples, DNA molecular weight standards, linkers, adapters, primers and reagents for mRNA isolation.

New England Immunology Associates

53 Smith Place, Cambridge, MA 02138.

Tel: 617 661 1117

Offer custom services in antiserum production as well as in the preparation of antibodies conjugated with enzymes or fluorochromes.

Nova Biomedical Corp

200 Prospect St, PO Box 9141, Waltham, MA 02254-9141. Tel: 617 894 0800 Telex: 200127 Fax: 617 893 6998

Manufactures automated blood gas, electrolyte, chemistry and haematology analyzers for clinical laboratories.

Oncolab Inc

36 The Fenway, Boston, MA 02215. Tel: 617 536 0850

Developing cancer diagnostics, therapeutics and vaccines. Subsidiary of Brain Research Inc.

Orion Research Inc

The Schraft Center, 529 Main St, Boston, MA 02129. Telex: 4430019 Tel: (617) 242 3900

Manufacture packs of cyanide standards for use in cyanide electrodes, as well as pH electrodes, pH meters etc.

Oros Systems Ltd

222 Third St, Cambridge, MA 02142. Tel: 617 868 6767 Fax: 617 868 7739

Manufacture affinity chromatography-based systems for purification of monoclonal antibodies.

Ortho Diagnostic Systems Inc

Cambridge Research Laboratory

195 Albany Street, Cambridge, MA 02139.

Carrying out long term basic research in medical diagnostic methods including immunological methods using hybridomas and recombinant DNA techniques, DNA sequencing and screening of cDNA, production of genome libraries, protein purification, cell culture etc. Developing diagnostics for HIV antibodies.

Oxford Instruments North America Inc

3A Alfred Circle, Bedford, MA 01730. Telex: 230 951 352 Tel: (617) 275 4350

Manufacture cryogenic systems including cryogenic containers, refrigerators, thermometers, valves, magnets and cryostats.

Polymer Laboratories Inc

Supply columns for HPLC for peptide purification. Subsidiary of Polymer Laboratories, UK.

Rainin Instrument Co Inc

Mack Road, Woburn, MA 01801. Tel: 617 935 3050/800 4 RAININ/800 FOR HPLC Telex: 949497 Fax: 617 938 8157

1715 64th St, Emeryville, CA 94608. Tel: 415 654 9142 Fax: 415 652 8876

Manufacture a motorized battery-operated hand pipette with four modes; pipette, dilute, multidispense and titrate, affinity and ion exchange chromatography and HPLC equipment, and associated software.

Repligen Corp

One Kendall Square Building 700, Cambridge, MA 02139. Tel: 617 225 6000/800 622 2259 Telex: 881987 F Fax: 617 494 1786

Research and development company working on recombinant DNA technology, enzymology and monoclonal antibodies. Developing animal and health-care products including AIDS vaccine, enzymes and proteins, as well as protein A in association with Applied Immune Science, US. Have produced recombinant AIDS virus protein for research use. Also have interest in pesticides.

Repligen-Sandoz Research Corp

128 Spring St, Lexington, MA 02173. Tel: 617 861 3816 Fax: 617 861 9241

Joint venture set up to develop Bt insect pest control products and enzymatic lignin degradation processes for the pulp industry.

Research Biochemicals Inc

9 Erie Drive, Natick, MA 01760-1312.

Telex: 510 601 5087 Tel: 508 651 8151 Fax: 508 655 1359

Manufacturer and supplier of pharmacologically active compounds including adrenergics, benzodiazepines, cholinergics, dopaminergics, enzyme inhibitors, excitatory amino acids, GABA-ergics, histaminergics, neurotoxins, opioids and serotonergics as well as compounds active at the cocaine, PCP and sigma receptors, HPLC reference standards and the USP grade drugs.

Rigaku/USA Inc

3 Electronics Ave, Danvers, MA 01923. Tel: 617 777 2446 Fax: TWX: 710 347 6511 Supplies X-ray diffraction equipment.

Rohm Tech Inc

195 Canal St, Malden, MA 02148.

Tel: 617 321 6984 Telex: 200721 Fax: 617 322 0358

Supply columns, packings and supports for ion and affinity chromatography (see Rohm Pharma, Germany).

Romicon Inc

high solids content.

100 Cummings Park, Woburn, MA 01801. Tel: 617 935 7840/800 356 4031 Telex: 949333 Fax: 617 935

Manufacture equipment and membranes for filtration including large diameter hollow fibre membranes in a variety of different molecular weight cut-offs and polymers suitable for use with solutions of high viscosity or

Rowley Biochemical Institute

Route 1, Rowley, MA 01969. Tel: (617) 948 2067

Specializes in the supply of dyes, stains and auxillary reagents for histology, pathology, haematology and microbiology.

33 Locke Drive, Marlborough, MA 01752-1146.

Tolar: \$10.601.6953 Fax: 508.481.7683

Develops and markets membrane bioreactor and membrane affinity purification systems. Has joint development programme with Tanabe Seiyaku Co Ltd of Japan to commercially produce an optically active pharmaceutical intermediate.

Seragen Inc

97 South St, Hopkinton, MA 01748. Tel: 617 435 2331/800 343 1346 Telex: 951966

Develops and manufactures immunological products and reagents for research use, including antiserums, monoclonal antibodies, growth factors, cancer therapeutics, reagents and cell sorters.

Serono Laboratories Inc

100 Longwater Circle, Norwell, MA 02061. Tel: 617 982 9000 Fax: 617 871 6754

Manufacture diagnostic test kits based on the use of monoclonal antibodies using magnetic immunoassay, diagnostics and therapeutics for fertility (including natural products), growth and human growth hormone as well as immunological products and vaccines. Part of the Ares-Serono Group,

UNITED STATES OF AMERICA Michigan - MI Part III

Shimadzu Scientific Instruments Inc

7102 Riverwood Drive, Columbia, MA 21046.

Fax: 301 730 1222 Tel: 301 381 1227 Telex: 087959

Manufacture a wide range of analytical instruments including UV/visible/near infra-red spectrophotometers, atomic absorption systems, a complete range of gas, liquid and thin layer chromatographs, equipment for isotachophoresis, balances, integrators and particle analyzers

T-Cell Sciences Inc

840 Memorial Drive, Cambridge, MA 02139. Tel: 617 864 2160/0632 Telex: 910 240 1560 Fax: 617 864 0854

Developing monoclonal antibodies, DNA/RNA probes, therapeutics etc, to manipulate receptor-based proteins, T-cells and subpopulations and relate them to diseases such as cancer and autoimmune conditions eg arthritis and the production of interleukin-2.

Thermedics Inc

470 Wildwood St, PO Box 2999, Woburn, MA 01888-1799. Telex: 923473 Fax: 617 933 4476

Supply analyzers for detection of nitrosmines, amines, ethyl carbamate and

explosives.

Thermo Jarrell Ash Corp

PO Box 9101, Franklin, MA 02038.

Tel: 508 520 1880 Telex: 174230 Fax: 508 520 1732

Manufacture advanced furnace/flame atomic absorption spectrometers.

Toxikon Corp

225 Wildwood Avenue, Woburn, MA 01801.

Tel: 617 933 6903 Telex: 924441

Offer services in product safety testing and toxicology.

Transformation Research Inc

155 N Beacon St, Brighton, MA 02135.

Tel: 617 783 4124

Carrying out research on antibodies and growth factors.

United States Department of Agriculture

Plant Physiology Institute

Beltsville, MA 20705.

Studies aimed at improving biological nitrogen fixation in forage legumes and in grasses include genetics, lectins and binding proteins in Rhizobium strains and assessment of nitrogen fixation in associative fixation between Spirillium and corn or sorghum. Developing cell and tissue culture methods and establishing conditions for embryogenesis in cells of crop plants. Also studying plant viruses: pathology, biochemistry and host-vector relationships.

VG Instruments Inc

32 Commerce Center, Cherry Hill Drive, Danvers, MA 01923. Tel: 617 777 8034

Manufactures analytical instruments including combined gas chromatography/mass spectrometry systems for process monitoring suited to monitoring of fermentations and research into bioengineering systems and reactions.

Vio-medics

Massachusetts Biotechnology Park, 365 Plantation St, Worcester, MA

Tel: 617 791 8934

Supply fluorescent labelled products including avidin, streptavidin, protein A and secondary antibodies as well as a range of low molecular weight fluorochromes.

Waters Chromatography

Division of Millipore Corp

34 Maple St, Milford, MA 01757

Tel: 508 478 2000/800 252 HPLC Telex: 948413

Develops, manufactures and markets a wide range of HPLC instruments, accessories, prepacked columns and other related supplies. In particular, modular instruments allow for flexibility in operating conditions, detection systems, data recording, logging and processing. Has pioneered development of prepacked columns for separation of sugars and oligosaccharides, peptides, proteins, nucleotides, nucleic acids, pharmaceuticals and various food flavourings and additives, as well as a scanning fluorescence detector.

Woods Hole Oceanographic Institution

Woods Hole, MA 02543.

Tel: (617) 548 1400 Telex: 951679

Developing methods for growing seaweeds as a biomass source for fuel production by anaerobic digestion as well as for the production of gums, other polysaccharides, animal feed and fertilizer.

Worcester Polytechnic Institute

Department of Life Sciences

Institute Road, Worcester, MA 01609.

Studying the use of Ti plasmids of Agrobacterium tumefaciens as a means of introducing new genetic material into protoplasts higher plants using liposomes.

Zymark Corp

Zymark Center, Hopkinton, MA 01748. Tel: 508 435 9501 Fax: 508 435 3439

Supplies automated systems for sample preparation and analysis suited to research method development, multiple analysis and dedicated routine

Michigan - MI

Anspec Inc

PO Box 7730, Ann Arbor, MI 48107.

Tel: 313 665 9666

Supplies a wide range of chromatographic equipment, reagents and

BioImage Corp

1460 Eisenhower Place, Ann Arbor, MI 48108. Fax: 313 971 1061 Tel: 313 971 7500/800 624 5894

Manufactures electrophoresis apparatus and analytical imaging instruments, densitometers, scanners and associated computer software. Subsidiary of Eastman Kodak.

BioLectronics Corp

1186 Combermere, Troy, MI 48083. *Tel:* 313 588 8022

Manufacture electrofusion systems.

BioQuant Inc

1919 Green Rd, Ann Arbor, MI 48105.

Tel: 313 995 2176

Supply monoclonal and polyclonal antibodies, radioisotopes and diagnostic test kits including an AIDS test.

Burdick & Jackson

1953 South Harvey Street, Muskegon, MI 49442.

Tel. 616 726 3171/800 368 0050

Purifies solvents for high performance liquid chromatography, spectrophotometry, fluorescence analysis of biological products, pesticide residues, etc.

Covalent Technology Corp

PO Box 1868, Ann Arbor, MI 48106. Tel: 313 769 5377

Developing diagnostics for hormones and diseases. Subsidiary of KMS Industries, US.

Coy Laboratory Products Inc

22 Metty Drive, Ann Arbor, MI 48103.

Tel: 313 663 1320

Supply apparatus for cell culture including incubators, bacterial culture equipment and anaerobic culture systems.

Cryomed Inc

51529 Birch St, New Baltimore, MI 48047. Tel: 313 725 4614 Fax: 313 725 7501

Supply cryogenic equipment, temperature probes and level monitors.

Difco Laboratories Inc

PO Box 331058, Detroit, MI 48232-7058.

Tel: 313 961 0800 Telex: 235683 difco lab Fax: 313 961 1501

Produces microbial culture media, diagnostic test kits and laboratory reagents.

Part III Michigan - MI UNITED STATES OF AMERICA

Dow Corning Corp

Dow Corning Center, PO Box 0994, Midland, MI 48686-0994. Tel: (517) 496 4000 Telex: 227450

Major producer of chemicals, including plastics for industrial, agricultural and domestic use. Developing industrial enzymes and related processes.

Eberbach Corp

505 S Maple, PO Box 1024, Ann Arbor, MI 48106. Tel: 313 665 8877 Fax: 313 665 9099

Manufactures laboratory equipment including separation and purification equipment, shakers and blenders, cooling plates and incubators etc.

Enzymes of America Inc

50575 Ryan Rd, Utica, MI 48087. Tel: 313 731 6424

Produce custom urinary proteins for use in immunodiagnostics.

Fenwal BioTechnology Systems

1425 Lake Cook Rd, Deerfield, MI 60015.

Tel: 312 940 5808

Produce cell culture systems. Division of Baxter Travenol Laboratories,

Gelman Sciences Inc

600 South Wagner Road, Ann Arbor, MI 48106 Tel: 313 665 0651/800 521 1520 Telex: 810 Telex: 810 223 6036

Manufactures ultrafiltration systems and membranes for sterilization of culture media or separation of blood fractions for diagnostic sample testing, as well as other microfiltration equipment. Specialized filters are manufactured for medical uses.

Immunon/Lipshaw Corp

7446 Central Ave, Detroit, MI 48210. Tel: 800 547 7429 Telex: 752418

Produce immunohistochemicals for tissue staining of any human antigen.

In Vitro International Inc

7885 Jackson Road, Suite 4, Ann Arbor, MI 48103. Tel: (313) 426 5053

PO Box 697, Niagara Falls, NY 14303. Tel: 716 297 3658

A type culture depository. Joint venture between Intra Gene International and University Micro Reference Laboratories, US. Accept only hosts containing plasmids that can be worked on in a P1 or P2 facility.

Kellogg Co

236 Porter Street, Battle Creek, MI 49016. Tel: (616) 966 2000

Major producer of food products and breakfast cereals in particular. Has a substantial investment in Agrigenetics, US.

Meridian Instruments

2310 Science Parkway, Okemos, MI 48864.

Manufactures an advanced anchored cell sorter and fluorescence analyzer for use in automated clonal selection of monolayer cell culture. The instrument combines computer-controlled laser technology, epi-illumination microscopy and high resolution stage positioning.

Michigan State University

Plant Research Laboratory

East Lansing, MI 48824-1312. Tel: (517) 355 1855

Studying production of ethanol from cellulosic feed materials using hydrofluoric acid hydrolysis followed by yeast fermentation.

Michigan, University of, Ann Arbor

Medical School Department of Biological Chemistry

1335 East Catherine Street, Ann Arbor, MI 48104.

Investigating isolation analysis of polyoma virus tumour antigens, cloning of coding sequences into plasmids and production of proteins in E coli.

MRC Systems Ltd

24079 Research Drive, Farmington Hills, MI 48024. Tel: 313 476 7795 Telex: 295796 Fax: 313 476 6589

Supply clean rooms and controlled environment installations.

Neogen Corp

620 Lesher Place, Lansing, MI 48912. Tel: 517 372 9200

Produce biotechnological products for food, agriculture and veterinary healthcare industries including diagnostics.

Plas-Labs Inc

917 E Chilson St, Lansing, MI 48906. Tel: (517) 372 7177

Supplies anaerobic culture apparatus and glove boxes as well as microbiological hoods and bacteriological safety enclosures.

Polycell Inc

Fax: 313 873 4935

Developing diagnostics based on bifunctional monoclonal antibodies binding to horseradish peroxidase and certain specie-specific antibodies including mouse, human, rat and rabbit with application in AIDS, ovarian cancer and neurochemistry research as well as imaging for heart disease. Subsidiary of Quest BioTechnology Inc, US.

Proteins International Inc

1858 Star Batt Drive, Rochester, MI 48309.

Tel: 313 852 1067

Produce immunodiagnostics and custom monoclonal antibodies.

Quest BioTechnology Inc

320 Fisher Bldg, Detroit, MI 48202. Tel: 313 873 0200 Telex: 910 2

Telex: 910 250 0840 Fax: 313 873 4935

Research and development company using techniques of recombinant DNA technology and hybridomas to produce diagnostics and pharmaceuticals. Acquires, develops and commercializes biotechnological and human health-care products and processes. Products include bispecific monoclonal antibodies, in vitro diagnostics and therapeutics for cancer and imaging techniques. Has recently acquired American Monitor Corp for the development of a clinical instrumentation and diagnostics division.

Quest Blood Substitute Inc

320 Fisher Building, Detroit, MI 48202.

Tel: 313 873 0200 Telex: 910 2500840 Fax: 313 873 4935

Developing blood substitute products based on its modified cross-linked haemoglobin technology. Subsidiary of Quest BioTechnology Inc, US. Licensed to: Northfield Laboratories; Baxter International.

Recomtex Corp

4700 S Hagadorn Rd, Suite 290, East Lansing, MI 48823. Tel: 517 332 1600

Venture capital firm which invests in biotechnology and funds start up companies. Investments in Biotrack, Applied ImmuneScience, Salutar, Penederm, Vical, Somatix, Biosym Technologies.

Solohill Engineering Inc

323 E William St, Suite 44, Ann Arbor, MI 48104. Tel: 313 665 0453 Fax: 313 665 7880

Manufacturing: 912 N Main St, Ann Arbor, MI 48104

Produces glass, plastic and collagen coated beads for use as microcarriers in cell culture applications.

Upjohn Co

7000 Portage Road, Kalamazoo, MI 49001. Tel: 616 323 4000 Telex: 224401 upjohn ofc kmz Fax: 616 323 7034

Has groups developing basic techniques in the following areas: molecular biology; cell biology; biopolymer chemistry. Results are made available to groups in pharmaceutical, agricultural fermentation and diagnostics research. Supports basic research in areas of molecular biology, protein and peptide chemistry including viral protein technology in relation to epitope immunology and novel vaccines, antibiotics, tetracycline, bovine growth hormone, seeds, recombinant DNA and hybridoma technology. The biotechnology group supports both product lead-finding and development. Products under development include immuno-modulator for AIDS and AIDS-related diseases.

UNITED STATES OF AMERICA Minnesota - MN Part III

Minnesota - MN

American Biosystems Inc

PO Box 112, Marine-on-St Croix, MN 55047. Tel: 612 430 3643

Offer services in custom immunoassay development, custom immunization and production of antiserums to peptides and steroids. Sell products in bulk quantities only.

American Crystal Sugar Co

101 North Third Street, Moorhead, MN 56560-1990. Tel: 218 236 4400

Sugar manufacturer involved in biogas production from sugar factory effluent.

Betaseed Inc

PO Box 195, Shakopee, MN 55379-0195. Tel: 612 445 8090 Telex: 4310025 betaspk

Telex: 4310025 betaspk Fax: 612 496 0205

Select, produce and market seed of improved varieties of sugar beet and

BioTrol Inc

11 Peavey Rd, Chaska, MN 55318. Tel: 612 448 2515 Fax: 612 448 6050

Specialize in environmental services including microbiological treatment and elimination of toxic and hazardous contaminants in water or soil. Products include bioreactors and proprietary bacterial inoculants. Services include soil washing, biotreatment and treatability testing.

Celox Corp

10701 Red Circle Drive, Minnetonka, MN 55343. Telex: 29812. Manufacture fortified defined serum-free media supplements.

Diagnostic Inc

Microbiological Products

315 27th Avenue, SE Minneapolis, MN 55434. Tel: (612) 379 8080 Telex: 4996985 diagnos

Market biological materials, speciality biochemicals, veterinary products, pharmaceuticals and derivatives of hyaluronic acid.

Ecochem Research Inc

11 Peavey Road, Chaska, MN 55318-2321. Tel: 612 448 4337 Fax: 612 448 1651

Offer services in custom synthesis, modification and immunoassay development.

Endotronics Inc

8500 Evergreen Boulevard, Coon Rapids, MN 55433.

Tel: 612 786 0302/800 325 1112 Telex: 910 380 4006 Fax: 612 786 0915

Manufactures a line of scaleable cell culture instruments for the continuous production of mammalian cell secreted proteins incorporating hollow fibre technology, sophisticated process control and a proprietary cycling process to optimize conditions for research, pilot and commercial scale production.

Genesis Laboratories Inc

5182 West 76th St, Minneapolis, MN 55435. *Tel*: 612 835 3446

Produce diagnostics including a blood glucose test and techniques for drug monitoring. Carrying out research on animal breeding and improvement.

Incstar Corp

1951 Northwestern Ave, Stillwater, MN 55082.

Tel: 612 439 9710/800 328 1482 Telex: 6879023 Fax: 612 779 7847

Supply radioimmunoassay test kits and reagents for hormones and allergies including histochemical antibodies and antiserums.

Lifecore Biomedical Inc

1055 10th Ave SE, Minneapolis, MN 55414. Tel: 612 379 8080

Produce hyaluronic acid and hydroxyapatite.

Minnesota Mining & Manufacturing Co

3-M Co

3-M Center, St Paul, MN 55144-1000. *Tel*: (612) 733 5454 *Telex*: 297023

Manufacturer and worldwide distributor of chemicals and chemical products. Has biotechnical research programmes in relation to pharmaceutical, diagnostic, medical and agricultural objectives with associated aspects of cell culture, virlogy, biochemistry etc.

Minnesota, University of

Gray Freshwater Biological Institute PO Box 100, Navarre, MN 55392. Tel: 612 471 7777

Carrying out research on the enzyme thioredoxin reductase and its involvement in cell division and protection from sunburn.

Minnesota, University of, Minneapolis

Minnesota, University of, St Paul

School of Medicine Department of Biochemistry 1305 Mayo, Minneapolis, MN 55455. Studying biochemistry of genetic recombination in yeast.

studying electronistry of genetic recommend in year

Department of Botany

St Paul, MN 55108.

Investigating gene structure and regulation in developmental biology of chloroplasts and nitrogen fixation in vascular and non-vascular systems.

Molecular Genetics

10320 Bren Road East, Minnetonka, MN 55343. Tel: 612 935 7335 Fax: TWX: 910 576 2430

Markets veterinary products including monoclonal antibody based diagnostics. Developing human vaccines against herpes, animal vaccines including scours vaccine, bovine growth hormone and other animal growth stimulators. Also developing new plant varieties including high tryptophan corn and corn with resistance towards commercial herbicides. Plant work is in conjunction with American Cyanamid, US and Pioneer Hi-Bred, US. Acquired by BioTechnica International, US.

NuAire Inc

2100 Fernbrook Lane, Plymouth, MN 55441.

Tel: (612) 553 1270/800 328 3352

Telex: 290871

Manufactures controlled environment safety cabinets of classes P1 to P3.

Osmo Membrane Systems

5951 Clearwater Drive, Minnetonka, MN 55343. Tel: 612 933 2277/800 352 9008 Telex: 290847

Manufacture reverse osmosis, ultrafiltration and microfiltration systems.

Osmonics Inc

5951 Clearwater Dr, Minnetonka, MN 55343.

Tel: 612 933 2277/800 351 9008 Telex: 290847 Fax: 612 933 0141

Manufactures a wide range of filters and related products including reverse osmosis systems for use in desalination and water purification.

Pasilac Inc

660 Taft St NE, Minneapolis, MN 55413. Tel: 612 331 7710 Telex: 29 0430

Produce membrane filters.

Protatek International Inc

1491 Energy Park Drive, St Paul, MN 55108. *Tel*: 612 644 5391

Produce virus diagnostic test kits and therapeutics, specialized microrganisms and veterinary vaccines, therapeutics and diagnostics.

R & D Systems Inc

614 McKinley Place NE, Minneapolis, MN 55413.

Tel: 612 379 2956/800 328 2400 Telex: 750627 Fax: 612 379 6580

Develop and market growth factors including human and porcine platelet-derived growth factor, as well as corresponding neutralizing antibodies.

Part III Missouri - MO UNITED STATES OF AMERICA

Research Inc

Control Systems

PO Box 24064, MN 55424. *Tel:* 612 941 3300

Produce laboratory-grade, process management and control equipment and computer software suitable for LIMS applications.

Syneco Systems Inc

3650 Annapolis Lane, Plymouth, MN 55447. Tel: 612 559 4210

Supply biological wastewater treatment products including anaerobic digester systems and accessories.

Systec Inc

3816 Chandler Drive, Minneapolis, MN 55421.

Tel: (612) 788 9701/800 328 6795 Telex: 703069

Develops and manufactures machines for synthesis of oligonucleotides.

Mississippi - MS

National Aeronautics & Space Administration (NASA)

Earth Resources Laboratory NSTL Station, MS 39529.

Tel: (601) 688 3155

Developing total energy recovery systems based on growing plants on recycled minerals, capturing energy photosyntheticaly and converting it into methane and ethanol using digestion and fermentation.

Missouri - MO

Anheuser-Busch Inc

One Busch Place, St Louis, MO 63188. *Tel:* 314 577 2000

Carrying out research on yeast metabolism and growth including both aerobic and anaerobic conditions in continuous cultivation as well as studies on yeast molecular biology and the control of gene expression. Products include beer, yeast and fermentation technology, interferon by recombinant DNA techniques.

Aquascience Research Group Inc

1100 Gentry Street, North Kansas City, MO 64116. Tel: 816 842 5936

Supplies products for aquaculture including antibiotic (neomycin).

Bio-Kyowa Inc

975 Nash Rd, PO Box 1550, Cape Girardeau, MO 63701. Tel: 314 335 4849

Produce amino acids. Subsidiary of Kyowa Hakko Kogyo, Japan.

Biokyowa Inc

975 Nash Rd, Box 1550, Cape Girardeau, MO 63701. Tel: 314 335 4849

Developing diagnostics and feed additives. Products include an L-lysine supplement for poultry or pigs.

Boehringer Ingelheim Animal Health Inc

2621 N Belt, St Joseph, MO 64502. Tel: 816 233 2571 Telex: 426205

Produce veterinary products and pharmaceuticals. Using recombinant DNA technology to develop animal vaccines. Subsidiary of Boehringer Ingelheim, US.

CompuGene

223 Renaldo Drive, Chesterfield, MO 63017-2210. Tel: 314 434 7250/800 231 4545

Produces computer software packages for use in molecular biology and analysis of DNA suitable for IBM PC or VAX systems.

Fermenta Animal Health

PO Box 901350, Kansas City, MO 64190-1350. Tel: 816 891 5500/800 422 0333 Fax: 816 891 0663

PO Box 2338, Fort Collins, CO 80522.

Tel: 303 221 2050

Produce veterinary diagnostics and vaccines as well as pesticides. Subsidiary of Fermenta, Sweden.

HEMCO Corp

111 N Powell, Independence, MO 64050.

Tel: 816 796 2900/800 821 3504 Telex: 434080 Fax: 816 796
3333

Supply clean room equipment.

Invitron Corp

4649 Le Bourget Drive, St Louis, MO 63114. Tel: 314 426 5000/800 325 1792 Fax: 314 426 6331

Large-scale contract manufacturer of biopharmaceuticals derived from mammalian cell culture utilizing proprietary perfusion culture technology. This technology produces a very high quality biological. Provides comprehensive services to complete all phases of production, process qualification and purification starting from a cell line to bulk finished therapeutic grade biopharmaceutical material. Products are manufactured under cGMPs. Major contracts: Rorer Group Inc to produce Factor VIII and a monoclonal antibody to purify Factor VIII; and SmithKline Beckman Corp for the development and production of soluble T4 (a potential AIDS therapeutic).

Kinetek Systems Inc

11810 Borman Drive, St Louis, MO 63146. Tel: 314 432 0870/800 222 2995 Fax: 314 432 0357

Supply cell and tissue culture equipment and supplies, bioreactors and supports and packings for affinity chromatography and HPLC.

Labconco Corp

8811 Prospect Ave, Kansas City, MO 64132.

Tel: 816 333 8811/800 821 5525 Telex: 42568 Fax: 816 363 0130

Offers a variety of controlled working environments, including horizontal laminar flow hoods, class II biohazard safety cabinets, and fume hoods for general use as well as compact mobile lyophilizers.

Labomatic Instruments Inc

901 Cosby St, Liberty, MO 64068. Tel: 816 792 3719 Fax: 816 792 1922

Supply columns for preparative HPLC chromatography (see Labomatic, Switzerland).

Mallinckrodt Inc

675 McDonnell Boulevard, PO Box 5840, St Louis, MO 63134.

Tel: 314 895 2000/800 325 7155 Telex: 447245 Fax: 314 895 2005

2703 Wagner Place, Maryland Heights, MO 63043. Tel: 314 895 2352/800 825 3688 Tx: 4312022

Produces high-grade reagents for genetic research and biotechnical applications and a wide range of other fine chemicals for cosmetic, electronic and medical use including medicinal narcotics, acetaminophen, mineral supplements, aromatic fluorine intermediates, enzymes, disposable products for clinical analyses, radioimmunoassay kits, radiopharmaceuticals, non-ionic contrast media and flavours for the food industry. Has a research agreement with Washington University St Louis, US in the area of hybridoma technology in relation to healthcare and diagnostic medicine. Subsidiary of IMC Corp, US.

Merck & Co Inc

Isotopes Division

4545 Oleatha Avenue, St Louis, MO 63116. Tel: 800 325 9034 Fax: 314 353 3754

PO Box 2951 Terminal Annex, Los Angeles, CA 90051. Tel: 800 372 6454

Supplies isotope-labelled compounds and stable isotopes: deuterium, carbon-13, nitrogen and oxygen isotopes.

Missouri, University of

Department of Biochemistry 215 University Hall, Columbia, MO 65211. Tel: (314) 882 7606

Undertaking genetic modification of nitrogenase of Rhodopseudomonas capsulata to increase rates of hydrogen production from sugars such as cellobiose as well as to eliminate uptake function of enzyme.

UNITED STATES OF AMERICA Nebraska - NE Part III

Missouri, University of

Department of Agricultural Engineering

100 Agricultural Engineering Building, Columbia, MO 65211. Tel: (314) 882 2369

Developing methods for isolation and enumeration of microbial populations in anaerobic digesters as well as determination of nutritional and environmental requirements of pure cultures of some organisms.

Monsanto Chemical Co

800 North Lindbergh Blvd, PO Box 7090, St Louis, MO 63167. Telex: 447282 Fax: 314 694 4105 Tel: 314 694 1000

Has developed composite hollow fibre membrane systems for separation of individual gases from mixtures, suitable for recovery of hydrogen, methane and other valuable gases from waste streams or from biogas generated by anaerobic digestion or on landfill sites. Supporting a significant programme of research on the structure of oligosaccharides at the Biochemistry Department, Oxford University, UK. Also carrying out research on mechanisms of pesticide and herbicide resistance.

Monsanto Co

700 Chesterfield Village Pkwy, St Louis, MO 63198. Tel: 314 694 1000

Manufactures agrochemicals and pharmaceuticals. Carrying out research over a wide area including aspects of agriculture, biochemistry and other life sciences. Research interests include aspects of plant genetic manipulation using the Ti plasmid as vector as well as studies of the mechanism of resistance to virus infection.

P J Cobert Associates Inc

PO Box 12668, St Louis, MO 63141 Fax: 314 993 2491 Tel: 314 993 2390

Distributes accessories for chromatography including stationary phases for gas/liquid chromatography, column packing material for high performance liquid chromatography, purified solvents etc.

Pathfinders Laboratories Inc

11542 Fort Mims Drive, St Louis, MO 63146. Tel: 314 569 0681

Supply a wide range of carbon 14-labelled organic compounds including amino acids, carbohydrates, lipids, pesticides etc, as well as general biochemicals and chemicals.

Seiler Instrument & Manufacturing Co Inc

170 E Kirkham Ave, St Louis, MO 63139. Fax: TWX: 910 760 1658

Supply a range of optical and fluorescence research microscopes including models working with incident light, incident light and transmitted light or phase contrast allowing alternate or simultaneous use of fluorescence and contrast techniques.

Sigma Chemical Co

PO Box 14508, St Louis, MO 63178. Tel: 314 771 5750/800 325 3010 Telex: 434475 Fax: TWX: 910 761 0593

Supplies a very wide range of fine chemicals, biochemicals, chemical reagents and enzymes, including affinity chromatography media, deuterated compounds, fermentation nutrients, immunochemicals, gel filtration media, ion exchangers, venoms, lectins, stabilised red blood cells, materials for tissue culture, absorbents for thin layer chromatography, restriction enzymes, nucleotides etc. Also supplies diagnostic kits and reagents for automated analysis.

Tripos Associates Inc

169 South Hanley Road, Suite 303, St Louis, MO 63144. Tel: 314 647 1099/800 323 2960 Fax: 314 647 9241

Develops molecular modelling and analysis software and provides related scientific support services for the pharmaceutical, biotechnology and chemical research industries. Provides biopolymer and 'small' molecules software in a single package, and rapid and flexible construction and manipulation of macromolecules, including insertions, deletions and point mutations. Subsidiary of Evans & Sutherland.

Washington, University of

Department of Microbiology

660 South Euclid Avenue, St Louis, MO 63110.

Carrying out studies on synthesis of proteins in cell cultures of chicken embryo fibroblasts.

Washington, University of

Department of Biological Chemistry

4559 Scott Avenue, St Louis, MO 63130.

Studying control of nucleic acid synthesis and DNA sequences.

Washington, University of

Department of Plant Biology

4559 Scott Avenue, St Louis, MO 63130.

Studying synthesis of sub-units of soya storage protein in cell-free systems using RNA isolated from soybean. Also studying regulation of synthesis of seed storage proteins.

Washington, University of

Department of Medicine

660 South Euclid Avenue, St Louis, MO 63110.

Researching into control of insulin biosynthesis, isolation and purification of polypeptide hormones and identification by immunohistochemical methods using monoclonal antibodies.

Washington, University of

Department of Internal Medicine

St Louis, MO 63130.

Tel: 314 362 8834

Carrying out research into applications of plant molecular biology including aspects of the use of the barley seed amylase regulatory system as a vehicle for expression of foreign genes.

Montana - MT

ChromatoChem Inc

2837 Fort Missoula Rd, Missoula, MT 59801.

Fax: 406 728 5078 Tel: 406 728 5897/800 426 7227

Manufacture an aldehyde activated kit for production of custom affinity supports and HPLC columns.

Montana State University

Department of Biochemistry

Johnson Hall, Bozeman, MT 59717.

Tel: (406) 994 4123

Studying microbiology of anaerobic digestion under various conditions of loading with cellulose (waste paper).

National Institute of Allergy & Infectious Diseases

Rocky Mountain Laboratories

Hamilton, MT 59840.

Tel: 406 363 3211

Developing vaccines by conventional methods as well as through use of recombinant DNA technology. Activities include attempts to produce a safer vaccine against whooping cough.

Ribi ImmunoChem Research Inc

PO Box 1409, Hamilton, MT 59840.

Telex: 295708 Tel: 406 363 6214/800 548 RIBI Fax: 406 363

Produces a line of high-quality immunomodulators including proprietary adjuvant systems and mitogens for basic research and hybridoma production, derived from bacterial and mycobacterial cell walls.

Nebraska - NE

American Laboratories Inc

4410 South 102nd Street, Omaha, NE 63127.

Telex: 989648 itsiud Fax: 402 339 0801 Tel: 402 339 2494

Produces animal proteolytic enzymes, blood products, gland extracts and animal hormones.

Biologics Corp

2720 North 84th St, Omaha, NE 68134.

Tel: 402 393 7440/800 228 9529

Using recombinant DNA technology to develop vaccines.

Part III New Hampshire - NH UNITED STATES OF AMERICA

Harris Laboratories Inc

PO Box 80837, Lincoln, NE 68501.

Telex: 469018 Fax: 402 476 7598 Tel: 402 476 2811

Performs Phase I-IV clinical research, including bioanalytical services and regulatory consultation.

ISCO Inc

PO Box 5347, Lincoln, NE 68505.

Tel: 402 464 0231/800 228 4250 Telex: 484353 Fax: 402 464

Manufactures a wide range of laboratory instruments for LC, HPLC and

Li Cor Inc

4421 Superior St, PO Box 4425, Lincoln, NE 68504.

Telex: 910 621 8116 Fax: 402 467 2811/2819 Tel: 402 467 3576

Supply instrumentation for biological and environmental sciences including equipment for measurement of light intensity.

Midland Scientific Inc

1202 S 11th Street, Omaha, NE 68108.

Tel: 402 346 8352/800 642 5263 Fax: 402 346 7694

Supplies laboratory equipment and reagents including sterilizers, petri plate viewers, filtration devices, glassware etc, as well as histology reagents and stains.

Nebraska, University of

Department of Chemical Engineering

Lincoln, NE 68588

Studying production of fuel ethanol from corn and analysis of the energetics of the process.

Norden Laboratories

601 W Cornhusker Highway, Lincoln, NE 68521.

Tel: 402 475 4541

Produce vaccines and veterinary products including vaccines and therapeutics. Subsidiary of Smithkline Beckman, US.

United States Department of Agriculture

R L Hruska Meat Animal Research Center Department of Agricultural Engineering Research

Clay Center, NE 68933.

Tel: (402) 762 3241

Studying effect of temperature on rate of methane production from anaerobic digestion of livestock manures.

Nevada - NV

Benson Polymeric Inc

PO Box 12812, Reno, NV 89510.

Tel: 702 825 1493

Produces ion exchange resins and speciality column packings for high performance liquid chromatography, as well as amino acid calibration standards and buffers for amino acid analysis by column chromatography.

Gametrics Ltd

324 S Third St, Las Vegas, NV 89101

Tel: 702 384 1049 Fax: 702 388 9978

Colony Route, Alzada, MT 59311. Tel: 307 878 4494 Fax: 307 878 4499

Research company working on pest control and sex determination in humans and other mammals through sperm manipulation. Owns X/YGenetics Ltd, US.

Hamilton Co

4970 Energy Way, Reno, NV 89502-0012. Tel: 702 786 7077/800 648 5950 Tele. Telex: 354467/910 395 6031

Fax: 702 323 7259

Manufactures microsyringes and precision fluid dispensing devices as well as equipment for gas chromatography and HPLC.

Immunex Inc

1445 Hot Springs Rd, Carson City, NV 89701-3656. Tel: 702 885 9400/800 854 1903 Telex: 3718223 immunex Fax: 702 885 9721

Producing diagnostics, monoclonal antibodies, polyclonal antibodies to haptens, radioimmunoassay kits and reagents.

Linear Instruments Corp

500 Edison Way, Reno, NV 89502.

Tel: 702 786 3636 Fax: 702 783 5268

Manufacture equipment for HPLC and super critical fluid chromatography, flow cells, fluorometers and associated computer data systems and controls.

New Hampshire - NH

Berthold Analytical Instruments Inc

28 Charron Avenue, Nashua, NH 03063.

Tel: 603 889 3309/800 343 6345 Fax: 603 889 3409

Supply equipment for chromatography, bioluminescence, scintillation and radioactivity counting.

Inotech Biosystems International Inc

PO Box 586, Jaffrey, NH 03452.

Tel: 603 532 4235

Develop products for cell culture and immunology including cell harvesting equipment, radioimmunoassays and detection tests.

Labsphere Inc

Box 70, Shaker Street, North Sutton, NH 03260.

Tel: 603 927 4266 Fax: 710 366 0064

Manufacture integrating spheres, integrating sphere instrumentation and laser cavities as well as diffuse reflectance standards, materials and coatings.

Medarex Inc

12 Commerce Ave, West Lebanon, NH 03784.

Tel: 603 298 8456 Fax: 603 298 6114

Developing therapeutics and diagnostics based on monoclonal antibodies.

Neslab Instruments Inc

PO Box 1178, Portsmouth, NH 03801.

Tel: (603) 436 9444 Telex: 940830

Supplies low temperature cryobaths, offering temperatures to minus 80 degrees centigrade, with control stability of 0.1 degrees centigrade, as well as constant temperature circulators, controllers and water baths.

New Hampshire, University of

Jackson Estuarine Laboratory

Durham, NH 03824.

Tel: 603 862 2175

Developing improved strains of seaweed Chondrus crispus, which produces the gum carrageenan, using methods of strain selection, colchicine-induced polyploids and somatic hybridization.

Optomax Inc

9 Ash St, Route 130, Hollis, NH 03049.

Tel: (603) 465 2291 Telex: 710 228 3456

Manufacture particle analyzers.

Roan Innovation Incubators

1155 Elm St, Manchester, NH 03101.

Tel: 603 644 6110

Venture capital investment company with interests in biotechnology new

Schleicher & Schuell Inc

10 Optical Ave, Keene, NH 03431.

Tel: 603 352 3810/800 245 4024 Telex: 757910

Fax: 603 357

Supplies filter and speciality papers, glass-fibre filters, ultra- and microfiltration membranes and apparatus, as well as a wide range of products for chromatography. Products for use in genetic manipulation and molecular biology include a nitrocellulose sheet used to screen colonies for specific types from culture plates, microcolumns for recovery of DNA fragments that have been separated by gel electrophoresis using a special matrix that absorbs the DNA and allows contaminants to be flushed away.

UNITED STATES OF AMERICA New Jersey - NJ Part III

Steraloids Inc

PO Box 310, Wilton, NH 03086. Tel: 603 654 9509

Manufactures hormones for use in medical research. Almost 1500 steroids available from stock.

Verax Corp

HC 61, Box 6, Etna Rd, Lebanon, NH 03766. Tel: 603 448 4445 Telex: 910 250 7500/953072 Fax: 603 448

Manufactures scale up technology for mammalian cell culture including collagen supports for culture media and cell culture equipment.

New Jersey - NJ

Advanced Separation Technologies Inc

37 Leslie Court, Whippany, NJ 07981. Tel: 201 428 9080 Fax: 201 428 0152

Manufactures columns and column packings and supports etc for HPLC and liquid chromatography.

AGEN Inc

Fax: 201 428 9877

Produce diagnostics including a monoclonal antibody-based blood clot test based on coated latex beads, available in complete kit form. Carrying out research and development in human diagnostics and immunoassays coagulation, fibrinolysis, neonatal screening and whole blood immunoassay as well as veterinary diagnostics.

Agri-Diagnostics Associates

2611 Branch Pike, Cinnaminson, NJ 08077. Tel: 609 829 0110/800 322 5487 Telex Telex: 750493 Fax: 609 829

Developing simple on-site diagnostic systems based on dipstick tests using monoclonal antibodies to detect fungal and bacterial diseases of crops and pesticides in plants, soil, ground water and harvested crops. Products include turf-disease detection kits for Pythium Blight, Dollar Spot and Brown Patch as well as a range of on-site detection kits for other plant diseases and research ELISA kits. A joint venture between DNA Plant Technology, US and Koppers, US.

Ajinomoto USA Inc

Glenpointe Centre West, 500 Frank W Burr Blvd, Teaneck, NJ 07666-6894

Tel: 201 488 1212

4020 Ajinomoto Drive, Raleigh, NC 27610.

Tel: 919 832 2890

Involved in the manufacture and sale of amino acids and in the sale of imported monosodium glutamate. Produce amino acid derivatives by fermentation.

Alfa-Laval Separator Co

2115 Linwood Ave, Fort Lee, NJ 07024.

Tel: 201 592 7800 Telex: 666361 Fax: 201 592 0260

Supplies a range of process plant and separation equipment including pilot plant scale continuous centrifugal separators, evaporators and heat exchangers. Subsidiary of Alfa-Laval AB, Sweden.

Alfacell Corp

225 Belleville Avenue, Bloomfield, NJ 07003. Tel: 201 748 8082

Producing anti-cancer drugs derived from living donor animal tissue, as well as purified proteins, serums, antiserums, complement, growth and attachment factors, collagen and other animal byproducts. Offer services in custom monoclonal antibodies.

Alladin Diagnostics Inc

84 Bayard Lane, Princeton, NJ 08540. Tel: 609 921 3229

Developing assays for enzymes and enzyme related disorders.

Allied Corp

Columbia Road & Park Avenue, PO Box 4000 R, Morristown, NJ 07960. Tel: (201) 455 2000

Interests in biotechnology lie in agricultural applications and in the production of industrial, speciality and agricultural chemicals. Have investments in both Bio Logicals Inc, Canada and Calgene Inc, US.

Amerace Corp

Enzyme Venture Group

Esna Park, Hackettstown, NJ 07840.

Tel: 201 852 1122 Telex: 6853377 Fax: 201 852 1587

Produces equipment and supplies for fermentation, chromatography and diagnostics including fermenters, bioreactors, ion exchange chromatography media, affinity chromatography media, bound protein A, support sheets for use in diagnostic tests, supports for electrophoresis and material for use in electrophoretic protein transfer as well as in DNA blotting systems.

American Biomaterials Corp

105 Morgan Drive, Plainsboro, NJ 08536.

Telex: 387866 Tel: 609 683 9000 Fax: 609 799 3297

Supply cell culture supports and microcarriers as well as growth factors. Offer services in custom equipment and research and development.

American Cyanamid

Agricultural Division

PO Box 400, Princeton, NJ 08540.

Tel: 609 799 0400

Produce animal feed antibiotics, parasite and pest control products, bovine somatotropin and crop and vegetation protection herbicides and pesticides.

American Cyanamid Co

One Cyanamid Plaza, Wayne, NJ 07470. Tel: 201 831 2522 Fax: 201 831 3551

Berdan Ave, Wayne, NJ 07470

Produces bulk medicinal products by fermentation (antibiotics and enzymes) and fine chemicals as well as agricultural, chemical, medical and consumer products. Carrying out research in rDNA technologies and has a medical products research and production division, Lederle Laboratories, US. Has investment interest in Molecular Genetics, US. Products under development include immuno-modulator for AIDS.

American Diagnostics

340 Kingsland St, Nutley, NJ 07110-1141.

Parent company of Clonal Diagnostics, US.

American Gas and Chemical Co

220 Pegasus Ave, Northvale, NJ 07647.

Tel: 201 767 7300/800 288 3647 Telex: 135151 Fax: 201 767

Manufacture environmental alarm systems, oxygen analyzers, sensors and

American Hoechst Corp

206 North Route 202, Somerville, NJ 08876.

Tel: (201) 231 2000 Telex: 833449

Manufactures pharmaceuticals, diagnostic reagents, veterinary products, pesticides and other products of Hoechst AG, Germany.

American Optical Corp

Research Devices Division

121 Ethel Rd W, Piscataway, NJ 08854.

Tel: 201 572 4800 Telex: 467058 Fax: 201 572 4808

Manufacture microscopes

American Ultraviolet Co

562 Central Ave, Murray Hill, NJ 07974.

Tel: 201 665 2211 Telex: 139266 Fax: 201 665 9523

Manufactures ultraviolet lamps for sterilization of clean rooms and laboratories.

Applied Bioscience International

Mettlers Rd, PO Box 2360, East Milstone, NJ 08875-2360.

Tel: 201 873 2550

Offer toxicology testing services.

Part III New Jersey - NJ UNITED STATES OF AMERICA

Arsynco Inc

PO Box 8, Foot of 13th Street, Carlstadt, NJ 07072.

Tel: (718) 898 2300 Telex: 62662

Produces fine organic chemicals and intermediates for the pharmaceutical industry.

Astec

PO Box 297, Whippany, NJ 07981.

Tel: 201 428 9080

Produce cyclodextrins enzymatically. With applications in chromatography.

Ausimont USA Inc

44 Whippany Rd, Morristown, NJ 07960.

Tel. 201 292 6250

Supplies speciality chemicals. Affiliated with Montedison, Italy.

Aviv Associates Inc

810 Towbin Ave, Lakewood, NJ 08701-0994. Tel: 201 367 1663/800 242 2848 Telex: Telex: 710 723 8332 Fax: 201

370 0032

Supply UV, visible and UV/visible spectrophotometers, spectropolarimeters, spectrometer cells, detectors, diagnostic test kits for blood and controls.

Bactomatic Inc

719 Alexander Road, PO Box 3103, Princeton, NJ 08540.

Tel: (609) 452 8515/800 847 9300

Manufactures equipment for rapid estimation of microbial contamination levels in food products and other media.

Becton Dickinson Labware

2 Bridgewater Lane, Lincoln Park, NJ 07035.

Tel: 201 628 1144/800 235 5953

Manufactures fluorescence-activated cell sorters, tissue culture plates and ELISA test kits. Part of Becton Dickinson & Co, US.

Becton Dickinson & Co

Clay Adams Division

299 Webro Road, Parsippany, NJ 07054.

Tel: 201 887 4800

Manufactures and distributes plastic disposable and other laboratory ware for cell, microbial and tissue culture.

Becton Dickinson & Co

Medical Sector

1 Becton Drive, Franklin Lakes, NJ 07417.

Tel: 201 848 6800

Produces medical devices and monoclonal antibody-based reagents.

Bellco Biotechnology

Bellco Glass Inc

340 Edrudo Rd, PO Box B, Vineland, NJ 08360.

Telex: 510 687 8910 Tel: 609 691 1075/800 257 7043 Fax: 609

691 3247

Manufacture a laboratory bioreactor for high density mammalian cell culture, a wide range of laboratory glassware for cell culture with related instrumentation and apparatus, including roller culture and suspension systems, incubators and biohazard safety cabinets, tissue culture plastic labware, culture chambers and plaque viewer as well as media handling and water distillation equipment. Part of Bellco Glass Inc.

Berlex Laboratories Inc

110 East Hanover Ave, Cedar Knolls, NJ 07927.

Tel: 201 540 8700 Telex: 136354

Carrying out basic research on endothelial cell function and development of clinical therapeutics.

Bio-Logical Control Inc

375 South St, Eatontown, NJ 07724.

Tel: 201 544 0505 Telex: 132243

Fax: 201 389 4679

Manufacture clean room equipment and clothing. Offer custom services.

Bio-Recovery Inc

193 Paris Ave, PO Box 38, Northvale, NJ 07647.

Tel: 201 784 9396 Telex: 510 101 0259 Fax: 201 784 0151

Supply equipment for ultrafiltration, crossflow microfiltration and reverse osmosis membrane systems as well as laboratory and production-scale systems for electrodialysis, freeze-dryers, cell harvesters and centrifuges. Offer services in separation.

BioDiagnostic Systems Inc

Research Park, 1 Wall St, Princeton, NJ 08540.

Tel: 609 924 9490

Develop and produce diagnostic kits.

Bio/Dynamics Inc

PO Box 43, Mettlers Rd, East Millstone, NJ 08873.

Offer services in toxicology testing including acute, subchronic and chronic tests, pathology, metabolic and analytical chemistry and quality assurance.

Biomatrix Inc

PO Box 530, 65 Railroad Ave, Ridgefield, NJ 07657.

Tel: 201 945 9550 Telex: 4992758

Manufactures biological materials based on modified hyaluronic acid for a wide variety of medical applications, including orthopedics, ophthalmics and drug delivery, and markets speciality intermediates for use in personal care products.

Biometallics Inc

PO Box 2251, Princeton, NJ 08543.

Tel: 609 275 0133 Fax: 609 275 0133

Produce a test kit for progesterone.

Biotest Diagnostics Corp

6 Daniel Rd East, Fairfield, NJ 07006.

Tel: 201 575 4500/800 631 1150 Telex: 178009 Fax: 201 575 4646

Manufacture diagnostics, including monoclonal antibodies against blood groups, antibodies against cell surface markers and cell surface receptors, growth factors, immunoglobulins etc, as well as systems for bacterial detection and equipment such as colony counters. Carrying out research into DNA probes, HIV-1 and HIV-2 recombinant-protein tests and interleukin-2. Subsidiary of Biotest-Serum-Institut GmbH, Germany.

Bush Boake Allen Inc

7 Mercedes Drive, Montvale, NJ 07645.

Tel: 201 391 8441 Telex: 224255

Produces vitamins and a wide range of biochemicals.

Campbell Soup Co

Campbell Institute of Research and Development

Campbell Place, Camden, NJ 08103.

Tel: 609 342 4899

Major food company interested in use of novel breeding techiques for improvement of crop plants and disease-free tomatoes in particular, as well as improvements in mushroom production. Has a significant investment in DNA Plant Technology Corp, US.

Candace Lane Corp

140 Littleton Rd, Parsippany, NJ 07054. Tel: 201 299 7699 Telex: 705359 Fax: 201 299 0670

Supply culture media.

Celgene Corp

7 Powderhorn Drive, Warren, NJ 07060.

Tel: 201 271 1001 Fax: 201 271 4184

Produces bacterial polysaccharides based on methanol fermentation, stable isotope labelled compounds and muconic acid; developing diagnostics. Activities based on the speciality biochemicals programme of Celanese,

Cenogenics Corp

620 Rte 520, Morganville, NJ 07751.

Tel: 201 536 6457

Developing diagnostics.

UNITED STATES OF AMERICA New Jersey - NJ Part III

Centrico Inc

100 Fairway Court, Northvale, NJ 07647. Tel: 201 767 3900 Telex: 135353 Fax: 201 767 3416

Supplies industrial centrifuges for separation, clarification and extraction down to 0.5 micrometre.

Chemap Inc

901 Hadley Rd, South Plainfield, NJ 07080-1011.

Tel: 201 757 7000/800 323 8831 Telex: 271308 Fax: 201 757 7006

Supplies monolayer tissue culture fermenters from laboratory to full production scale with pH, oxygen, stirring, temperature control and recording, as well as a full range of stirred tank fermenters.

Chemical Design US Ltd

200 Rte 17 S, Suite 120, Mahwah, NJ 07430. Tel: 201 529 3323 Fax: 201 529 2443

Produce computer systems and software for modelling the structure and properties of both small molecules and proteins, and studying their interactions.

Chemical Dynamics Corp

3001 Hadley Road, PO Box 395, South Plainfield, NJ 07080.

Tel: 201 753 5000/800 243 6564 Telex: 4754581 chemdyn Fax: 201 753 8734

Supplies biochemicals, biological buffers, pharmaceutical intermediates etc including DNA technology reagents. Specializes in amino acid derivatives, peptides and restriction endonucleases.

Ciba-Geigy Corp

Pharmaceuticals Division

556 Morris Ave, Summit, NJ 07901.

Manufactures pharmaceuticals and plant protection chemicals. Research interests include aspects of the regulation of synthesis of proteins associated with protease activity in diseases of man. Has development agreements with Genentech, US for their new health care products, with Bio-response, US for recombinant proteins and with Kyowa Kakko Kogyo, Japan for recombinant gamma-interferon. Involved in the development of herbicide resistant crop plants. Products under development include vaccines (AIDS etc) and drug delivery systems. Subsidiary of Ciba-Geigy, Switzerland.

Cistron Biotechnology Inc

10 Bloomfield Avenue, PO Box 2004, Pine Brook, NJ 07058. Tel: 201 575 1700/800 642 0167 Fax: 201 575 4854

Developing DNA technology for production of lymphokines and immunoassays. Interleukin-1 beta licences have been granted to Du Pont and Baxter. Cistron sells lymphokine products to the research market worldwide.

Clinical Sciences Inc

30 Troy Road, Whippany, NJ 07981.

Develops, manufactures, and/or distributes immunodiagnostic test kits and bulk reagents. The products utilize radioimmunoassay (RIA), enzyme linked immunosorbent assay (ELISA), and fluorescent technologies for hepatitis, sexually transmitted diseases, the ToRCH panel and autoimmune conditions, and include veterinary products. Affiliated with Sorin Biomedica SpA, Italy.

Clonal Diagnostics Ltd

11 Franklin Avenue, Belleville, NJ 07109-3501.

Produces antibodies to antibiotics and peptide or protein human hormones including a kit for screening HCG. Joint venture with American Diagnostics, US.

Cozzoli Machine Co

401 East Third Street, Plainfield, NJ 07060.

Tel: 210 757 2040 Telex: 178007 cozzoli pnfd Fax: 201 757 7386

Manufactures liquid and powder filling equipment for vials, ampoules, syringes etc. Products range from small hand-operated table-top machines to fully automated production lines.

CPC International

International Plaza, Englewood Cliffs, NJ 07632. Tel: (201) 894 2408

Manufacturing facilities:, PO Box 345, Argo, IL 60501. Tel: 312 458 2000

Manfactures glucose syrups, high-fructose corn syrup, fermentation ethanol and other corn-based products, including enzymes (amyloglucosidase, cellulase etc).

Cryofab Inc

540 N Michigan Ave, Kenilworth, NJ 07033.

Tel: 201 686 3636/800 426 2186 Telex: 4972137 cryofab Fax: 201 686 9538

Manufacture vacuum chambers and cryogenic equipment.

Cytogen Corp

Biopharmaceutical company developing monoclonal antibodies as unique delivery systems for diagnostic and therapeutic agents. Product development efforts are focused on the diagnosis and treatment of cancer and cardiovascular disease.

Davy McKee Corp

100 Oak Way, Berkeley Heights, NJ 07922.

Tel: 201 665 0100 Telex: 23 275326 Fax: 201 665 0122 (see Davy McKee Corp, IL).

Diagnostic Specialties

4 Leonard St, PO Box 4338, Metuchen, NJ 08840. Tel: 201 549 4011

Supply diagnostic kits including enzyme immunoassays for pregnancy, hormones and drugs. Developing latex test kits and DNA probes.

DNA Plant Technology Corp

2611 Branch Pike, Cinnaminson, NJ 08077.

Tel: 609 829 0110 Telex: 750493 Fax: 609 829 5087
6701 San Pablo Avenue, Oakland, CA 94608.

Tel: 415 547 2395

Agricultural biotechnology company developing and marketing value-added plant-based products for consumer and industrial markets, products for diagnosis and control of plant diseases and pests as well as products for modifying ice crystal formation. Projects include improved plant varieties using in vitro techniques such as tissue culture and recombinant DNA technology with interests in tropical crops, cereals, flowers and oils. Have joint venture agreement with Agri-diagnostics Associates to produce and market turf disease detection kits. Have joint venture with Du Pont to commercialize developments in branded produce. Following recent merger now incorporate Advanced Genetic Sciences.

E Leitz Inc

Instrument Division

24 Link Drive, Rockleigh, NJ 07647. Tel: (201) 767 1100 Telex: 135356

Manufactures a range of tungsten carbide microtome knives.

E R Squibb & Sons Inc

PO Box 4000, Princeton, NJ 08540. Tel: 609 921 4000

Manufacturing Division: PO Box 191, New Brunswick, NJ 08903. Tel: 201 545 1300

Major manufacturer of pharmaceuticals including steroids and antibiotics (amphotericin, neomycins, nystatin, penicillins, tetracyclines and thiostrepton). Has joint company with Novo Industri AS, Denmark to market insulins produced by Novo.

EKATO Corp

600 A Lake St, Ramsey, NJ 07446. Tel: 201 825 4684 Fax: 201 825 9776

Supply industrial fluid agitators and plant; products of EKATO, Germany.

EM Diagnostic Systems Inc

PO Box 70, 480 Democratic Road, Gibbstown, NJ 08027. Tel: 800 222 0342 Fax: 609 423 4389

Supplies diagnostic instruments and reagents for hospitals, clinics and group practices as well as microscopical stains and dyes.

Part III New Jersey - NJ UNITED STATES OF AMERICA

EM Science

111 Woodcrest Rd, Cherry Hill, NJ 08034-0395. Tel: (609) 354 9200/800 922 1084 Telex: 230 902556

Produce equipment and accessories for chromatography as well as research biochemicals. Division of EM Industries Inc, US.

300 C Corporate Court, S Plainfield, NJ 07080. Tel: 201 756 5756 Fax: 201 668 5997 Telex: 501584

40 Cragwood Rd, S Plainfield, NJ 07080.

Tel: 201 668 1800

Developing new and improved pharmaceuticals through their proprietary technology.

Enzyme Bio-Systems Ltd

600 Sylvan Ave, Englewood Cliffs, NJ 07632. Tel: 201 894 2320 Fax: 201 894 4955

Produces industrial enzymes for starch, baking, flavour, brewing, cereal, confection and alcohol applications.

ES Industries

8 South Maple Avenue, Marlton, NJ 08053.

Tel: 609 938 3616/800 356 6140 Fax: 609 983 0588

Supplies accessories, columns, packing materials and fraction collectors for high performance liquid chromatography, gas chromatographs, process chromatographs, GC capillary columns and accessories.

Espec Corp

400 D, 1 Corporate Court, South Plainfield, NJ 07080-2498. Tel: 201 753 5900/800 5 ESPECO Telex: 550540 Fax: 201 753

Manufacture controlled environment chambers and cabinets, incubators and ovens.

Ethicon Inc

Rte 22 West, Somerville, NJ 08876.

Tel: 201 218 0707

Produce growth factors. Subsidiary of Johnson & Johnson, US.

Exxon Research & Engineering Co

180 Park Avenue, Florham Park, NJ 07932.

Tel: (201) 765 0100

Have extensive research and development programme in microbiology and enzymology including aspects of hydrocarbon conversion and biosynthesis as well as the structure and properties of microbial polysaccharides.

Exxon Research & Engineering Co

Corporate Research Science Laboratory

PO Box 45, Linden, NJ 07036.

Undertaking studies on metabolism of methane using bacteria.

FCS Industries Inc

Rt 3 Box 95, Flemington, NJ 08822. Tel: 201 782 3353

Industrial Park Drive, Tempe, AZ 85282.

Tel: 800 528 4401

Offer services in allergy testing and treatment including diagnostic tests and vaccines. Also developing fertility drugs.

FMC BioSupport Materials Venture

Amerace Development Center, Route 24, Hackettstown, NJ 07840. Tel: 201 852 1122

Manufacture separation and purification cartridges available in ion exchange and affinity Protein A or G form.

Forward Technology Research Laboratory Inc

22 Glenwood Avenue, Jersey City, NJ 07306.

Tel: 201 432 6211

Manufactures a chamber designed for use in the preparation of bimolecular lipid membranes in an essentially solvent-free form.

Frinton Laboratories Inc

PO Box 2310, Vineland, NJ 08360. Tel. (609) 692 6902 Telex: 834247

Offers a specialized service in the custom synthesis of research organic chemicals.

Gene Link Australia Inc

2 Terminal Rd, New Brunswick, NJ 08901. Tel: 201 545 1100

Licensing technology developed in Australia by the University of Adelaide for the control of growth in pigs by use of feed additives based on recombinant DNA technology.

Getinge International Inc

1100 Towbin Avenue, Lakewood, NJ 08701.

Tel: 201 370 8800 Fax: 201 370 2543 Telex: 792466

Manufacture steam-based sterilizer systems designed for industrial or laboratory applications fitted with continuous monitoring and recording of load temperature including systems suitable for use at P3 and P4 levels of biohazard, systems for decontamination of spent media, and systems for sterilization of animal feed, bedding and cages.

Gibralter Biological Laboratories Inc

23 Just Rd, Fairfield, NJ 07006

Fax: 201 227 0812 Tel: 201 227 6882

Developing in vitro cell culture toxicity testing. Offer contract services in product safety and evaluation testing. Carrying out research on AIDS.

Glen Mills Inc

203 Brookdale Street, Maywood, NJ 07607.

Telex: 134656 Fax: 201 487 8469 Tel: 201 845 4664

Markets a completely enclosed, autoclavable mill for continuous and batch cell disruption at rates of 10 to 1000 litres per hour, suitable for use with yeast, fungi and bacteria; a wide range of mills for size reduction of laboratory and industrial solids and slurries; sample splitters, dividers and

Gow-Mac Instrument Co

Kearney St, Bldg 26E, Bridgewater, NJ 08807.

Tel: 201 560 0600 Telex: 833174 lawmac

Fax: 201 271 2782

Supply equipment for gas chromatography and HPLC.

Haber Inc

470 Main Rd, Towaco, NJ 07082.

Tel: 201 263 0990

Developing methods of electrophoresis in non-aqueous solvents (electromolecular propulsion) for the separation and downstream processing of the products of gene manipulation and other proteins. Also developing clinical diagnostics and analytical techniques based on the same principle including products for determination of cardiovascular disease and blood lipoproteins.

Hacker Instruments Inc

PO Box 657, Fairfield, NJ 07007.

Tel: 201 226 8450 Telex: 642769

Manufactures high resolution micromanipulators operating with increments of 0.1 micron.

Henley Chemicals Inc

50 Chestnut Ridge Road, Montvale, NJ 07645.

Tel: (201) 307 0422 Telex: 232210 hnly ur Fax: 201 307 0424

Supplies fine chemicals and biochemicals.

Heraeus Inc

Industrial Products

111 A Corporate Blvd, South Plainfield, NJ 07080. Tel: 201 755 4800/800 441 2554 Fax: 201 754 9494

Supply centrifuges, incubators, ovens, vacuum equipment and tissue culture roller apparatus and suppplies.

High Efficiency Filter Corp

375 South St, Eatontown, NJ 07724

Tel: 201 544 0200 Telex: 132243 Fax: 201 389 4679

Supply bacteriological filters.

UNITED STATES OF AMERICA New Jersey - NJ Part III

Hoechst Celanese Corp

206 North Route 202, Somerville, NJ 08876. Tel: 201 231 2000

Separations Products Division: 13800 South Lakes Drive, Charlotte, NC

28217.

Tel: 704 588 5310

Produces pharmaceuticals and diagnostics as well as digestive enzymes and microporous membranes for separation technologies. Carrying out microbiological research (see American Hoechst, US).

Hoffmann-La Roche

The Roche Institute of Molecular Biology 370 Kingsland Street, Nutley, NJ 07110. Tel: 201 235 5000 Telex: 13417

Research company creating pharmaceutical, agricultural and industrial products through genetic engineering technologies. Involved in protein purification and characterization, bacterial and yeast genetic engineering, immunogenetics, agricultural microbiology and mammalian gene isolation and characterization. Cloning and expression of DNAs, protein and peptide purification, amino acid sequence analysis, immunodetection techniques and monoclonal antibody production are also being investigated. Also have interest in sweeteners and pesticides. Developing therapeutic chimeric antibodies against HIV and HIV-1, human T-cell and leukemia virus Have joint venture with Epitope Inc, US to develop virus targeting HIV mouse monoclonal antibodies for diagnostic and other in vitro non-therapeutic uses.

Human Genetic Mutant Cell Repository

Coriell Institute for Medical Research

Copewood & Davis Sts, Camden, NJ 08103. Tel: 609 966 7377

Distributes cell cultures from individuals with genetic abnormalities. Sponsored by NIH, US.

IGI Inc

2285 E Landis Ave, Vineland, NJ 08360. Tel: 609 691 2411 Telex: 244432

Supplies animal health and breeding products including vaccines, pharmaceuticals, feed supplements and diagnostics.

Immunomedics Inc

150 Mt Bethel Rd, Warren, NJ 07060. Tel: 201 647 5400

5 Bruce St, Bldg 7, Newark, NJ 07103. Tel: 201 456 4779 Fax: 201 456 4773

Uses its antibody-based technology to develop proprietary products that will detect, diagnose and treat cancer earlier and more effectively than conventional methods.

Imperial Biotechnology Ltd

25 Elmwood Place, Short Hills, NJ 07078-3305. Tel: (201) 379 5089 Telex: 820554

Offers facilities for contract development and biochemical manufacture by fermentation, extraction and purification (see Imperial Biotechnology Ltd,

IN/US Service Corp

1275 Bloomfield Ave, Fairfield, NJ 07006. Tel: 201 575 7552 Fax: 201 575 8458

Manufacture radioactivity monitoring systems for measurement of eluants from HPLC systems. With four channels the instrument can be used with two isotopes and two non-isotopic detection systems (UV or luminescence).

Independent Equipment Corp

PO Box 460, Route 202N, Three Bridges, NJ 08887. Tel: 201 782 5989

Supply spill cleanup materials and other environmental control products.

Institute for Medical Research

Human Genetic Mutant Cell Repository Copewood & Davis Streets, Camden, NJ 08103. Tel: (609) 966 7377

Distributes cell cultures from individuals with genetic abnormalities. Sponsored by the National Institutes of Health, US.

Inter-Cell Technologies Inc

422 Rte 206, Suite 143, Somerville, NJ 08876. Tel: 201 359 8228

Developing biological and immunological products including lymphokines.

Interferon Sciences Inc

783 Jersey Avenue, New Brunswick, NJ 08901. Tel: 201 249 3250/800 255 1500 Telex: 910 997 0024

Specializes in manufacture and purification of interferon as well as production of conventional and monoclonal antibodies. Carrying out research on hybridoma and recombinant DNA technology for production of human interferons, IF-A and IF-G. Subsidiary of National Patent Development Corp, US.

I-Stat Corp

formerly Integrated Ionics Inc

303 College Rd East, Princeton, NJ 08540. Tel: 609 243 9300

Developing medical diagnostics, probes and systems based on advanced test procedures using sensors incorporating enzymes and antibodies.

J T Baker Chemical Co

Laboratory Products Division

222 Red School Lane, Phillipsburg, NJ 08865. Tel: 201 859 2151/800 JT BAKER Telex Telex: 299514 Fax: 201 859

Produces a wide range of chemical reagents and laboratory products for instrumental analysis, chromatographic and electrophoretic separation, diagnostics and industrial fine chemicals. Product lines include metabolites (sugars, amino acids and derivatives), enzymes for research including a wide range of restriction endonucleases, viral, bacterial and animal DNA as well as individual nucleosides and nucleotides, purified solvents, packing materials and prepacked columns for high performance liquid chromatography, biological buffers, reduced volume vials and chemicals for liquid scintillation counting.

Janssen Pharmaceutica/Life Science Products

40 Kingsbridge Road, Piscataway, NJ 08854. Tel: 201 524 9152/800 624 0137 Telex: Telex: 490 999 9544 524 9215

Markets products for immunodiagnostics, biochemistry, cell biology and biotechnology including: T and B cell markers; human IgG subclass reagents; neoantigen; biotinylated DNA probes; allotype determinants; rat and mouse anti-monoclonals; normal and standard serums; cytokines and their antiserums (interleukin 1-6); growth factors; enzymes (cholesterol dehydrogenase, amylase etc); complex carbohydrates; hybridoma growth factor; venoms and toxins; protein A and G; lactoferrin and lactoperoxidase; restriction endonucleases; DNA primers and standards; kits for molecular biology - all products of Janssen Biochimica, Belgium.

Johnson & Johnson Inc

One Johnson & Johnson Plaza, New Brunswick, NJ 08903. Fax: 201 524 8589 Tel: 201 524 6697 Telex: 844414

Manufactures pharmaceuticals, diagnostics and other health care products. Manufactures monoclonal antibodies for use in research applications through Ortho Pharmaceutical Co, US and similar products for clinical use through Ortho Diagnostic Systems, US. Has collaborated with McDonnell Douglas Corp, US in developing methods for manufacturing drugs in the NASA space shuttle. Has an investment interest in Bio Logicals Inc, Canada. Markets a non-isotopic DNA probe for a herpes confirmation test and is developing similar probes for gonorrhea, tuberculosis, human papilloma virus and pneumonia in collaboration with Enzo Inc, US.

Johnston Associates Inc

181 Cherry Valley Rd, Princeton, NJ 08540. Tel: 609 924 3131

Investment company. Cofounders of Genex Corp, Cytogen Corp, Ecogen Inc, Sepracor Inc, I-Stat Corp, Immunicon Inc, Envirogen Inc and Biocyte Corp, allUS companies.

Kontes Biotechnology

Telex: 510 687 8967 Fax: 609 692 3242

Produces chromatography columns and an electrophoresis transfer system for DNA recovery from electrophoresis gels and Protein A-supports and avidin-coated beads for affinity chromatography.

Part III New Jersey - NJ UNITED STATES OF AMERICA

Kratos Analytical Instruments

170 Williams Drive, Ramsey, NJ 07446. Tel: 201 934 9000 Telex: 6853505

Manufacture integrated liquid chromatography mass spectrometry systems, as well as HPLC absorbance detectors, fluorescence detectors, solvent delivery systems and computing systems for chromatography. Division of Applied Biosystems, US.

The Liposome Co

1 Research Way, Princeton Forrestal Center, Princeton, NJ 08540. Tel: 609 452 7060 Telex: 882085

Research and development company interested in the use of liposomes for chemotherapy. Developing use of liposomes in drug delivery systems as well as cancer therapeutics and vaccines. Will merge with Liposome Technology, US.

LSL Biolafitte Inc

Alexander Commerce Park, 719 Alexander Road, Princeton, NJ 08540. Tel: 609 452 7660 Fax: 609 452 7667

Supplies a full range of integrated biotechnology equipment from bench top to production scale, including fermenters and mammalian cell culture systems from 2 to 10,000 litres, freeze dryers, crossflow filtration systems and computer software for data logging and control systems for all of the above.

Lurex Scientific

PO Box 2420, S Vineland, NJ 08360.

Supplies analytical equipment and apparatus for cell culture including tissue homogenizers.

Madis Laboratories Inc

375 Huyler Street, South Hackensack, NJ 07606.

Supplies proteases in bulk for industrial use.

Makari Research Laboratories Inc

223 South Dean St, Englewood, NJ 07631. Tel: 201 871 3244

Manufactures diagnostics based on monoclonal antibodies for the early detection of cancer though detection of cells undergoing cell division.

Marcor Development Corp

108 John Street, Hackensack, NJ 07601. Tel: 201 489 5700 Telex: 710 990 5131 Fax: 201 489 7357

Supplies bulk reagents for microbial culture, enzymes, fermentation nutrients, protein hydrolyzates, peptones and peptides.

Marine Biologicals Inc

PO Box 546, Marmora, NJ 08223.

Tel: 609 390 1333

Developing marine byproducts including Limulus amoebocyte lysate.

Matheson Gas Products

PO Box 1587, Secaucus, NJ 07096.

Tel: 201 867 4100 Telex: 424546/710 992 8826

Produce a range of speciality gas equipment including gas cylinder cabinets, membrane gas filters, gas pressure regulators etc, as well as gas standard mixtures and speciality gases, and toxic gas detectors.

Meer Corp

9500 Railroad Avenue, North Bergen, NJ 07047.

Tel: (201) 861 9600 Telex: 128290

Produces flavour extracts and water-soluble gums from plant sources.

Membrex Inc

141 Lanza Ave, Garfield, NJ 07026. Tel: 201 546 5242 Fax: 201 546 6277

Develops, manufactures and sells high performance membrane-based systems for processing and purifying biological materials, incorporating proprietary non-fouling membranes and rotary separation technology. Current product lines include rotary biofiltration systems which utilize high performance ultrafiltration and microfiltration membranes, Also developing a line of 'bioactive' affinity systems.

Merck & Co Inc

Merck Sharp & Dohme Research Laboratories

PO Box 2000, Rahway, NJ 07065.

Tel: 201 574 4000 Fax: 201 574 4720

Manufactures pharmaceuticals, bacterial polysaccharides, vitamins and antibiotics, as well as bacterial and viral vaccine antigens. Also produces wide range of fine chemicals and research materials. Using genetic engineering and peptide/protein chemistry techniques in relation to improved therapeutics and vitamins, as well as for production of vaccines. Has joint venture with Chiron, US to market hepatitis B vaccine. Other products under development include veterinary drugs and pesticides and animal studies on AIDS vaccine.

Mettler Instrument Corp

Box 71, Highstown, NJ 08520.

Tel: (609) 448 3000 Telex: 843352 mico

Manufactures a wide range of analytical and precision balances as well as other laboratory instruments including titrators, Karl Fisher apparatus, thermogravimetric systems etc.

Micro Membranes Inc

95 Orange St, Newark, NJ 07102. Tel: 201 621 7071/800 722 MEMB

Fax: 201 621 8624

Produce microtitre plates and well strips, supported and unsupported membranes and nylon and latex beads. Developing tissue culture supports, microspheres and particles.

Nametre Co

101 Forest St, Metuchen, NJ 08840.

Tel: 201 494 2422

Manufactures automatic, process and laboratory viscometers.

National Diagnostics Inc

1013-1017 Kennedy Blvd, Manville, NJ 08835. Tel: 201 722 8600/800 526 3867

201 722 8641

Telex: 6858083 nadia uw Fax:

Fax: 201 287

Manufactures chemicals and reagents for use with laboratory instrumentation, including protein separation, histology and electrophoresis. Electrophoresis apparatus and liquid scintillation counting systems, probes, power supplies and biological stains also supplied.

National Patent Development Corp

783 Jersey Avenue, New Brunswick, NJ 08901.

Tel: (201) 249 3232

Working on production of interferon by genetically engineered yeast through a joint agreement with Collaborative Genetics Corp, US as well as through its subsidiary Interferon Sciences Inc, US.

National Starch & Chemical Corp

Finderne Ave, Bridgewater, NJ 08807.

Tel: 201 685 5000

Manufacture processed starches and rigid polymer supports for solid phase peptide synthesis.

Neurogenetic Corp

215 College Rd, Paramus, NJ 07652.

Applying genetic engineering to the diagnosis and treatment of neurobiological disorders.

New Brunswick Scientific Co Inc

PO Box 986, 44 Talmadge Rd, Edison, NJ 08818-4005.

Tel: 201 287 1200/800 631 5417 Telex: 4753012

Supplies laboratory and industrial fermentation equipment, incubator shakers, colony counters, nutrient-sterilizing and dispensing equipment, tissue culture apparatus, laboratory freeze driers, sterilizable oxygen electrodes, and complete commercial systems for the production of enzymes, pharmaceuticals and chemicals by fermentation or products of cell culture, such as interferon

New Jersey Institute of Technology

Department of Electrical Engineering

323 High Street, Newark, NJ 07102.

Tel: 201 645 5321

Studying theoretical aspects of bioenergy conversion using a fuel cell to produce electricity from steam reformed biogas obtained from anaerobically digested refuse.

UNITED STATES OF AMERICA New Jersey - NJ Part III

New Jersey Medical School

Department of Microbiology

100 Bergen Street, Newark, NJ 07103.

Studying genetic analysis in hamster cells by means of gene transfer and microcell hybridization for gene mapping in human tumour cells and formation of clone libraries of human chromosomes.

Norton Co

Performance Plastics Division 150 Dey Rd, Wayne, NJ 07470. Tel: 206 696 4700

Produces biocompatible, flexible tubing; inert fluoropolymer tubing, fittings and valves; Teflon labware; and Teflon filters with pore sizes ranging from 1 micron to 60 microns.

Ohaus Corp

Manufactures and supplies a wide range of electronic balances based on microprocessor electronics, weighing in grams, ounces or pennyweights. Some models permit select parts counting. Portable units with long battery life are available.

Ortho Diagnostic Systems Inc

US Rte 202, Raritan, NJ 08869. Tel: 201 218 1300

Produces and markets immunodiagnostic kits for infectious diseases, fluorescent antibody systems, monoclonal antibodies, blood group reagents, antiserums, neurostasis reagents and instrumentation. Subsidiary of Johnson and Johnson Inc, US.

Ortho-mune Monoclonal Antibody

Route 202, Raritan, NJ 08869. Tel: 201 524 2374/800 631 5807

Produces monoclonal antibodies to human antigens. Division of Ortho Diagnostic Systems Inc.

Ortho Pharmaceutical Co

Route 202, Raritan, NJ 08869. Tel: 201 218 6000

Manufactures a wide range of pharmaceutical and other biological products such as antifungal drugs, antiseptic preparations and monoclonal antibodies including murine antibodies used in the identification of human T and B cells. Instruments for clinical use include computerized cell sorting and analysis. Developing therapeutics and diagnostics including immuno-modulator for HIV infection, erythropoietin, interleukin-2, cancer monoclonal antibodies, hepatitis B vaccine, drug delivery systems and home pregnancy tests. Subsidiary of Johnson & Johnson Inc, US.

Penta Manufacturing Co

PO Box 1448, Fairfield, NJ 07007.

Manufactures research biochemicals and solvents as well as speciality and fine chemicals and pharmaceutical intermediates. Division of Penta International Corp, US.

Pharmacia ENI Diagnostics Inc

350 Passaic Ave, PO Box 2803, Fairfield, NJ 07007-2803. Tel: 201 227 6700/800 346 4364

Supplies diagnostics and allergy lines, products of Pharmacia LKB Diagnostics, Sweden. Products include AIDS diagnostics, interleukin-2, HTLV-III antibody test and toxin diagnostics, and a monoclonal antibody purification kit.

Pharmacia LKB Biotechnology Inc

800 Centennial Avenue, PO Box 1327, Piscataway, NJ 08855-1327.

Tel: 201 457 8000/800 526 3618 Telex: 833417 Fax: 201 457 9002/0557

Manufacture and distribute products for separation and molecular biology through three divisions: Laboratory Separation; Process Separation; and Molecular Biology. Products include liquid chromatography and FPLC systems, gel filtration, ion exchange and affinity chromatography media, complete systems and accessories for all electrophoresis techniques, centrifugation media and biochemicals, as well as chromatographs, custom made media, micro-carriers for cell culture and a comprehensive range of reagents for molecular biology including enzymes, cloning vectors, nucleotides, oligonucleotides and gene synthesis systems. Also produce food allergy testing diagnostics. Subsidiary of Pharmacia LKB Biotechnology AB, Sweden.

Philips Electronic Instruments Co

85 Mackee Drive, Mahwah, NJ 07430. Tel: 201 529 3800 Telex: 642351

Manufactures a wide range of analytical equipment and associated data collecting, processing and visualizing systems including scanning and transmission electron microscopes, X-ray spectrometers and energy dispersive X-ray analysis systems.

Porton Products Ltd

PO Box D, Lakewood, NJ 08701-0747. Tel: 201 370 0284 Fax: 201 367 8797

Supply antibody purification systems based on immobilised Protein A (see Porton Products, UK and Bioprocessing, UK).

Pragma Bio-Tech

225 Belleville Ave, Bloomfield, NJ 07003. *Tel*: 201 748 8624

Offers various services in Phase I-IV clinical trials for the pharmaceutical, diagnostic and cosmetic industries.

Princeton Scientific Instruments Inc

Manufactures diagnostic test kits. Subsidiary of Electro-Nucleonics Laboratories Inc, US.

Princeton University

Department of Biochemical Sciences PO Box 430, Princeton, NJ 085544. Tel: (609) 452 4100

Studying regulation of mammalian plasminogen activator, use of cell hybridization, microcell and chromosome-mediated gene transfer. Also studying gene stucture and function in Drosophila, structure of interphase and metaphase chromosomes and chromatin structure.

Quality Biologics Inc

Copewood St, Camden, NJ 08103. Tel: 609 966 1305/800 622 8820

Offer services in pre-clinical product safety and evaluation testing.

Queue Systems Inc

1250 Route 28, North Branch, NJ 08876.

Tel: 201 218 0558/800 334 7070 Telex: 139136 Fax: 201 218

Supplies fermenters and bioreactors for cell culture as well as cell environmental and cryopreservation systems. Agents for LH Fermentation,

R P Cargille Laboratories

55 Commerce Road, Cedar Grove, NJ 07009. Tel: 201 239 6633 Fax: 201 239 6096

Manufactures and develops speciality chemicals, reagents and industrial chemicals under contract, as well as custom synthesis of new products.

Part III New Jersey - NJ UNITED STATES OF AMERICA

Research Plus Inc

PO Box 324, Bayonne, NJ 07002.

Tel: 201 823 3592/800 341 2296 Telex: 550838 Fax: 201 823

9590

Manufactures steroids and peptides, sugar derivatives, biological buffers etc. Products include testosterone and its derivatives, corticosterone, cortisone, stigmasterol and other sterols, biologically active peptides. peptide intermediates and building blocks, peptide substrates for enzymes, somatostatin etc.

Roussel Corp

400 Sylvan Avenue, Englewood Cliffs, NJ 07632.

Telex: 423187 .Tel: (201) 871 3366 Fax: 201 871 9798

Manufactures steroids, including testosterone and its derivatives, prednisone, prednisolone, hydrocortisone etc, as well as vitamins (cyanocobalamin, cholecalciferol and ergocalciferol), antibiotics and antidiabetics.

Rutgers University

Department of Horticulture and Forestry

Old Queen's Building, New Brunswick, NJ 08903.

Studying disease resistance in hybrid progenies of peach, with selection and preservation of existing peach germplasm.

Rutgers University

Department of Biochemistry and Microbiology

Cook College, New Brunswick, NJ 08903.

Tel: (201) 932 9829

Developing methods of preparing cellulases with high activity from fungi such as Trichoderma reesei as well as use of mutagens and recombinant DNA technology to produce improved strains of both T reesei and Zymomonas for the production of ethanol.

Rutgers University

Department of Environmental Science

Cook College, New Brunswick, NJ 08903.

Developing composting systems for treatment of wastes.

Sandoz Inc

59 Route 10, East Hanover, NJ 07936.

Tel: 201 503 7500

Produces a wide range of pharmaceutical products. Also manufactures microbial pesticides based on Bacillus thuringiensis. Other interests include crop improvement (corn), cancer therapeutics, kidney plasminogen activator and colony stimulating factor, an immuno-modulator for AIDS and related diseases. Subsidiary of Sandoz AG, Switzerland.

Satori Corp

258 Park St, Upper Montclair, NJ 07043-1732. Tel: 201 783 9787 Fax: 201 744 3290

Fax: 201 744 3290

Provides computerized control/data logging systems for fermentation and cell culture systems, research and pilot scale.

Schering-Plough Corp

1011 Morris Ave, Union, NJ 07083.

Tel: 800 631 7952

PO Box 526, Kenilworth, NJ 07033. Tel: 201 709 2600 Tx: 6719534

Manufactures antibiotics such as sisomicin and gentamicins (including garamycin, a brand of gentamicin sulphate designed for tissue culture work), steroids and bulk chemicals including dihydroxyacetone. Developing immuno-modulators for AIDS related diseases, alpha, beta and gamma-interferon production. Also owns DNAX Ltd, UK, an immunology and genetic engineering company. Has joint ventures in the application of genetic engineering to plant systems and therapeutics including Genex, Biogen, Collagen Corp and Cetus, US.

Scientific Instruments & Technology Corp

PO Box 6906, Piscataway, NJ 08854.

Tel: 201 271 4700 Telex: 833157 Fax: 201 271 5906

Supply sampling handling equipment including fraction collectors, balances, blenders and homogenizers and UV/VIS spectrophotometers. Offer quality control and regulatory services.

400 Ford Road, Denville, NJ 07834.

Tel: 201 625 8822/800 221 5598

Telex: 4930966

Fax: 201 625

Produces test kits for diagnosis of autoimmune and infectious diseases in humans. Offers services in custom antiserum production, fractionation, conjugation to enzymes and fluorochromes as well as custom frozen tissue section slides.

Sea Pharm Inc

791 Alexander Rd, Princeton, NJ 08540.

Develop therapeutics based on products derived from marine organisms.

Sera-Tec Biologicals

525 Milltown Rd, North Brunswick, NJ 08902.

Tel: 201 846 6800 Telex: 844444

Produces bulk antiserums.

Serva Biochemicals

50 Chestnut Ridge Rd, Montvale, NJ 07645. Tel: 516 333 1575/800 645 3412 Telex:

Telex: 275658

Fax: 516 333

Offers a variety of biochemicals for industrial and laboratory use in separations technology. Products include ampholytes, polyacrylamide gels and a complete line of electrophoresis reagents, adsorbents and columns for HPLC and liquid chromatography, caesium chloride and collagenase for use in tissue digestion.

Siemens Allis Inc

Analytical Systems

One Computer Drive, Cherry Hill, NJ 08034.

Tel: (609) 424 9210 Telex: 845166

Produce advanced analytical x-ray instrumentation.

Sybron Chemicals Inc

Birmingham Rd, PO Box 66, Birmingham, NJ 08011.

Tel: 609 893 1100

Supplies selectively-adapted bacterial cultures for treatment of industrial and municipal wastewater and contaminated ground water. Subsidiary of Sybron Corp.

Techne Inc

3700 Brunswick Pike, Princeton, NJ 08540-6192.

Tel: 609 452 9275

Telex: 4971718 Fax: 609 452 0608

Manufactures stirring systems for the cultivation of cells suitable for the production of hybridomas and monoclonal antibodies as well as other laboratory equipment including dry controlled temperature baths.

Technogenetics Inc

237 W Parkway, PO Box 294, Pompton Plains, NJ 07444-0294. Telex: 882495

Developing and marketing monoclonal antibodies for immunocytology and human diagnostic kits including systems for the detection of IgM immunoglobulin in people infected by AIDS.

Thomas Scientific

99 High Hill Rd at I-295 PO Box 99, Swedesboro, NJ 08085-0099.

Tel: (609) 467 2000 Telex: 6851166

Manufacture pH electrodes and pH meters including battery operated and digital systems.

Unichema Chemicals Inc

One Sears Drive, Paramus, NJ 07652.

Tel: 201 599 0670 Telex: 753224

Developing chemicals from fats and oils as well as biological and enzymic conversion techniques.

UNITED STATES OF AMERICA New York - NY Part III

Unigene Laboratories Inc

110 Little Falls Road, Fairfield, NJ 07006. Tel: 201 882 0860 Fax: 201 227 6088

Research and development company carrying out contract work in areas of genetic engineering and related biochemistry relevant to development of therapeutic and diagnostic reagents for human and animal health care. Areas of interest include development of growth hormones, calcitonin, anti-inflammatory proteins, fertility regulating hormones. Also developing new immunization procedures. Has isolated enzyme that amidates carboxyl terminal of proteins.

United States Testing Inc

Laboratory Equipment Division 1415 Park Ave, Hoboken, NJ 07030. Tel: (201) 792 2400 Telex: 126493

Manufacture glove boxes.

US Services Inc

19 Ox Bow Lane, Summit, NJ 07901. Tel: 201 273 0440 Fax: 201 273 0449 Supplies stable isotopes for research.

Vangard International

1111 A Green Grove Road, PO Box 308, Neptune, NJ 07754. Tel: 201 922 4900/800 922 0784

Supplies apparatus and equipment for microbial and cell culture and diagnostics including testing systems for monoclonal antibodies in hybridoma cultures using a solid-phase screening system.

Whatman BioSystems Inc

9 Bridewell Place, Clifton, NJ 07014.

Tel: 201 773 5800 Cables: 133426 Fax: 201 472 6949

Developing continuous culture of mammalian cells for production of therapeutics. Supply downstream processing systems including membrane filtration and chromatography including ion exchange cellulose media and columns. Part of Whatman International (see Whatman Biosystems Ltd, UK).

Wheaton Instruments

1301 North 10th Street, Millville, NJ 08332.

Tel: 609 825 1400/800 225 1437 Telex: 551295/510 687 7580

Fax: 609 825 1368

Manufactures laboratory instruments and equipment including roller culture apparatus and micro-stirrer systems for cell culture as well as culture tubes and bottles, as well as a microprocessor control system for fermentation.

Wien Laboratories Ltd

Supplies radioimmunoassay kits, components and antibodies.

Wild Leitz USA Inc

24 Link Drive, Rockleigh, NJ 07647-9987.

Tel: 201 767 1100 Telex: 6853354 Fax: 201 767 4196

Supply equipment for microscopy.

New Mexico - NM

Environmental Air Control Inc

Envirco Divsion

6701 Jefferson NE, Albuquerque, NM 87109.

Tel: 505 345 3561/800 545 6598 Telex: 556253 Fax: 505 345 8875

Supply clean room supplies, cabinets and filters.

Los Alamos National Laboratories

Life Sciences Division Los Alamos, NM 87545. Tel: 505 667 3114

Developing methods for rapid identification of microrganisms of clinical importance.

Rhomed Inc

1020 Tijeras NE, Albuquerque, NM 87106. Tel: 505 764 9977

Developing diagnostics, antibody-based delivery system for cancer diagnostics and therapeutics, and immunoassays.

Summa Medical Corp

4272 Balloon Park Road NE, Albuquerque, NM 87109. Tel: 505 345 8891/800 843 4339

Manufactures drugs for use in cancer detection and therapy, including an interest in use of monoclonal antibodies. Products include histochemical markers and diagnostic kits.

Vivigen

2000 Vivigen Way, Sante Fe, NM 87501. Tel: 505 988 9744/800 VIVIGEN

Genetics reference library offering cytogenetic, biochemical and molecular genetic testing.

New York - NY

AC Biotechnics Inc

100 Crossways Park West, Woodbury, NY 11797. Tel: 516 496 3300 Telex: 144698

Offer services in fermentation processing including licensing of proprietary gene cloning technology (see AC Biotechnics, Sweden).

Accurate Chemical and Scientific Corp

300 Shames Drive, Westbury, NY 11590.

Tel: 516 433 4900/800 645 6264 Telex: 144617 accuchem Fax: 516 997 4948

Supplies biochemicals, fine chemicals and media for cell separation, buffers, sugar derivatives, acetone powders and research enzymes, including cholinesterase, collagenase, asparaginase and amyloglucosidase. Also supplies a wide range of antiserums and antibodies against enzymes, fibrinogens, gamma-globulins, hormones, blood components, immunoglobulins, tissue-typing antigens and venoms as well as other conjugated antibodies, antimicrobials (eg ampicillin and antimycin), lectins, steroids and peptide hormones. Distributor for Sera Labs, UK, Janssen Biochimica, Belgium, Australian Monoclonal Development Pty Ltd, Biomakor and Maagar Scientific Services, Israel, Cedarlane Laboratories Ltd, Canada, Inter-Cell Technologies Inc, US, Medilab OY, Finland and UCB Bioproducts SA, Belgium.

Advanced Purification Systems Inc

80 Raynor Ave, Ronkonkoma, NY 11779.

Tel: 516 467 2301/800 233 2774 Telex: 4758154 Fax: 516 467

Supply clean rooms, fittings and clothing.

American Bioorganics Inc

908 Niagara Falls Blvd, North Tonawanda, NY 14120. Tel: 716 695 1020 Fax: 716 695 1028

Manufacture tissue culture serum-free media.

American Diagnostica Inc

49 East 68th St, New York, NY 10021.

Tel: 212 249 2222 Telex: 221034 amer ur Fax: 212 288 7910

Supply clinical diagnostics and kits based on TPA active assay and ELISA techniques as well as monoclonal and polyclonal antibodies. Also distributor for BioNative AB, Sweden native leukocyte interferon.

American Volpi Corp

Markets fibre optic illumination for microscopy, fibre optic inspection instruments and fibre optic electronic control systems (see Volpi AG, Switzerland).

An-Con Genetics

1 Huntington Quadrangle, Melville, NY 11747. Tel: 516 694 8470 Fax: 516 694 8477

Produce custom biotechnological equipment and instruments including automated DNA extraction and analysis systems.

Part III New York - NY UNITED STATES OF AMERICA

Anachemia Chemicals Inc

3 Lincoln Blvd, Rouses Point, NY 12979. Tel: 518 297 4444/800 323 1414 Fax: 518 297 2960

Supplies biochemicals as well as analytical chromatography accessories and equipment for high performance liquid chromatography.

Analytab Products Inc

200 Express St, Plainview, NY 11803. Tel: 800 645 0666 Telex: 960231

Produce bacterial identification systems and viral diagnostics.

Anotec Separations

226 East 54th St, New York, NY 10022. Tel: 212 751 3770

Manufacture separations equipment including a disposable syringe filter combining glass microfibre and membrane filter components. Company in the Alcan Group.

Applied DNA Systems Inc

1450 Broadway, New York, NY 10018-2201. Tel: 212 302 7055 Telex: 225517

Research and develop clinical reagents and diagnostics. Products include human collagenase, oxyrase, monoclonal antibodies and in vitro chemosensitivity assay.

Applied Microbiology Inc

5 Brooklyn Navy Yard, Brooklyn, NY 11205. *Tel*: 718 852 4676

Carrying out research and development of medical and biotechnological products including diagnostics, therapeutics and vaccines for bovine mastitis and toxic shock syndrome as well as for B subtilis production and staphylocide.

Arnel Products Co Inc

Supplies antiserums for radioimmunoassay and other immunological procedures.

Atlantic Ultraviolet Corporation

250 North Fehr Way, Bay Shore, NY 11706.

Tel: 516 586 5900 Telex: 645158 Fax: 516 595 2609

Manufacture ultrviolet transilluminators as well as UV sterilizing systems.

Atomergic Chemetals Corp

222 Sherwood Ave, Farmingdale, NY 11735-1718.

Tel: 516 694 9000 Telex: 6852289 Fax: 516 694 9177

Manufactures custom chemicals and pharmaceuticals. Products under development include enzymes, dyes and stains, monoclonal antibodies, yeasts, bacterial xanthan and hyaluronic acid.

Bio-Technology General Corp

1250 Broadway, New York, NY 10001. Tel: 212 239 0450 Fax: 212 239 0502

Manufacture and develop diagnostics, biologicals and pharmaceutical, agricultural and veterinary products using recombinant DNA technology to develop new products including bovine growth hormone, human superoxide dismutase, human growth hormone, apolipoprotein E, hepatitis B vaccine, hyaluronic acid and Trichoderma-based plant fungicide.

Bionique Laboratories Inc

Bloomingdale Rd, Route 3, Saranac Lake, NY 12983. Tel: 518 891 2356 Fax: 518 891 5753

Offers contract services in mycoplasma screening to detect cell culture contamination and supplies a cell protective device as well as pharmaceutical, veterinary and diagnostic products and equipment for cell culture and bulk bacterial cultures.

BioReactor Technology Inc

105 Jordan Rd, Troy, NY 12180. Tel: 518 283 4336

Developing clinical diagnostics and fermentation technology.

Bioresearch Inc

55 Rome St, Farmingdale, NY 11735. *Tel*: 516 249 8400

Produce synthetic peptides and oligonucleotides. Developing automated systems for peptide and oligonucleotide synthesis.

Biotechnology General Corp

375 Park Ave, New York, NY 10152. Tel: 212 319 8944

Developing speciality chemicals and reagents. Products include superoxide dismutase, bGH, hGH and chicken growth hormones, recombinant diagnostics, surfactants and fungicide based on Trichoderma.

Brain Research Inc

46 E 91 St, New York, NY 10028. Tel: 212 831 6645/3070

Research company developing cancer diagnostics.

Brinkmann Instruments Inc

Cantiague Road, Westbury, NY 11590.

Tel: 516 334 7500/800 645 3050 Telex: 6852174 Fax: 516 334 7521

Manufacture electrochemical instrumentation, cell homogenizers, liquid handling and constant temperature equipment, electrodes, sample preparation equipment, centrifuges including micro systems, cell and tissue culture equipment, ion and thin layer chromatography equipment and accessories.

Bristol-Myers Co

Industrial Division

PO Box 657 Thompson Rd, Syracuse, NY 13201. Tel: 315 432 2000

345 Park Avenue, New York, NY 10022

Major producer of antimicrobial products including cephalosporins, penicillins, mitomycin, kanamycin and tetracycline and bulk fermentation chemicals such as gluconic acid. Has research agreement with Genex Corp, US and with Interferon Sciences Inc, US to market leukocyte, fibroblast and other interferons. Engaged in research on fermentation technology and genetic engineering. Products under development include cancer and viral vaccines as well as prosthetics.

Brookhaven Instruments Corporation

750 Blue Point Rd, Holtsville, NY 11742-1832.

Tel: 512 758 3200 Telex: 6852252 Fax: 516 758 3255

Manufactures particle analyzers and apparatus for molecular weight determination.

Brookhaven National Laboratory

Department of Biology

Upton, NY 11973.

Tel: (516) 345 3382

Developing system for photobiological production of hydrogen using membrane vesicles from green photosynthetic bacteria.

C Itoh & Co (America) Inc

335 Madison Avenue, New York, NY 10017. Tel: 212 818 81 18 Telex: WUD 12297

Market a microprocessor controlled bioreactor system and evaporators.

Cambridge Filter Corp

7645 Henry Clay Blvd, Syracuse, NY 13221-4906. Tel: 315 457 1000 Telex: 322096 Fax: 315 457 7341

Manufacture clean room laminar flow systems.

Cambridge Instruments Inc

Optical Instruments Division

PO Box 123, Buffalo, NY 14240-0123.

Tel: 716 891 3000 Telex: 91285 Fax: 716 891 3155

Supplies a wide range of microscopes and accessories including scanning electron microscopes and other research microscopes.

UNITED STATES OF AMERICA New York - NY Part III

Cambridge Research Biochemicals Inc

10 East Merick Rd, Suite 202, Valley Stream, NY 11580. Tel: 516 825 1322/800 327 0125 Telex: 971398 1519 Fax: 516 825

Supply active peptides, peptide antiserums, neuroactive and other amino acids, enzyme substrates, inhibitors and peptide-derived oncoprotein antibodies for research as well as offering custom peptide synthesis, custom aminopeptide antibody manufacture, bulk peptide synthesis and radiolabelled peptides. Carrying out research on complementary synthetic peptide controls to oncoprotein antibodies, oncoprotein immunodiagnostic and immunoblotting kits, epitope scanning kits, synthetic peptide mimotope design kits, software, neuroendocrine markers and synthetic peptide antibodies to HIV.

Carl Zeiss Inc

One Zeiss Drive, Thornwood, NY 10594. Tel: 914 747 1800 Telex: 221834

Markets a full range of microscopy equipment, including upright, inverted, stereo and photomicroscopes; transmission and scanning electron microscopes with integrated image analysis; quantitative and analytical microscopy systems; laser scan microscopes; and a series of image processing and image analysis systems.

Carolus Corp

PO Box 219, Champlain, NY 12919. Tel: 514 733 5858

Supply fermentation equipment.

Carter-Wallace Inc

767 Fifth Avenue, New York, NY 10022. Tel: (212) 758 4500

Reported licensee of Stanford University, US Cohen-Boyer patent for recombinant DNA Technology.

Celanese Corp

1211 Avenue of the Americas, New York, NY 10036. Tel: 212 764 7640

Celanese Research Co: Summit, NJ 07901.

Tel: 201 522 7500

Manufactures industrial chemicals and polymers based on petrochemical feedstocks. Licenses an anaerobic treatment process for use with industrial wastewater. Has a research programme related to genetic engineering and has contracted work to Yale University, US concerned with development of enzymes for use in the industrial, chemical and textile industries.

Cell-Tech International

688 Main Street, Buffalo, NY 14202. Tel: (716) 842 6270 Telex: 421669

Markets human B-cell growth factor. Developing diagnostics, clinical test and pharmaceutical products based on recombinant DNA technology and hybridomas. Partnership between Cellular Products Inc, US and Biotech Research Laboratories Inc, US.

Cellular Products Inc

688 Main Street, Buffalo, NY 14202.

Telex: 131202 cpi Tel: 716 842 6270 Fax: 716 842 1093

Produces research products including human and recombinant growth factors and monoclonal antibodies to HIV and HTLV-1 retroviruses as well as antigen ELISAs, immunofluorescent assays and FDA-approved antibody ELISA test kits for HIV and HTLV-1.

Charm Bioengineering

710 Old Willets Path, PO Box 12308, Hauppauge, NY 11788-0615. Tel: 516 234 0500 Telex: 144538 Fax: 516 234 0691

Supply radioimmunoassay equipment, radiation monitors and detectors, sterilizers and scintillation counters.

Chem Systems Inc

303 South Broadway, Tarrytown, NY 10591. Tel: 914 631 2828

Consulting firm undertaking studies on the implications of biotechnology developments to the chemical industry. Areas covered include technical, economic, market and strategic studies for the applications of biotechnology to speciality chemicals, fine chemicals, commodity chemicals, energy, equipment, food industry etc. Capabilities from design of process through economic evaluations and strategic considerations. Additionally, determine economic technologies available for licence and merger and acquisition work.

Clark Laboratories Inc

215 Pine St, Jamestown, NY 14701.

Tel: 716 483 3851

Produce immunodiagnostic reagents and offer services in development of immunoassays and the preparation of antigen coated tubes and plates.

Clean Room Products Inc.

1 Clean Room Drive, Ronkonkoma, NY 11779-6528. Tel: 516 588 7000/800 832 4273 Telex: 645151 Fax: 516 588

Manufactures equipment and accessories for the construction of clean

Columbia University

School of Engineering

353 Terrace Building, New York, NY 10027.

Tel: (212) 280 4716

Investigating use of ultrafiltration membranes and, in particular, pilot-plant studies using non-fouling membranes with algae as a means of concentrating plant extracts and hydrolzates for use as fermentation feedstocks. Possible methods of end-product recovery from fermentation process include ethanol production.

Columbia University

Office of Science & Technology Development Department of Biochemistry 630 West 168th Street, New York, NY 10032.

Tel: (212) 694 4126

Offers non-exclusive licences for commercial development of pioneering genetic engineering techniques developed at the University. These methods make it possible to introduce almost any gene into cultures of animal and other eukaryotic cells which can then be used for the production of proteins for vaccines.

Columbia University

Department of Chemical Engineering

New York, NY 10027.

Tel: 212 280 4453

Developing methods for recovery of protein products from recombinant yeast based on enzymic digestion of the cell wall leading to a much higher protein yield.

Cornell University

Department of Biochemistry

Ithaca, NY 14853.

Tel: (607) 256 4326

Studying regulation of genetic activity in yeast (Saccharomyces cerevisiae) using mutations, nucleotide sequencing and recombinant DNA technology.

Cornell University

Department of Agricultural Engineering

Ithaca, NY 14853.

Tel: (607) 256 4533

Using attached-film expanded-bed reactor with thermophilic bacteria for conversion of cellulosic material to ethanol and acetic acid or with yeast for the production of ethanol. Developing plug-flow and completely mixed digesters for use with agricultural residues. Developing computer programs to model economics of anaerobic digestion.

Cornell University

Boyce Thompson Institute for Plant Research

Tower Road, Ithaca, NY 14853.

Tel: (607) 257 2030

Undertaking studies on structure and function of nitrogen fixation (nif) genes and introducing nif genes into bacteria using recombinant DNA techniques as well as studies on mycorrhiza.

Part III New York - NY UNITED STATES OF AMERICA

Corning Glass Works

Houghton Park AB-1, Corning, NY 14831. Tel: (607) 974 9000 Telex: 932499

PO Box 1150, Elmira, NY 14902-9944

Manufactures glass, including Pyrex brand heat-resistant borosilicate glassware for domestic and laboratory use, as well as plastic and glass disposable laboratory ware. Has developed systems for immobilization of enzymes on glass support systems and for the production of high-fructose corn syrup using glucose (xylose) isomerase in particular. Has also applied the technique to production of radioimmunoassay test kits. Has developed immobilized systems for hydrolysis of lactose in whey.

Corning Science Products

PO Box 7740, Corning, NY 14830. Tel: 800 448 3400

Supply ELISA plates and washers. A Corning Laboratory Sciences Company.

Diagnostic Technology Inc

240 Vanderbilt Motor Parkway, Hauppauge, NY 11788. Tel: 516 582 4949

Markets diagnostics and clinical tests for medical and veterinary use as well as other biological products including monoclonal antibodies and agglutinin tests for blood test kits.

Duwest Research

44 Ferracane Place, PO Box 349, Garnerville, NY 10923. Tel: 914 942 1193

Offers both single and multi-client consultancy services in the areas of market research and economic analysis.

E F Hutton

1 Battery Park Plaza, New York, NY 10004. Tel: (212) 742 5000

Investment corporation with interests in biotechnology companies.

Eastman Kodak Co

Life Sciences Division

343 State Street, Rochester, NY 14650.

Tel: 716 458 4014/800 225 5352 Telex: 978481

Major supplier of photographic and x-ray film, including materials designed for biological and medical applications. Developing diagnostic methods based on thin film immobilized enzyme technology and reflectance spectroscopy as well as products in the areas of animal nutrition, agricultural technology and pharmaceuticals through partnership with Cetus and Amgen, US.

Edwards High Vacuum Inc

3279 Grand Island Blvd, Grand Island, NY 14072. Tel: (716) 773 7552 Telex: 6854319

Manufactures vacuum pumps and freeze driers.

Elsevier Scientific Software

Elsevier Biosoft

JIC 52 Vanderbilt Avenue, New York, NY 10017. Tel: (212) 370 5520 Telex: 420643

Distributes scientific software for IBM-PC and Apple I.

Enzo Biochem Inc

345 Hudson Street, New York, NY 10013. Tel: 212 337 3355/800 221 7705 Tele. Telex: 424683 enzobio

Currently develops, manufactures and markets diagnostic and research products and provides diagnostic services. FDA-cleared diagnostic products include non radioactive DNA probe-based assays for viral infections and a gel based, one-step, faecal occult blood screening test. Research products include DNA probe based assays for identifying a variety of microorganisms and viruses, biotinylated probes for viruses, oncogenes and bacteria, monoclonal antibodies for immunopathology and biotinylation kits for the non-radioactive labelling of DNA probes. Recent product introduction analyses cervical biopsy tissue for virus types implicated in cervical cancer. Owns three diagnostic laboratories and is building a network of clinical reference laboratories primarily by acquisition. Developing new and highly specific therapeutics for combating viral diseases and cancer using antisense nucleic acid technology.

Ever Ready Thermometer Co Inc

401 Park Ave S, New York, NY 10016. Tel: 212 684 2155 Fax: 212 684 2204

Manufacture humidity and temperature monitors and controls.

111 Great Neck Rd, Suite 607, Great Neck, NY 11021. Fax: 516 466 0893 Tel: 516 466 2110 Telex: 275770

Developing therapeutic products based on antivirals, surfactants, cytokines and interferon for treatment of genital herpes and genital warts.

FBA Pharmaceuticals

425 Park Avenue, New York, NY 10022.

Tel: 212 751 5544

Distributes bulk pharmaceuticals and fine chemicals (see Bayer AG, Germany).

Fleischmann Yeast Co

625 Madison Avenue, New York, NY 10022. Tel: (212) 759 4400

Produces bakers' yeast, feed yeast and related food products.

Fluid Metering Inc

29 Orchard St, PO Box 179, Oyster Bay, NY 11771. Tel: 516 922 6050/800 223 3388 Telex: 510 100 1281 Fax: 516 624 8261

Supply equipment for gel filtration, HPLC and electrophoretic transfer as well as flow controllers and pumps.

Fluka Chemical Corp

980 South Second Street, Ronkonkoma, NY 11799. Tel: 516 467 0980/800 358 5287 Telex: 967807 Fax: 516 467

Supplies a wide range of fine chemicals including neutral ionophores for ion-selective electrodes, silanizing agents and cocktails for ion-selective liquid membranes for use in microelectrodes and bioactive peptides. Subsidiary of Fluka Chemie, Switzerland.

Freeman Industries

100 Marbledale Road, PO Box 415, Tuckahoe, NY 10707. Tel: (914) 961 2100 Telex: 131646

Supplies vitamin concentrates, amino acids and proteins. Extracts fine chemicals from agricultural waste products. Manufactures and distributes inorganic and organic chemicals containing bromine.

Fritzsche Dodge & Olcott

76 Ninth Avenue, New York, NY 10011.

Develops and manufactures fragrances, flavours and allied materials from sources which include fermentation and microbial conversion of natural products.

Frost & Sullivan Inc

106 Fulton Street, New York, NY 10038. Tel: (212) 233 1080

Carries out surveys analyzing and forecasting market developments; these include a study of the existing and potential fermentation products markets within the European Community in relation to antibiotics, enzymes organic acids, amino acids, vitamins, organic solvents, single-cell protein, oils, fats and polysaccharides.

FTS Systems Inc

Life Sciences Division

PO Box 158, Route 209, Stone Ridge, NY 12484-0158. Tel: 914 687 0071/800 251 1531 Telex: 510 247 0547 Fax: 914 687 7481

Manufactures freeze dryers for laboratory use as well as vacuum pumps, lyophilizers and baths.

Gallard Schlesinger Industries Inc

584 Mineola Avenue, Carle Place, NY 11514. Tel: 516 333 5600 Telex: 967792

Distributes a wide range of laboratory and fine chemicals, including coloured isoelectric point markers and calibration kits. Agent for BDH Chemicals Ltd, UK. Sales in US only.

UNITED STATES OF AMERICA New York - NY Part III

General Electric Co

Energy Systems Programs Department 1 River Road, Schenectady, NY 12345. Tel: 518 385 7024

Has developed method of biogas purification based on the use of permoselective membranes.

General Foods Corp

250 North Street, White Plains, NY 10625. Tel: 914 335 2500

Technical Centre: 555 South Broadway, Tarrytown, NY 10591

Manufactures and distributes processed food products. Carries out related research on fermentation of foods and food ingredients from research stage to production facility. Has investment interests in Engenics Inc, US.

Genetic Diagnostics Corp

160 Community Drive, Great Neck, NY 11021. Tel: 516 487 4711 Telex: 230199

Manufactures and supplies monoclonal antibody diagnostic kits and fluorometers, and offers a contract research service related to hybridomas, affinity purification and separation as well as method development with applications in tests for drug abuse and diseases.

Gibco Laboratories Life Technologies Inc

3175 Staley Rd, Grand Island, NY 14072. Tel: 716 773 0700/800 828 6686 Telex: 916407

Supplies media components for cell growth including agar, yeast extracts amd peptones.

Giles Scientific Inc

250 Mercer St, Suite A301, New York, NY 10012. Tel: 212 603 9290 Fax: 212 586 9095

Supply products for testing antibiotic sensitivity and computer software.

Harrick Scientific Corp

88 Broadway, PO Box 1288, Ossining, NY 10562. Tel: (914) 762 0020

Supplies electrophoresis equipment and spectrophotometer cells.

Heat Systems Ultrasonics Inc

Telex: 143101 Fax: 516 694

Manufactures a wide range of apparatus for use in cell disruption, emulsifying and processing cells or tissue, based on both mechanical and ultrasonic systems, and clean room equipment and glove boxes.

Hellma Cells Inc

118-21 Queens Blvd, Forest Hills, NY 11375. Tel: 718 544 9166 Fax: 718 263 6910

Supplies spectrophotometric accessories including deuterium lamps, dye-laser cells and a complete line of flow cells capable of turning any spectrophotometer into an HPLC detector.

IBM Corp

Thomas J Watson Research Center, Yorktown Heights, New York, NY. Tel: (914) 945 3000

Orchard Rd, Armonk, NY 10504

Has developed bench top computers for laboratory use, with real time operating system software to both control instruments and acquire, as well as analyse, data from multiple instruments. The system, which offers printing, plotting and data storage facilities, includes a chromatography applications program that can be used with both liquid and gas chromatographs.

Imclone Systems Inc

180 Varick St 7th Floor, New York, NY 10014. Tel: 212 645 1405 Fax: 212 645 2054

Produce DNA probes and immunodiagnostics for viral diseases, vaccines and modelling systems for drug design.

Inco Inc

1 New York Plaza, New York, NY 10004. Tel: 212 742 4626

R&D Center Inc: Sterling Forest, Suffern, NY 10901

International company involved in mining, formed metal products, electrical energy including batteries, and related products. Has strong investment interest in biotechnology companies, including Biogen SA, Switzerland, Immunogen, US and Liposome Co, US.

Intergen Co

formerly Armour Biochemicals

Two Manhattanville Rd, Purchase, NY 10577. Tel: 800 431 4505 Telex: 426973

Produce virus-free foetal bovine serum and also provide normal calf and horse serums as well as sterile trypsin solution.

International Flavours and Fragrances Inc

521 West 57th Street, New York, NY 10019.

Produces a wide range of organic chemicals by both fermentation and chemical synthesis.

Kidder Peabody and Co Inc

10 Hanover Square, New York, NY 10005. Tel: (212) 747 2802

Provides marketing and financial information for the drug industry in the form of published reports including The Industrial Enzyme Market.

Kipp & Zonen

390 Central Avenue, Bohemia, NY 11716.

Fax: 516 589 2068 Tel: 516 589 2885 Telex: 0960250 Manufactures recorders and high-resolution printer/plotters.

Lederle Laboratories

Pearl River, New York, NY 10965. Tel: (914) 735 5000

Major producer of pharmaceuticals, including penicillins and other antibiotics, vaccines, vitamins, anticancer and cardiovascular therapeutics and antifungal drugs. Part of American Cyanamid Co, US.

Manostat Corp

519 Eighth Avenue, New York, NY 10018.

Tel: 212 594 6262 Telex: 649380 Fax: 212 594 6262

Manufactures automatic pipetting devices, culture media, liquid chromatography equipment, glove boxes and peristaltic pumps.

Milton Roy Co

820 Linden Ave, Rochester, NY 14625.

Tel: 800 922 0826 Telex: 4441037 Fax: 716 248 4014

Manufacture spectrophotometers.

Mobay Corp

FBA Pharmaceuticals

Tel: 212 751 5544 Fax: 212 308 2103

Supplies pharmaceuticals and fine chemicals; products of Bayer AG, Germany.

Montedison USA Inc

1114 Avenue of the Americas, New York, NY 10036.

Tel: 212 764 0260 Telex: 66312/225976 Fax: 212 840 0732

Distributes products of Montedison SpA, Italy.

Nalge Co

Nalgene Labware Department

Manufactures a wide range of plastic laboratory ware including pipettes, filter systems, pipette washers etc. Division of Sybron Corp, US

New York Biolabs Inc

30 Austin Boulevard, PO Box 167, Commack, NY 11725.

Tel: 516 543 3800 Telex: 271150

Supplies enzymes for molecular biology specializing in restriction enzymes, as well as offering custom service for purification of enzymes and nucleic acids for genetic engineering purposes.

Part III New York - NY UNITED STATES OF AMERICA

New York City

Office of Resource Recovery

51 Chambers Street, Room 830, New York, NY 10007. Tel: (212) 566 8870

Developing landfill gas projects and testing use of landfill gas in internal combustion engines for generation of electricity.

New York City Public Health Research Institute

Applied Genetics Laboratory

455 First Ave, New York, NY 10016.

Tel: 212 578 0850

Carrying out research on the genetic manipulation of Bacillus subtilis including development of assays for determination of level of protein secretion based on recognition through inclusion of a specific sequence, in addition to the usual secretion sequence and foreign gene sequence. Products investigated include the herpes virus antigen as well as prokaryotic and eukaryotic genes.

New York Public Health Research Institute

Department of Microbiology

455 First Avenue, New York, NY 10016.

Tel: 212 578 0800

Carrying out studies on cloning of genes in Bacillus subtilis using Staphylococcus aureus plasmids and in vitro recombination techniques.

New York State College Cornell

Agriculture & Life Sciences

Ithaca, NY 14853.

Tel: 607 256 3264

Assisting in the development of guidelines for the release of genetically engineered organisms.

Nikon Inc

Instruments Division

623 Stewart Avenue, Garden City, NY 11530. Tel: (516) 222 0200 Telex: 967806

Manufactures a wide range of optical microscopes and related photographic equipment, including research polarizing, clinical laboratory, stereo zoom, ultra-violet illumination instruments etc.

Northern Clinical Diagnostics Inc

688 Main Street, Buffalo, NY 14202.

Tel: (716) 842 6270

Clinical testing company. Also looking at methods of adapting research methodologies to clinical applications. Developing diagnostic test methods for AIDS based on detection of human T-cell leukemia virus (HTLV). Subsidiary of Cellular Products Inc, US.

Norwich Eaton Pharmaceuticals Inc

17 Eaton Avenue, Norwich, NY 13815-0231.

Tel: (607) 335 2111

Manufactures drugs and pharmaceuticals. A Procter & Gamble company.

NSG Precision Cells Inc

195G Central Ave, Farmingdale, NY 11735. Fax: 510 221 2152 Tel: 516 249 7474

Manufacture a very wide range of cells for spectrometry in optical glass or quartz as well as cells for UV and IR work. Products include standard cells, anaerobic cells, water jacketed cells, dye laser cells and fluorimeter cells.

Nuclear Associates

100 Voice Rd, Carle Place, NY 11514-1593.

Tel: 516 741 6360 Fax: 516 741 5414

Manufacture radioactivity counters and densitometers.

Nuclear & Genetic Technology Inc

172 Brook Avenue, Deer Park, NY 11729.

Tel: (516) 242 9802

Research and development company carrying out genetic engineering research. Developing monoclonal antibody-based in vitro human diagnostics against cancer.

NYGene Corp

One Odell Plaza, Yonkers, NY 10701. Tel: 914 964 8300/800 622 3280

Produce a membrane affinity separation system for the purification of monoclonal and polyclonal antibodies.

Olympus Corp

Clinical Instruments Division

4 Nevada Drive, Lake Success, NY 11042.

Tel: 516 488 3323/800 521 5548

Supplies monoclonal antibodies specific for interleukins 1 and 2, tumour necrosis factor, interferons beta and gamma, granulocyte-monocyte colony stimulating factor and monoclonal antibodies specific for human leukocyte markers as well as second-step reagents; products developed and manufactured for Olympus by United Biomedical Inc, US.

Olympus Corp of America

Precision Instruments Division

4 Nevada Drive, Lake Success, NY 11042-1179. Tel: 516 488 3880/800 446 5967 Telex: 960199

Manufactures microscopes, photographic and other optical devices for laboratory and clinical use.

Oncogene Science Inc

350 Community Drive, Manhasset, NY 11030.

Tel: 516 365 9300

Produce monoclonal antibodies and oncogene probes. Products include monoclonal antibodies for oncogene-encoded proteins, growth factors and their receptors, oncogene DNA probes and oligonucleotides. Also DNA probe-based in vitro diagnostic products available for detecting leukemia.

Oyster Bay Pump Works Inc

1 Bay Avenue, PO Box 96, Oyster Bay, NY 11771. Tel: 516 922 3789

Manufactures specialist multichannel pumps for use in immunodiagnostics based on positive displacement solid-state stepping motor drives.

Pall Biomedical Products Corp

BioSupport Division

77 Crescent Beach Road, Glen Cove, NY 11542.
Tel: 516 759 1900/800 645 6246 Telex: 649491

Manufacture solid phase support membranes with a variety of surface characteristics for applications in diagnostic assays including immunofiltration, dot ELISA and other solid phase immunoassay protocols. Offers services in development of in vitro diagnostic assays.

Pall Biotechnology Division

30 Sea Cliff Avenue, Glen Cove, NY 11542.

Tel: (516) 671 4000 Telex: 126329

Supplies a wide range of filtration apparatus and filtration membranes. Products include nylon membranes for DNA or RNA blot transfers.

Pall Trinity Micro Corp

Cortland, NY 13045.

Tel: (607) 753 6041 Telex: 93795

Manufactures filters and filtration systems.

Pall Ultrafine Filtration Corp

2200 Northern Blvd, East Hills, NY 11548.

Tel: (800) 645 6262

Supplies a wide range of filtration products and systems for laboratory and industrial use.

Pfeiffer Glass

140 Bennington Drive, Rochester, NY 14616.

Tel: (716) 865 1290

Manufactures pipettes. Division of Fisher Scientific International, US.

UNITED STATES OF AMERICA New York - NY Part III

Pfizer Inc

235 East 42nd Street, New York, NY 10017 Tel: 212 573 2531/2323 Fax: 212 573 7851

PO Box 10640, Southport, NC 28461.

Tel: 919 457 5011

Leading manufacturer of fermentation products including organic acids, antibiotics, enzymes and microbial polymers, sorbose, xanthan, antibiotics and tetracycline. Major producer of bulk industrial enzymes, including protease, lipases, carbohydrases etc. Has active programme of strain selection supplemented by genetic engineering methods, including cell fusion and recombinant DNA technology. Manufacture citric acid by bulk fermentation at NC site. Also produce water treatment products.

Popper and Sons Inc

300 Denton Ave, New Hyde Park, NY 11040. *Tel*: (516) 248 0300

Manufacture cell culture and harvesting equipment as well as pipetters and syringes

Praxis Biologics Inc

30 Corporate Woods, Suite 300, Rochester, NY 14623.

Tel: 716 272 7000 Telex: 1312686

4300 Oak Park, Sanford, NC 27330.

Developing pediatric vaccines, therapeutics and diagnostics against infectious diseases using techniques of animal cell culture. Carrying out clinical trials on typhoid vaccine. Associated with Stanford University, US.

Prime Technologies International

630 Fifth Ave, Suite 1540, New York, NY 10111. Tel: 212 307 6150

Consultants offering information and licensing opportunities in several areas of technology including biotechnology and health care. Also provide assistance in negotiating terms for selected technologies.

Quantum Chemical Corp

Lifecodes Corp Division

Old Sawmill River Rd, Valhalla, NY 10595. Tel: 914 592 4122 Fax: 914 592 1235

Carrying out research and development in relation to medical diagnostics with an interest in recombinant DNA technology, immunology and hybridomas and modification of proteins. Offer clinical services in the use of radioisotope DNA probes for chronic myelogenous leukemia and T and B cell cancer.

Revion Inc

767 Fifth Avenue, New York, NY 10022.

Tel: 212 758 5000

Health Care Group: 1 Scarsdale Rd, Tuckahoe, NY 10707

Major manufacturer of health care products and cosmetics. Has interests in the production of interferon through its subsidiary Meloy Laboratories,

Robert S First Inc

(see RSF International Group Inc).

Rochester University

Department of Biology

260 Critten Boulevard, Rochester, NY 14627.

Investigating genes for histone synthesis in large and small nucleus of Tetrahymena.

Rockefeller University

Laboratory of Molecular Cell Biology

66th & York Avenue, New York, NY 10021.

Studies include gene organization and formation of mRNA in mammalian cells and determination of inverted repeat DNA sequences. Also assessing role of chromosomal proteins in gene activation and use of charon phage as cloning vector.

Rockefeller University

Laboratory of Genetics

66th & York Avenue, New York, NY 10021.

Carrying out studies on structure and function of chromosomal DNA in Drosophila melanogaster, use of cosmids as cloning vector, and mapping of structural genes. Also studying fine structure of DNA.

RSF International Group Inc

formerly Robert S First Inc

PO Box 368, Mount Kiscos, NY 10549. Tel: 914 241 6360 Fax: 914 241 6362

International management consultants to the health care and bioltechnology industries. Provide market research and assistance for strategic planning mergers and acquisitions, technology transfer. Offcies in Tokyo and Barcelona.

Savant Instruments Inc

110-103 Bi-County Blvd, Farmingdale, NY 11735.

Tel: 800 634 8886 Telex: 6973199

Produces laboratory concentration and evaporation systems with applications in nucleic acid, peptide, hormone and tissue extract separation as well as preparation of samples for electrophoresis and chromatography. Also supplies fused cells for ultraviolet, visible and infrared (2-10 mm path length), flow cells, jacketed cells and cell washers.

Scherago Associates Inc

1515 Broadway, New York, NY 10036. Tel: 212 730 1050 Fax: 212 382 3725

Sponsors of conferences in biotechnology, such as the Second Annual Congress for Hybridoma Research.

Schroder Ventures

787 Seventh Ave, New York, NY 10019. Tel: 212 871 3880

Has an investment interest in the Cambridge BioScience Corp, Celgene Corp, DNA Plant Technology Corp, Mycogen Corp, Nova Pharmaceutical Corp, Neurogen Corp and Procyte Corp, all US.

Fax: 607 334

Fax: 516 333 4859

Sheffield Products

PO Box 630, Woods Corner, Norwich, NY 13815. Tel: 607 334 9951/800 833 8308 Telex: 6460 Telex: 646056

Manufactures and markets hydrolyzed proteins and peptones for use in

Sloan Kettering Institute for Cancer Research

410 East 68th Street, New York, NY 10021.

Carrying out studies on structure and expression of genes, including immunoglobulin, globulin prolactin and dihydrofolate genes, cloning of DNAs specifically expressed in tumour cells and regulation of synthesis of mRNA for growth hormones.

Spectronics Corp

956 Brush Hollow Rd, Westbury, NY 11590. Tel: 516 333 4840 Telex: 510 222 5877

Manufactures analytical chromatographs and accessories, DNA UV transilluminators and electrophoresis apparatus, pipettes and sterilizers.

State University of New York

School of Biology College of Environmental Science

Syracuse, NY 13210.

Tel: (312) 470 6849

Studying production of glycerol at the laboratory scale by use of the algae Dunaliella grown in high-salt media.

State University of New York

Department of Microbiology

Stony Brook, NY 11790.

Investigating gene expression in cells following nuclear transplantation.

State University of New York

Centre for Biotechnology

130 Life Sciences Building, Stony Brook, NY 11794-5208. Tel: 516 632 8521

Encourages innovative research at the University for technology transfer. Also lets incubator space to start up companies in biotechnology. Provides access of industry to the specialized resources of the University, including tissue culture and monoclonal antibody laboratory, centre for analysis and synthesis of macromolecules and centre for radioligand synthesis and spectroscopy.

Part III North Carolina - NC UNITED STATES OF AMERICA

State University of New York

Department of Neurobiology

Stony Brook, NY 11790.

Carrying out studies on monoclonal antibodies.

Sterling Organics US

33 Riverside Ave, Rensselaer, New York, NY 12144. Tel: 518 445 8100 Telex: 710 441 8252 Fax Fax: 518 445 8635

Manufacture a wide range of absorbent media designed for use in industrial scale separation of biological products and materials including: macroporous particles based on titania, kieselguhr, or calcium phosphate; ion exchangers based on agarose; glutaraldehyde treated supports for protein immobilization and cross-linked agarose composites. Subsidiary of Sterling Drug, part of Eastman Kodak group.

Sulzer Biotech Systems

230 Crossways Park Drive, Woodbury, NY 11797.
Tel: 516 921 7373/800 433 6774 Telex: 4974189 sbs wdb Tel: 516 921 7373/800 433 6774

516 921 7684

Fax:

Supplies bioreactors and biotechnical equipment for the laboratory, pilot plant and industrial user as well as computerized control systems (analog or DDC) and a large range of peripheral equipment including micro- and ultrafiltration units for downstream processing (see MBR Bio Reactor AG, Switzerland).

United Biomedical Inc

2 Nevada Drive, Lake Success, NY 11042. Tel: 516 354 1060 Fax: 516 775 8024

Produces diagnostics and chemical tests based on monoclonal antibodies and speciality proteins. Supplies monoclonal antibodies for research/testing markets. Offers contract services in immunological product development. Developing an AIDS vaccine based on peptides.

Unitron Inc

175 Express Street, Plainview, NY 11803. Tel: 516 822 4601 Telex: 961328

Manufactures a range of optical microscopes including a tissue culture microscope with a large inverted stage suited to photography. Available for brightfield or phase contrast applications. Subsidiary of Taztek Industries

Virogenetics Corp

120 De Freest Drive, Troy, NY 12180.

Joint venture between Institut Merieux and Health Research Inc to develop therapeutic and diagnostic products for human healthcare and veterinary use including human/animal vaccines utilizing viral vectors such as genetically engineered pox virus.

The VirTis Co Inc

Route 208, Gardiner, NY 12525.

Tel: 914 255 5000/800 431 8232 Telex: 926474 Fax: 914 255

Supplies laboratory equipment including research fermenters with temperature and speed control, a digital dsplay unit with options for aerobic or anaerobic culture of cells or microbes in batch or continuous culture. Other products include laboratory freeze dryers and ultrasonic cell disrupters.

Vitatech Consultants

PO Box 12, Syosset, NY 11791.

Tel: 516 921 8539

Developing a genetically-engineered protein which acts as a biochemical animal spayer by preventing oestrus behaviour.

Wadsworth Center for Laboratories and Research

New York State Department of Health

Albany, NY 11201.

Tel: 518 474 2121

Developing vaccines based on a technique of splicing the gene for the required disease virus onto the vaccinia virus.

WHO LEMSIP

Laboratory for Experimental Medicine & Surgery in Primates NYU Medical Center, 550 First Ave, New York, NY 10016. Tel: 212 679 8884

Provides a primate blood grouping service as well as carrying out research studies on hepatitis in chimpanzees.

Yeshiva University

Albert Einstein School of Medicine Department of Genetics Bronx, NY 10461.

Undertaking studies on transposed genes and gene mobilization in histone genes from sea urchin.

Yeshiva University

Albert Einstein School of Medicine Department of Microbiology & Immunology

Bronx, NY 10461.

Studying the organisation of mammalian genes.

Yeshiva University

Albert Einstein School of Medicine Department of Biochemistry Bronx, NY 10461.

Studying regulation of genes for alpha-amylase in yeast (Saccharomyces carlsbergensis), kinetics of transcription and the nature of genetic lesions in mutants

York Biologicals International Inc

24 Old Wood Rd, Stony Brook, NY 11790. Tel: 516 751 6553 Telex: 421669

Supplies diagnostic kits and reagents, biochemical and other biological products including serological reagents, antigens, antiserums and growth factors for tissue culture, immobilized antibodies and alpha, beta and gamma-interferons.

Zeta-Meter Co Inc

50-17 Fifth St, Long Island City, NY 11101. Tel: 718 392 0229 Telex: 4948504

Manufactures particle electrophoresis instruments suitable for analysis of colloids in suspension with applications in water and effluent treatment, pulp and paper making, pharmaceutical production and food processing.

North Carolina - NC

Advanced Medical Imaging Inc

PO Box 15160, Charlotte, NC 28211.

Tel: 704 364 7213

Developing products for skin cancer diagnosis and other tissue diseases including in vivo cellular imaging.

Air Control Inc

PO Box 1738, 237 Raleigh Rd, Henderson, NC 27536. Tel: 919 492 2300 Fax: 919 492 9225

Supply clean room equipment.

Akzo Technical Membranes

One North Park Sq, PO Box 2659, Asheville, NC 28802 Tel: 704 258 5010/800 227 3652 Fax: 704 258 5040 Fax: 704 258 5040

Supply autoclavable crossflow microfiltration cartridges suitable for sterile filtration applications in pharmaceutical and biotechnical processes as well as for concentration of cell suspensions. Develop and market: technical hollow fibres; tubes and flat membranes; membrane and polymer technology. Subsidiary of Akzo America Inc.

Allotech

715 West Johnson St, Raleigh, NC 27603.

Tel: 919 828 9446

Developing perception-based display technologies in relation to the nervous

American Agricultural Services Inc

Route 2, Box 267-A, Lucama, NC 27851. Tel: 919 469 1800

Carry out field and greenhouse evaluation of tissue culture progeny and field testing of biological products for farmers and investors.

Aqua-10 Corp

PO Box 818, Beaufort, NC 28516.

Tel: 919 728 2270

Produce probiotics for livestock and poultry as well as for soil and crops.

UNITED STATES OF AMERICA North Carolina - NC Part III

AquaSynergy Ltd

5977 Dixon Drive, Raleigh, NC 27609. Tel: 919 782 8016

Developing technologies related to increased productivity in the culture of aquatic plants and animals.

Atlantic Coast Consultants Inc

2450 Honeysuckle Rd, Chapel Hill, NC 27514. Tel: 919 929 6212

Supplies biotechnological equipment suitable for clinical and research laboratory use.

Bafer Inc

2024 W Fifth St, Washington, NC 27889. Tel: 919 975 2012

Custom design and manufacture thermoplastic products including therapeutic equipment, filters and packaging.

Basf Corp

PO Box 13528, Research Triangle Park, NC 27709. Tel: 919 248 6500

Produces chemicals. Also developing agricultural crop protection products (see Basf AG, Germany).

Becton Dickinson Research Center

Research Triangle Park, NC.

Carrying out research on immunodiagnostics.

Bio-Tek Research Consultants

PO Box 12626, Research Triangle Park, NC 27709. Tel: 919 361 2128

Develop research technology for histopathology and electron microscopy.

Biocon Inc

8100 Brownleigh Drive, Raleigh, NC 27612. Tel: 919 781 9777

649 Lofstrand Lane, Rockville, MD 20850. Tel: 301 762 3202

Offers services in the testing and maintenance of air filtration and laminar flow systems, toxicology testing for pesticides etc and veterinary pathology services.

Biocon US Inc

PO Box 13159, Research Triangle Park, NC 27709. Tel: 919 781 3550 Telex: 218407 518 Codell Drive, Lexington, KY 40509.

Tel: 606 269 6351

Carries out research on novel enzymes and supplies enzymes, natural colours and related products for the following industries: brewing, distilling, food baking/milling, animal feed, dairy, starch processing and pharmaceutical. Enzymes supplied include amylases, amyloglucosidase, lactase and cellulases. Subsidiary of Biocon Ltd, Ireland.

Cardiovascular Diagnostics Inc

PO Box 13417, Research Triangle Park, NC 27709. Tel: 919 544 2952

Carrying out research and development on cardiovascular and other diagnostics.

Boron Biologicals Inc

2811 O'Berry St, Raleigh, NC 27607. Tel: 919 832 2044

Research, synthesize and market biologically active compounds including boron analogues of amino acids and nucleic acids, and neurotransmitters. Offer custom synthesis services.

Burroughs Wellcome Co

3030 Cornwallis Road, Research Triangle Park, NC 27709. Tel: 919 248 3000 Telex: 510 927 0915

PO Box 1887, Greenville, NC 27835.

Tel: 919 830 6476

Manufactures and supplies a wide range of pharmaceutical, veterinary, diagnostic and other products for health care and treatment of humans and animals. Products under development include interferon, vaccines, antibacterials, antivirals for AIDS etc, antihistamines, anti-depressants, anti-cancer and cardiovascular treatments.(see Wellcome Diagnostics,

Byron Instruments Inc

520 S Harrington St, Raleigh, NC 27601.

Tel: 919 832 7501

Produce industrial monitoring devices for air quality and analyzers including an analyzer for CO in the blood. Subsidiary of General Monitors

CAMAG Scientific Inc

PO Box 563, Wrightsville Beach, NC 28480.

Tel: 910 343 1830/800 334 3909

Distributors for thin layer chromotography products of CAMAG, Switzerland.

Carolina Agrotech Corp

PO Box 2196, Henderson, NC 27536. *Tel*: 919 492 9377

Research and development of Shiitake mushroom spawn from genetically pure culture for cultivation and marketing.

Carolina Biological Supply Co

2700 York Road, Burlington, NC 27215. Tel: 919 584 0381/800 334 5551 Telex: 574354

Supplies fine chemicals, enzymes and diagnostics for research and medical applications, including antibiotics such as penicillin, products for liquid chromatography, diagnostic enzymes such as urease, etc. Offer a wide range of laboratory teaching aids.

Carolina By-Products Co Inc

PO Box 20687, Greensboro, NC 27420.

Tel: 919 272 3121

Supply nutrients, substrates and defoamers.

Carolina Chemists and Consultants Inc

5500 Commercial Ave, Raleigh, NC 27612.

Tel: 919 787 3061

Offer analytical services including: chemical analysis of waste products, ground and drinking water; USP sterility testing.

Carolina Medical Electronics Inc

157 Industrial Drive, PO Box 307, King, NC 27021. Tel: 919 983 5132/800 334 4531

Design, manufacture, market and service electronic equipment for the detection and diagnosis of vascular disorders. Products include electromagnetic flowmeters, duplex scanning systems and colour flow Doppler imaging systems.

CEM Corp

PO Box 200, Matthews, NC 28105.

Tel: 704 821 9204

Developing sterilization techniques using microwave technology.

Central Biologics Inc

5100 Huntingwood Drive, Raleigh, NC 27606. Tel: 919 552 5309

Carry out contract research and custom production of medical products including sera as well as new viral and bacterial vaccines.

Chathamborough Research Group Inc

PO Drawer 929, Pittsboro, NC 27312.

Tel: 919 542 5600

Offer R&D clinical services to medical and pharmaceutical sectors in relation to the gaining of FDA approval for products.

Part III North Carolina - NC UNITED STATES OF AMERICA

Ciba-Geigy Agricultural Division

PO Box 18300, Greensboro, NC 27419. Tel: 919 292 7100

Developing recombinant bovine interferon. Carry out immunoassays for the company's research projects. Part of Ciba-Geigy Corp, US.

Ciba-Geigy Corp

Agricultural Biotechnology Research Center PO Box 12257, Research Triangle Park, NC 27709-2257. Tel: 919 549 8164

Carrying out applied research in plant molecular biology, plant genetic engineering, plant cell and tissue culture in tobacco etc, including recombinant DNA manipulation, plant pathology and plant physiology. Subsidiary of Ciba-Geigy AG, Switzerland.

Clinical Research International

PO Box 13991, Research Triangle Park, NC 27709. Tel: 919 544 3900

Offer services in clinical research and trials to the pharmaceutical industry in relation to biotechnological products.

CompuChem Corp

3308 E Chapel Hill, Nelson Highway, Research Triangle Park, NC 27709. Tel: 919 549 8263/800 833 5097 Fax: 919 248 6462

Offer environmental analytical services and treatment of hazardous wastes.

Conviron

Controlled Environments Inc 167 Weaverville Highway, Asheville, NC 28804. Tel: 704 658 3445/800 368 9132

Supply environmental control chambers and related products.

CRX Medical Inc

5265 North Blvd, Raleigh, NC 27604. Tel: 919 876 7800

Carry out research and development of drug delivery techniques involving release by biodegradation of cyanoacrylate polymers as well as cyanoacrylate adhesives for medical and veterinary use.

Diamond Research Products

PO Box 6416, Raleigh, NC 27628. Tel: 919 821 1688/800 451 5958

Manufacture hybridization systems.

Edward Weck Inc

PO Box 12600, Research Triangle Park, NC 27709. Tel: 919 544 8000

Carrying out research and development of medical products including biocompatible materials for use in surgical implants and drug release systems. Subsidiary of Squibb Corp, US.

Elcatech

4291 Lantern Drive, Winston-Salem, NC 27106. Tel: 919 777 3624

Developing reagent kits for clotting factors based on novel coagulation assay techniques.

Embrex

PO Box 13989, Research Triangle Park, NC 27709-3989. Tel: 919 941 5185

Developing improved products for the poultry industry including growth factors, and treatments to increase hatching and health.

Environmental Diagnostics Inc

2990 Anthony Rd, PO Box 908, Burlington, NC 27215.

Tel: 919 226 6311/800 334 1116 Telex: 510 601 7157 Fax: 919 229 4471

Developing diagnostics for the food, environment, medical and veterinary sectors.

Enzyme Technology Research Group Inc

Liggett & Myer Research Laboratories 7100 West Main St, Durham, NC 27702. Tel: 919 683 3161

Carrying out R&D using immobilized enzyme technology to develop new products including carrageenan supports, magnetic enzymes and gold bioelectrodes.

Etoh Inc

Rte 8, Box 66A, Chapel Hill, NC 27514. Tel: 919 942 6604

Design and operate alternative energy systems for the production of fuel, animal feed and food.

Family Health International

Non-profit biomedical research and technical assistance organization carrying out data collection, analysis and the design of clinical research in support of Third World aid health programmes including the development and testing of safe, effective and affordable contraceptive measures.

Filtration Technology Inc

PO Box 31442, Raleigh, NC 27612. *Tel*: 919 787 3988

Developing products and procedures for control of liquid and air contaminants by containment and biological decontamination.

Flanders Filters Inc

Gas Monitoring Inc

PO Box 1285, Cary, NC 27511. Tel: 919 469 9326

Offer environmental gas testing services in the medical sector.

International Bio-Synthetics Inc

PO Box 24168, Charlotte, NC 28224.

Tel: 704 527 9000

Develop enzymes, fine chemicals and reagents. Joint venture between Gist-brocades and Shell.

Glaxo Inc

Five Moore Drive, Research Triangle Park, NC 27709. Tel: 919 248 2100

Carrying our research in all areas of medicine for the parent company Glaxo Group Ltd, UK.

Granite Diagnostics Inc

2990 Anthony Rd, PO Box 908, Burlington, NC 27215. *Tel*: 919 226 6311/800 334 1116

Manufacture monoclonal antibodies and offer services in immunization, monitoring and testing of immunoproducts etc as well as quality assurance in relation to animal genetics.

Hunter Biosciences Inc

3208 Spring Forest Rd, Raleigh, NC 27604. Tel: 919 872 9686/800 638 4868 Fax: 919 872 6747

Developing and implementing biotechnological methods for treating contaminated areas.

Hydro Service & Supplies Inc

PO Box 12197, Research Triangle Park, NC 27709. Tel: 919 544 3744 Fax: 919 544 5852

Manufactures and supplies equipment for reverse osmosis, ultrafiltration and membrane filtration..

ICI Americas Inc

PO Box 208, Goldsboro, NC 27533. *Tel*: 919 731 5201

Develop new agrochemicals including insecticides and chemotherapeutics as well as conducting a seed breeding programme.

UNITED STATES OF AMERICA North Carolina - NC Part III

Incon Corp

Rte 2, Youngsville, NC 27596. Tel: 919 848 2051

Carrying out research in the application of biotechnological techniques to new product and aquatic plant and animal crop development including high protein algae and oil, as well as development of organic sustainable agricultural systems.

International Bio-Synthetics

PO Box 241068, Charlotte, NC 28224. Tel: 704 527 9000 Telex: 216902 Fax: 704 527 8184

Produce industrial enzymes and biochemicals.

KabiVitrum Inc

PO Box 597, Clayton, NC 27520. Tel: 919 553 3831

Applying rDNA and other techniques to the development of genetically engineered health care and food products. Subsidiary of Procordia, Sweden (see KabiVitrum AB, Sweden).

Labsystems Inc

PO Box 13970, Research Triangle Park, NC 27709-3970. Tel: 919 460 1800/800 572 8270 Fax: 919 469 2623

Write to: PO Box 48723, Chicago, IL 60648

Develop, manufacture and market products in the areas of liquid handling, diagnostics and instrumentation. Products include pipetting systems, diagnostic kits for infectious diseases (TORC, Tetanus, Bordetella, Pertussis), monoclonal antibodies to intermediate filaments, EIA plate readers, kinetic readers, luminometers and fluorometers. Provide custom design and manufacturing services to the biotechnology industry. Subsidiary of Labsystems OY, Finland.

LaQue Center for Corrosion Technology Inc

PO Box 656, Wrightsville Beach, NC 28480. Tel: 919 256 2271

Carry out consulting and testing on material performance in marine environments. Developing methods of biofouling control and prevention.

Maize Genetic Resources

421 Angier Highway, Benson, NC 27504. Tel: 919 934 9908

Developing new genetic lines of stress-resistant corn varieties to license for commercial use.

MAPS Inc

Suite 220, Carr Mill Mall, Carrboro, NC 27510. Tel: 919 967 1558

Carrying out research and development in relation to novel separation technology for oil and minerals as well as producing a magnetic sorter with application to antibodies.

Maricultura Inc

PO Drawer 565, Wrightsville Beach, NC 28480. Tel: 919 256 5010

Research, develop, produce and market natural chemicals and pharmaceuticals from marine microorganisms.

Medical Products Search Inc

4265 Brownsboro Rd, Winston-Salem, NC 27106. Tel: 919 761 8377

Engaged in the development and technology transfer by licence of novel medical products.

Membrane Production Technology Inc

108 Coatbridge Circle, Cary, NC 27511.

Tel: 919 542 1316

Develop and market membrane separation filter systems for cell culture and bioprocessing.

Miles-Cutter Laboratories

PO Box 499, Clayton, NC 27520. Tel: 919 553 5011

Produce blood and plasma related products, including immune serum globulin, blood volume expanders and treatments for bleeding. Subsidiary of Miles Inc, US.

Mycosearch Inc

PO Box 941, Chapel Hill, NC 27514. Tel: 919 968 0730

Research company developing methods of isolation and culture of new fungi and fungal products with applications in the medical, fermentation and agricultural industries.

Norina Instrument Co Inc

405 E Main St, Carrboro, NC 27510. *Tel*: 919 942 3777

Carrying out research and development of new image enhancement display processes with applications in biological and medical imaging and X-ray-based detection systems.

North Carolina Biotechnology Center

79 Alexander Drive, PO Box 13547, Research Triangle Park, NC 27709-3547.

Tel: 919 541 9366

Non-profit corporation that promotes research, education and technical development in biotechnology with programmes in biomedical science, plant molecular biology, marine biotechnology, bioprocess engineering, bioelectronics and forestry as well as industrial relations and small business development. Support is provided by the state with additional funds from federal government and industry. Working with universities, industry, financial organisations, entrepreneurs and governments.

North Carolina State University

Box 7621, Raleigh, NC 27695-7621.

Tel: 919 737 2768

Have an embryo transplant facility.

North Carolina State University

FACS/Hybridoma Facility

4700 Hillsborough St, Raleigh, NC 27606.

Tel: 919 829 4351

Offer service in flow cytometry and hybridoma technology.

North Carolina State University

Department of Poultry Science

Raleigh, NC 27623.

Tel: (919) 737 2623

Has carried out laboratory studies on optimization of biogas (methane) production by anaerobic digestion of poultry wastes and constructed an operational plug-flow plant based on a large plastic bag system.

North Carolina, University of

Department of Zoology

Chapel Hill, NC 27514.

Undertaking research on gene expression in sea urchin.

North Carolina, University of

School of Medicine

Manning Drive, Chapel Hill, NC 27514.

Studying latent DNA in Epstein-Barr virus, role of episomes in oncogenic process and viral structure using restriction enzyme analysis. Also studying cytomegalovirus, transcription of the herpes virus genome and organization of Bacillus genes.

Novo Biochemical Industries Inc

Franklington, NC 27525.

Tel: (919) 494 2014

Markets industrial enzymes, including proteases and amylases. Has produced recombinant lipolase (detergent enzyme). Developing monoclonal antibody-based human in vitro diagnostics, as well as production systems for monoclonal antibodies, cellular growth factors and insulin. Subsidiary of Novo Industri, Denmark.

Organon Teknika Corp

100 Akzo Ave, Durham, NC 27704.

Tel: 919 620 2000/800 682 2666 Telex: 6202107

Major international healthcare company producing medical diagnostics and other high technology products including a diagnostic test for antibodies to HIV antigen in serum or plasma. Also produces microbial enzymes including peroxidase substrates for ELISA, immunoblotting and immunohistological staining (see Organon International, Netherlands). Subsidiary of Akzo, Netherlands.

Part III North Carolina - NC UNITED STATES OF AMERICA

Pharmagene

607 East Kingston Ave, Charlotte, NC 28203. Tel: 704 374 1224

Using site-specific recombinant processes to develop patentable technology and products such as cell lines.

Probiologics International Inc

1000 Park Forty Plaza, Suite 200, Research Triangle Park, NC 27709. Tel: 919 737 7652

R&D company producing new probiotics and antibiotics with applications in human health care and veterinary treatment.

PuriDyne Inc

3216 Wellington Court, Suite B, Raleigh, NC 27615. Tel: 919 846 7887

Market an air purification system. Carrying out R&D on antimicrobial products.

Questar

Division of Hoechst-Celanese

PO Box 241074, Charlotte, NC 28224.

Tel: 704 588 5310

Developing products based on membrane separation including products for cell culture

Quintiles

1000 Franklin Square, 1829 E Franklin St, Chapel Hill, NC 27514. Tel: 919 929 0222 Fax: 919 929 0262

One Kendall Square, Bldg 100, Cambridge, MA 02139. Tel: 617 225 0010 Fax: 617 225 0013

Clinical research services firm providing study design, data management and biostatistical and regulatory support to expedite approval of health care products.

Research Triangle Institute

PO Box 12194, Research Triangle Park, NC 27709-2194.

Tel: 919 541 6000 Telex: 802509 Fax: 919 541 5985

Research organisation offering basic R&D facilities and services in the application of biotechnical procedures to product development.

Rheem Manufacturing Co

Scientific Products Division

PO Box 275, Route 1, Aiken Rd, Asheville, NC 28804.

Tel: 704 658 2711 Telex: 577449

Manufactures ultra-low temperature freezer and cold storage systems.

Rhone-Poulenc Ag Co

PO Box 12014, Research Triangle Park, NC 27709. Tel: 919 549 2000

US representative of Rhone-Poulenc, France coordinating the company's research activities in the US.

Rural Advancement Fund International

PO Box 1029, Pittsboro, NC 27312. Tel: 919 542 5292

Private non-profit research and advocacy organization concerned with the problem of the loss of genetic diversity in agriculture. Focus on socio-economic impacts of agricultural biotechnology.

SCI Development Corp

3 Sedgewood Rd, Chapel Hill, NC 27514. Tel: 919 929 3688

Carrying out research and development on novel biotechnical measurement techniques including a procedure for in situ measurement of the mineral concentration of sweat

SLT Labinstruments

PO Box 8101, Hillsborough, NC 27278. Tel: 919 732 1111/800 228 4837

Manufacturers of a full line of microplate readers, washers and diluter dispensers. Specialize in multiplate and high-throughput applications.

Sphinx Biotechnologies

PO Box 12194 C/O RTI, Research Triangle Park, NC 27709. Tel: 919 541 6590

Developing diagnostic tests for cancer, anti-tumour agents and other therapeutics.

Stearns Catalytic Division

United Engineers & Constructors

Suite 900 NCNB Plaza, Winston-Salem, NC 27101. Tel: 919 748 0431

30 S 17th St, PO Box 8223, Philadelphia, PA 19101. Tel: 215 422 4222

Provide engineering and construction management services over a wide range of industrial applications, including pharmaceutical and biotechnical plant construction. Subsidiary of Raytheon Co, US.

Sun Brokers Inc

PO Box 2230, Wilmington, NC 28402.

Tel: 919 763 3694/800 LAB VIAL (522 8425) Fax: 919 762 4942 Telex: 4948812

Distributor of gas/liquid chromatography and general laboratory accessories, including glass and plasticware.

Takeda Chemicals Products USA Inc

PO Box 2577, Wilmington, NC 28402.

Tel: 919 762 8666

Using biotechnological process for manufacture of fine chemicals.

tecan US Ltd

PO Box 8101, Hillsborough, NC 27278. *Tel*: 919 732 5000/800 338 3226

Developing automated sampling instrumentation for laboratory analysis and harvesting of cells with applications in the production of monoclonal antibodies and hybridoma.

Touch Scientific Inc

8600 Jersey Court, Raleigh, NC 27612. Tel: 919 787 7282

Developing rapid diagnostic tests based on monoclonal and polyclonal antibodies and other medical equipment.

Friangle Biomedical Sciences

1004 Guess Rd, Suite D, Durham, NC 27705. Геl: 919 477 9283

Develop and market disposable clinical laboratory equipment and instruments for use in enzymology and immunohistology procedures.

Triangle Research and Development Corp

PO Box 12696, Research Triangle Park, NC 27709. Tel: 919 781 8148

Carry out contract research in heat transfer technology in relation to medicine including laser catheter, endoscopic, RF hypothermia, cancer therapy, infusion and injury prevention instrumentation, as well as mathematical modelling of medical systems.

Wallace Menhaden Products Inc

1834 J Bell Lane (Ocean), Newport, NC 28570. Tel: 919 393 2198

Research company developing feed, food and medical products derived from fish oils and proteins.

Wastek Corp

PO Box 12, Pittsboro, NC 27312.

Tel: 919 542 5411

Supply biotechnological formulations for processes of biodegradation and recycling of industrial and municipal wastes.

Watauga Herb Co

PO Box 2168, Boone, NC 28607.

Tel: 704 262 5358 Fax: 704 262 0655

Perform tissue culture, selection and propagation of herbal plant species for crop cultivation as a source of herbal extracts. Offer custom extraction.

UNITED STATES OF AMERICA Ohio - OH Part III

Webb Technical Group Inc

4320 Delta Lake Drive, Raleigh, NC 27612. Tel: 919 787 9171

Carry out R&D and analysis related to microbiological processes and offer consultation in the applications of genetic engineering to the food and environmental sectors. Offer analytical services including chemical analysis of water and waste products and samples.

Wellcome Diagnostics Research Laboratories

Supplies interferon and vaccines as well as other pharmaceutical and veterinary products.

North Dakota - ND

North Dakota State University Agricultural Experiment Station

Department of Botany Fargo, ND 58105. Tel: (701) 237 7209

Studying organization of chloroplasts in terms of genetic regulation, synthesis turnover and senescence in wheat.

Ohio - OH

Adria Laboratories

PO Box 16529, Columbus, OH 43216.

Produces anticancer drugs (adriamycin, doxorubicin hydrochloride), cardiovascular products and topical analgesics. Expanded research facilities include work on AIDS related complex and interferon. Jointly owned by Hercules Inc, US and Montedison SpA, Italy.

Agrigenetics Corp

35575 Curtis Blvd, Suite 300, Eastlake, OH 44094. Tel: 216 942 2210 Telex: 450188

Established plant breeding and seed company for most major crops and especially corn. Also produces bacterial inoculants for agricultural use. Has extensive research programme in cell biology, microbiology and molecular genetics of higher plants, including aspects of nitrogen fixation, plant tissue culture and protoplasts, plasmid recombination, isolation, characterization, modification and expression of plant genes, function and modification of plant organelles and basic studies on photosynthesis, carboxylase and photorespiration. Subsidiary of Lubrizol, US.

Ajax Magnethermic Corporation

1745 Overland Avenue, Warren, OH 44482.

Produce anaerobic culture systems.

American Research Products Co

30175 Solon Industrial Parkway, Solon, OH 44139. Tel: 216 349 1199/800 448 4442 Telex: 985582

Carrying out DNA/RNA hybridization. Produce bulk enzyme and enzyme substrate preparations and reagents.

AMRESCO

American Research Products

30175 Solon Industrial Pkwy, Solon, OH 44139-9827. Tel: 216 349 1199/800 448 4442 Telex: 995582 Fax: 216 349

Supplies speciality chemicals and in vitro diagnostics.

Analog & Digital Peripherals Inc

251 South Mulberry St, Troy, OH 45373. Tel: 513 339 2241 Telex: 810 450 2685 Fax: 513 339 0070

Supply computer control and data systems for gas chromatography and

Anatrace Inc

1280 Dussel Drive, Maumee, OH 43537. Tel: 419 891 3030

Offer services in custom protein purification and derivatization, preparation of conjugated products and immobilization of biochemical

Ashland Chemical Co

PO Box 2219, Columbus, OH 43216. Tel: (614) 889 3333 Telex: 245343

Manufactures and markets a complete range of high purity speciality chemicals and reagents as well as industrial chemicals and solvents.

Rattelle Memorial Institute

Pacific Northwest Laboratories: PO Box 999, Battelle Blvd, Richland WA 99352

Tel: 509 375 2267 Tx: 326345

Carries out contract research, multiclient studies and basic investigations on separation and conversion techniques. Biotechnology interests include genetically engineered organisms for degrading toxic chemicals, vaccines for animal use, monoclonal antibodies for diagnostic applications and plant tissue culture applied to sweet sorghum, guayule, milkweed and other potential biomass energy crops. Also interested in isolation, production, immobilization and use of enzymes, plant genetics, and in cell culture of plant, animal and human cells and tissues. Undertaking studies in genetic engineering and use of plasmids, virus and other vectors as well as isolation of mRNA for cloning and drug targeting.

Bicron Corporation

12345 Kinsman Rd, Newbury, OH 44065. Tel: (216) 564 2251 Telex: 980474

Manufacture radioactive isotope counters.

BP Research & Development

4440 Warrensville Center Road, Cleveland, OH 44128. Tel: 216 575 4141

Ohio Research Center: 3092 Broadway Avenue, Cleveland, OH 44106 Has research programme on crop breeding, including aspects of genetic engineering.

Charles F Kettering Research Laboratory

150 East South College Street, Yellow Springs, OH 45387. Tel: (513) 767 7271

Studies include investigation on production of glucose syrup by hydrolysis of cellulosic raw materials.

Cincinnati Sub Zero Products Inc

12011 Mosteller Rd, Cincinnati, OH 45241. Tel: (513) 751 8810 Telex: 214390

Manufacture constant temperature chambers

Columbus Instruments International Corp

950 North Hague Avenue, PO Box 44049, Columbus, OH 43204. Tel: 614 488 6176/800 669 5011 Telex: 246514 Fax: 61 Fax: 614 276 0529

Manufacture oxygen uptake measuring equipment (respirometers) used to measure biological activity in food, grain products, tissue cultures, bacteria contamination etc. Also supply laboratory animal behavioural and physiological equipment and computer image analyzers.

Duriron Corp Inc

Box 1145, Dayton, OH 45401. Tel: 513 226 4000 Telex: 288292

Manufactures processor/reactors which combine mixing, blending and reaction processes with vacuum or pressure filtration.

Enzyme Technology Corp

783 US 250 East Route 2, Ashland, OH 44805-9280. Tel: 419 289 3706

Manufactures industrial and speciality enzymes, including a liquid heat-stable alpha-amylase and a liquid glucoamylase, available in both alcohol and food grades. Offers services in product or process development, contract fermentations, scale-up and commercialization, as well as collaborative research. Subsidiary of Great Lakes Chemical Corp, US.

Fermenta ASC Corp

5966 Heisley Rd, PO Box 8000, Mentor, OH 44001-8000. Tel: 216 357 4100

Manufactures and markets a variety of agri and speciality chemical products

Part III Ohio - OH UNITED STATES OF AMERICA

Forma Scientific Inc

Millcreek Rd, PO Box 649, Marietta, OH 45750.

Tel: 614 373 4763/800 848 3080 Telex: 298205 Fax: 614 373 2382

Manufactures and supplies safety cabinets and workstations. Division of Mallinckrodt Inc, US. Other products include incubators, freezers and laboratory refrigerators, blood bank and laminar flow equipment, washers, baths and circulators.

Geltech Inc

934 Salem Parkway, Salem, OH 44460-0313. Tel: 216 337 9944/800 543 5832 Fax: 216 337 9947

Supply chromatography columns, electrophoresis equipment and bench centrifuges.

General Environmental Science Corp

9419 Woodland Avenue, Cleveland, OH 44104

Produces bacteria for use in waste-treatment processes.

Gilford Instrument Laboratory

Artino Street, Oberlin, OH 44074. *Tel*: 216 744 1041

Manufactures spectrophotometers and other laboratory apparatus including scanning densitometers for use with slabgels, autoradiograms and thin layer chromatographic plates, working in transmission, reflectance and fluorescence modes. Data outputs can be to computers, integrators or strip chart recorders.

Gilson Co Inc

PO Box 677, Worthington, OH 43085. *Tel*: 614 548 7298

Supply particle size and sampling analyzers.

ICN Biochemicals

26201 Miles Road, PO Box 28050, Cleveland, OH 44128-0250.

Tel: 216 831 3000/800 321 6842

Telex: 985464

Fax: 216 831 2569

Supplies biochemicals for research and manufacturing, prepared diets for research animals and adsorbents for chromatography.

Isolab Inc

Drawer 4350, Akron, OH 44321.

Supplies materials for electrophoresis including cultivar identification electrophoretic gels for fractionation of storage proteins of wheat cultivars, as well as disposable products for use in chromatography and radioassay procedures.

Isotec Inc

3858 Benner Road, Miamisburg, OH 45342.

Tel: 513 859 1808/800 448 9760 Telex: 288278 Fax: 513 859 4878

Supply stable isotope labelled compounds (deuterium, carbon-13, nitrogen-15, oxygen-18) for research and industry.

JACO

468 Geiger St, Berea, OH 44017.

Tel: 216 234 4000 Fax: 216 234 7007

Supply a wide range of plastic fittings.

Kroger Co

1014 Vine Street, Cincinnati, OH 45201. Tel: (513) 762 4000

Dairy product manufacturer producing lactose and bakers' yeast from whey, as well as whey protein concentrates as food ingredients in joint venture with Corning Glass Works, US.

Lubrizol Enterprises Inc

29400 Lakeland Boulevard, Wickliffe, OH 44092. Tel: 216 943 4200

Investment subsidiary of Lubrizol Corp, US which manufactures additives for lubricants.

Meridian Diagnostics Inc

3471 River Hills Drive, Cincinnati, OH 45244. Tel: 513 271 3700/800 543 1980 Supplies diagnostic test kits for clinical use.

Molecular Data Corp

2869 Scarborough Rd, Cleveland, OH 44118. Tel: 216 381 6328 Fax: 216 321 4173

Manufacture elemental analyzers, X-ray equipment, radioactivity detectors and ratemeters. Offer research, development and production services

EG & G Mound Applied Technologies

Stable Isotopes Sales

PO Box 3000, Miamisburg, OH 45343-3000. Tel: 513 865 3501 Fax: 513 865 3164

Specializes in production and distribution of stable isotopes, including 15N, $3He,\,O18$ and 17O.

The Munhall Co

5655 North High Street, Worthington, OH 43085.

Tel: 614 888 7700/800 CHROMAX Telex: 510 100 8330 Fax: 614 846 4175

Produce gene sequencing equipment and reagents, DNA synthesizers, particle size analyzers and equipment and accessories for liquid chromatography and HPLC.

North Coast Biotechnology Inc

3100 E Overlook, Cleveland Heights, OH 44118. *Tel*: 216 932 0090

 $Supply\ enzymes\ for\ the\ production\ of\ the rapeutics.$

Oak Technical Inc

219 S Sycamore Street, Ravenna, OH 44266-1203. Tel: 216 296 3416 Fax: 216 296 6117

Supplies laboratory products including powder-free disposable gloves designed to minimise contamination.

Ohio State University

Biotechnology Center

203 Bricker Hall, 190 North Oval Mall, Columbus, OH 43210.

Provide a coordinated interdisciplinary programme in biotechnology drawing on resources of existing programmes in Colleges of Agriculture, Biological Sciences, Chemistry, Engineering, Medicine, Veterinary Medicine and Pharmacy in areas such as enzymes, nucleic acids, protein biochemistry and biochemical engineering.

Ohio State University

Department of Biochemistry

484 West 12th Ave, Columbus, OH 43210-1292.

Tel: 614 422 6771

Carrying out research on biological control, including aspects of the expression of insecticidal proteins in plants and plant symbionts as well as investigating the mechanisms of insect specificity of insecticidal protein toxins. Also investigating the control of Rhizoctonia damping off using Trichoderma spp.

Ohio Valley Speciality Chemical Inc

Supplies reagents for gas chromatography, including liquid phases, column packings and silylation reagents.

Procter & Gamble

Miami Valley Laboratories

PO Box 39175, Cincinnati, OH 45247.

Tel: 513 562 1100

Manufacture detergent products with enzymes.

Radiometer America Inc

811 Sharon Drive, Westlake, OH 44145.

Manufactures pH meters and electrodes as well as fully automated analyzers for carrying out wet chemical tests.

UNITED STATES OF AMERICA Oregon - OR Part III

Raphael Katzen Associates International Inc

7162 Reading Road, Suite 1200, Cincinnati, OH 45237, Telex: 810 461 2930 Fax: 513 351 0810 Tel: 513 351 7500

Undertakes engineering consultancy and project management in areas of energy, pollution abatement, chemicals and fuel production, including production of ethanol by fermentation for use as a fuel.

Research Organics Inc

4353 East 49th Street, Cleveland, OH 44125. Telex: 985247 res org clv Tel: 216 883 8025/800 321 0570 Manufactures biochemicals in bulk for industry.

Schwartz/Mann Biotech

PO Box 28050, Cleveland, OH 44128. Tel: 216 831 3000/800 431 2800

Manufactures nylon transfer membranes suitable for use in northern, southern and western blotting procedures as well as for dot blots, colony lifts and plaque lifts.

SDS Biotech Corp

7528 Auburn Rd, Painesville, OH 44077. Tel: 216 357 3095

Manufacture animal health care and nutritional products including herbicides, fungicides, antihelmintics, nutritional supplements and antibiotics for poultry and animal health care. Acquired by Fermenta, Sweden in 1986.

So-Low Environmental Equipment Co Inc

10310 Spartan Drive, Cincinnati, OH 45215. Tel: 513 772 9410

Produces laboratory freezers and refrigerators.

Tekmar Co

PO Box 371856, Cincinnati, OH 45222-1856. Tel: (513) 761 0633 Telex: 214221

Manufacture high shear dispensers and homogenizers from lab to full scale production capacity.

United States Biochemical Corp

USB

26111 Miles Rd, Cleveland, OH 44128. Tel: 216 765 5000/800 321 9322 Telex: 980718

Supplies molecular-weight standard protein kits for high performance liquid chromatography and sodium dodecyl sulphate electrophoresis, as well as over 6000 different biochemicals, including amino acids, nucleotides, enzymes, coenzymes, vitamins and buffers. Enzymes for use in molecular biology include a wide range of restriction endonucleases, RNA polymerase and DNA polymerases and kits, polynucleotide kinase, etc. Also produces reagents for cross-linking and modification of reactive groups in solid-phase protein synthesis. Agents for Marine Biochemicals, Norway fish peptones and protein hydrolyzates.

PO Box 279, Yellow Springs, OH 45387. Telex: 205437 Tel: 513 767 7241/800 343 4357 Fax: 513 767 9353

Manufacturers and markets industrial and clinical analyzers for the measurement of glucose, L-lactate, alcohol, sucrose, lactose and starch. Products are based on immobilized enzyme technology and a linear electrochemical sensor. Also manufactures a two channel biological monitor used to measure oxygen uptake or evolution.

Oklahoma - OK

Biospec Products

PO Box 722, Bartlesville, OK 74005-0722. Tel: 918 333 8247

Manufactures novel cell disrupters for microorganisms and for plant and animal tissues, mixers, stirrers and shakers.

Davy McKee Corp

108 North Trenton Avenue, PO Box 2968, Tulsa, OK 74101 Tel: 918 583 9101 Telex: 492450 Fax: 918 584 6287 (see Davy McKee Corp, IL).

Immuno-Mycologics Inc

PO Box 1151, Norman, OK 73070. Tel: 405 288 2458/800 654 3639

Telex: 650 162 5015

Produce complement fixation test reagents as well as antibodies against infectious agents.

Oklahoma State University Agricultural Experiment Station

Department of Biochemistry

107 Whitehurst Hall, Oklahoma, OK 74075.

Investigating techniques of transfer of genetic material to plants, transfer of genes to isolated plant cells and protoplasts and production of callus cultures from brassicas. Also studying use of cauliflower mosaic virus as vector for gene transfer. Isolating and characterizing mRNA that codes for the major storage protein of Zea mays (corn). Undertaking engineering of chromosomes as a means of transferring diseases and insect resistance from Agropyron and rye.

Oklahoma, University of

Department of Microbiology

Norman, OK 73018.

Tel: (405) 325 4321

Studying the use of immobilized yeast (Kluyveromyces) in alginate beads for the production of ethanol from whey lactose.

Phillips 66 Biosciences Corp

Research Center

Phillips Building, Bartlesville, OK 74004. *Tel*: 918 661 3566/3947 *Telex*: 492455

Fax: 918-661 8739

Major petroleum, natural gas and chemical company. Investigating applications of bacteria to enhanced oil recovery. Has developed a process for production of single-cell protein from methanol. Has joint programme with Massachusetts Institute of Technology, US, testing safety of food or feed. Has investments in Salk Institute Biotechnology Associates, US. Products under development include fermentation based flavours, diagnostics, nutritional yeast, enzymes and veterinary vaccines.

Phillips Petroleum Company

Technology Licensing

223 PLB, Bartlesville, OK 74004.

Tel: 918 661 5482

Have developed a number of state-of-the-art technologies in biotechnology and other fields that are available for licensing including, an rDNA yeast expression system, a high cell density process and dried yeast protein production.

ProVesta Corp

15 Phillips Building, Bartlesville, OK 74004.

Tel: 918 661 5281/800 233 1811 Telex: 492455 Fax: 918 662

Produces fermentation-based products for the flavour enhancer, consumer product, animal feed, aquaculture and enzyme markets. Joint venture partner with Dow Corning Enterprisesin AgriSense, a producer and marketer of biological pesticides. Subsidiary of Phillips Petroleum Co, US.

Oregon - OR

American Bioclinical Inc

4432 SE 16th Avenue, Portland, OR 97202-4705. Tel: 503 233 5216/800 547 3686 Telex: 910 464 4792

Produces diagnostic kits and immunological reagents including antiserums and antibodies to drugs, hormones and serum proteins. Products under development include radioimmunoassay kits, monoclonal antibodies, non-isotopic tests including a test for LH/FSH and visual HCG.

Anti-virals Inc

249 SW Avery Ave, Corvallis, OR 97333. Tel: 503 753 3635

Carries out contract research in therapeutics and diagnostics (see Antigene, US). Developing DNA analogs ('neu-genes') with applications in research and clinical diagnostics and therapeutics and tests for viral diseases eg AIDS.

Antigene Development Group

990 SE Marion, Corvallis, OR 97333. Tel: (503) 753 3133

Markets phamaceuticals and diagnostics based on synthetic polymers targetable against selected genetic sequences.

Part III Pennsylvania - PA UNITED STATES OF AMERICA

Bend Research Inc

64550 Research Rd, Bend, OR 97001-8599. Tel: 503 382 4100 Telex: 517787

Carrying out research and development of separation systems, biosensors and immobilized enzyme products.

Bentech Laboratories

14424 SE Industrial Way, Clackamas, OR 97015. Tel: 503 652 2333

Developing products for agriculture and plant growth which include a crop yield enhancing agent, antifungals and a wound healing treatment.

Bio-Molecular Dynamics

PO Box 668, Beaverton, OR 97075. Tel: (503) 626 6290

Manufactures liquid filtration products.

Epitope Inc

13425 Southwest Koll Pkwy, Beaverton, OR 97006. Tel: 503 641 6115/800 234 EPTO Fax: 503 64 Fax: 503 643 2781

Research company creating pharmaceutical, agricultural and industrial products through genetic engineering technologies. Developing viral detection kits, including Western blot and MAB to HIV. Have joint venture with Ingene Inc, US.

Idea Scientific Co

PO Box 2078, Corvallis, OR 97339.

Tel: 503 758 0999

Manufactures electrophoresis equipment including vertical slab SDS polyacrylamide and other gels, electrophoretic blotting apparatus and Western blot strip testing equipment.

Kirkman Laboratories Inc

PO Box 3929, Portland, OR 97208

Telex: 364412 intr id 132 Tel: 503 233 4441 Fax: 503 243 6815

Supplies reagents and laboratory ware for medical applications.

Molecular Probes Inc

4849 Pitchford Ave, Eugene, OR 97402.

Tel: 503 344 3007 Telex: 858721 molecular Fax: 503 344 6504

Specializes in reagents, dyes, spin labels and fluorescent chemicals used to investigate biological membrane structure and function as well as to study enzymes mechanisms.

National Appliance Co

NAPCO

PO Box 1000, Tualatin, OR 97062.

Telex: 151144/910 997 2722 Tel: 503 692 4686 Fax: 503 692

Manufactures incubators, water baths, ovens and autoclaves etc.

Oregon University

Department of Chemistry

Johnson Hall, Eugene, OR 97403.

Studying control of endorphins and hynorphin in RNA synthesis in pituitary cells, synthesis of cDNA from RNA and sequencing to obtain gene structure.

Oregon, University of

Institute of Molecular Biology

Johnson Hall, Eugene, OR 97403.

Isolating cDNA from yeast (Saccharomyces) and use of plasmids in yeast genetics.

Synthetech Inc

1290 Industrial Way, PO Box 646, Albany, OR 97321.

Tel: 503 967 6575 Telex: 322501

Developing enzyme engineering technologies.

Pennsylvania - PA

7579

5 Prime→ 3 Prime Inc

117 Brandywine Parkway, West Chester, PA 19380. Tel: 215 344 7570/800 533 5703

Telex: 446573

Fax: 215 344

Manufactures pre-swollen, pre-packed chromatography columns for use in protein and DNA separations designed for use in recombinant DNA work, antibodies, enzyme inhibitors, nucleases and ribonucleases.

Acme Hardesty Co Inc

Benjamin Fox Pavilion, Suite 910, Jenkintown, PA 19046.

Tel: (215) 886 0200 Telex: 845233

Produces fatty acids and hydrogenated glycerides from animal and vegetable sources.

Air Products & Chemicals Inc

PO Box 538, Allentown, PA 18105. Tel: 215 481 4911

Telex: 847416 Fax: 215 481 5900

Supplies bulk gases as well as gas handling equipment, pressure regulators, calibration standards, carrier gases, gas mixtures and laboratory gases including rare gases. Also offers contract and design services in supercritical fluid processing of biotechnology products.

American Sterilizer Co

2425 W 23rd St, Erie, PA 16514. Tel: (814) 452 3100

Manufacture steam generators and equipment for production of potable, distilled or deionized water by stainless steel clean steam generation.

Ametek

Thermox Instruments Division

150 Freeport Rd, Pittsburgh, PA 15238. Tel: 412 828 9040

Telex: 6714789 Fax: 412 826 0399

Supply oxygen analyzers, detectors and mass spectrometers.

Arco Performance Chemicals Inc

1500 Market Street PO Box 7258, Philadelphia, PA 19101. Tel: (215) 557 2880

Produces bacterial cultures for treatment of effluent from paper and pulp mills. Subsidiary of Atlantic Richfield Co, US.

B Braun Biotech Inc

999 Postal Rd, Allentown, PA 18103.

Telex: 0176532 Tel: 215 266 6262/800 258 9000 Fax: 215 266

840 Hinckley Rd, Suite 230, Burlingame, CA 94010.

Tel: 415 692 9712

Designs, manufactures, distributes, sells and services a complete line in biotechnological instrumentation for fermentation including: temperature controllers, shakers and incubators, cell homogenizers, continuous aseptic sampler, etc, as well as fermenters from 2 to 3000 litres. Fermentation systems are available in modular form or as engineering projects. Also supply amino acid analyzers and accessories, cell and tissue culture equipment, cell disintegrators, HPLC equipment and reagents, DNA and peptide synthesizers, temperature controllers and FT infrared, UV and UV/visible spectrophotometers.

Bachem Bioscience Inc

3700 Market St, Philadelphia, PA 19104.

Tel: 215 387 0011 Telex: 910 250 2352 Fax: 215 387 1170

Supply amino acids and derivatives, bioactive peptides, enzyme substrates and epitope vaccines. Subsidiary of Bachem Feinchemikalien AG, Switzerland.

Baker Instrument Co

100 Cascade Drive, Allentown, PA 18103. Tel: 215 264 2800 Telex: 510 651 2345

Produces immobilized antibodies. Part of the Proctor and Gamble Group, US. (see Serono Baker Diagnostics, US).

UNITED STATES OF AMERICA Pennsylvania - PA Part III

Benzon Biosystems

Alfred Benzon Inc

1629 Locust St, Suite 300, Philadelphia, PA 19103. Tel: 215 545 1616 Telex: 5106013423 abenzon 5684

Fax: 215 545

Licensing runaway replication plasmid technology (RAPT) and replicon stabilization technology (RST) for large scale expression and processing of recombinant proteins and polypeptides, and marketing proprietary genetically engineered endonuclease of Alfred Benzon Inc, a subsidiary of Benzon Pharma AS, Denmark, for processing and purification of recombinant proteins and polypeptides on laboratory and process scale. Also offer custom cloning, expression systems development and production programmes.

Bernhard Inc

112 S Broad St, Kennett Sq, PA 19348. Tel: 215 444 1949

Supplies control instrumentation including level switches operated on an ultrasonic principle and thus unaffected by changes in conductivity or

BioChem Technology Inc

66 Great Valley Pkwy, Malvern, PA 19355. Tel: 215 647 8610 Telex: 510 600 6924

Fax: 215 647 6509

Offer services in computer instrumentation and software and developing biosensors for the fermentation industry for measurement of cell concentration and metabolism. Products include an NADH detector and computer controlled peristaltic pumps.

Biological Energy Corp

2650 Eisenhower Ave, PO Box 766, Valley Forge, PA 19482. Tel: 215 630 9630

Developing fermentation technology for biomass processing.

Biomol Research Laboratories Inc

Offer custom synthesis services. Products include polyclonal antibodies and antibiotics for culture media.

Bioscience Management Inc

1530 Valley Center Parkway, Suite 120, Bethlehem, PA 18017. Tel: 215 974 9693/800 627 3069

Environmental biotechnology firm which develops, manufactures and markets specialized biological products, systems and services for pollution control applications. Products contain specialized microorganisms and selected synergistic ingredients for enhancing their action. Developing biosensors and carrying out research on the degradation of oil, tar, and creosote contaminants in soil.

Bodman Chemicals

PO Box 2221, Aston, PA 19014.

Tel: 215 459 5600/800 241 8774 Telex: 834223 Fax: 215 459

Supplies equipment for analytical chromatography including HPLC and liquid chromatography systems.

Capital Controls Co Inc

PO Box 211, Colmar, PA 18915. Tel: 215 822 2901 Telex: 846454

Manufactures water disinfection and water analysis equipment.

CDS Instruments

Autoclave Engineers-Oxford

7000 Limestone Rd, Oxford, PA 19363. Tel: 215 932 3636

Telex: 835308 Fax: 215 932 4158

Manufactures analytical instruments for gas chromatography, gas chromatography/mass spectrometry, and FTIR spectrometry, purge and trap and thermal desorption systems.

Centocor Inc

Telex: 834823

Research and development company using hybridoma, monoclonal antibodies and genetic engineering techniques to produce immunological diagnostics in the areas of cancer, liver and heart diseases including hepatitis B, and viral infections in humans. Developing AIDS test based on recombinant virus protein.

Chemservice Inc

660 Tower Lane, PO Box 3108, West Chester, PA 19381-3108. Tel: (215) 692 3026 Fax: TWX: 510 663 0003

Manufactures amino acid and carbohydrate standards.

Chrono-Log Corp

2 West Park Road, Havertown, PA 19083. Tel: 215 853 1130 Telex: 831579 Fax: 215 853 3972

Manufactures instruments (aggregometers) for the study of blood platelet functions.

Computer Chemical Systems Inc

Route 41 & Newark Rd, PO Box 683, Avondale, PA 19311. Telex: 910 240 4109 Tel: 215 268 2051 Fax: 215 268 0465

Supply equipment for gas chromatography.

Connaught Laboratories Inc

Rte 611, PO Box 187, Stillwater, PA 18370. Tel: 717 839 7187/800 822 2463

Produces human vaccines and diagnostics distributed through E R Squibb & Sons Inc, US as well as monkey blood, tissues and cell lines available from Connaught Laboratories Ltd, Canada.

Davy McKee Corp

One Oliver Plaza, Pittsburgh, PA 15222. Tel: 412 566 4500 Fax: 412 566 3229 Telex: 902943 (see Davy McKee Corp, IL).

Drexel University

Department of Chemical Engineering

Philadelphia, PA 19104. *Tel*: (215) 895 2236

Developing process for conversion of corn stover to alcohol fuel using acid hydrolysis followed by fermentation using immobolized yeast.

Drummond Scientific Co

500 Parkway, Broomall, PA 19008. Tel: 215 353 0200/800 523 7480

Telex: 831352 Fax: 215 353

Manufactures automatic pipetting devices.

Ecogen Inc

2005 Cabot Boulevard West, Langhorne, PA 19047-1810. Tel: 215 757 1590 Telex: 846671 ecogen Telex: 846671 ecogen

Developing insecticides and microbial plant pesticides based on novel improved strains of Bacillus thuringiensis as well as pseudomonads for control of soil borne fungal pathogens and the fungus Neozygites to control mites. Using recombinant DNA technology, tissue and cell culture methods etc, to develop new agricultural products.

Electron Microscopy Sciences Inc

PO Box 251, Fort Washington, PA 19034.

Tel: 215 646 1566/800 523 5874 Telex: 510 661 3280

Supply clean room and microscopy equipment as well as pipetters and syringes

Fisher Scientific Co

Biotechnology Group

711 Forbes Ave, Pittsburgh, PA 15219. Tel: 412 562 1729/8543 Telex: 13

Telex: 138287 Fax: 412 562 5344

Supplies a wide range of instruments and reagents for a variety of disciplines including molecular biology, immunology, cell biology and bioseparations. Products lines include restriction, modification enzymes, biochemicals, antibodies and detection systems, HPLC and low pressure chromatography systems and a complete line of electrophoresis apparatus and power supplies.

Part III Pennsylvania - PA UNITED STATES OF AMERICA

Fox Chase Cancer Center

7701 Burholme Avenue, Philadelphia, PA 19111. Tel: 215 728 2468/6900

Carrying out basic research on the causes of cancer and ways to prevent, detect or cure it; eg studying control of expression of endogenous viral genes and their importance in oncogenesis and disease. Developing community interventions for cancer prevention and screening with emphasis on liver cancer prevention, smoking cessation, breast cancer screening and hereditary cause of cancer.

Gannett Fleming Engineers

PO Box 1963, Harrisburg, PA 17101.

Designs landfill gas recovery facilities.

Gen Trak Inc

999 West Valley Rd, WAyne, PA 19087. Tel: 215 254 8550/800 221 7407

Supply antibodies including monoclonal antibodies, immunodiagnostic tests including an AIDS test and flow cytometry reagents.

Hazleton Research Products Inc

Telex: 901977

Manufactures dry powdered tissue culture media and other cell culture reagents.

Heinz USA

PO Box 57, Pittsburgh, PA 15230. Tel: (412) 237 5757

Manufactures processed foods. Involved in enzyme engineering through its subsidiary Hubinger Co, US.

Honeywell

Process Control Division

1100 Virginia Dr, Fort Washington, PA 19034. Tel: (800) 328 5111 Telex: 846398

Manufactures chart recorders and control devices.

Hotpack Corp

10940 Dutton Road, Philadelphia, PA 19154. Tel: 215 824 1700/800 523 3608 Telex: 6851197 Fax: 215 637

Supplies mechanical convection, drying and sterilizing ovens as well as carbon dioxide incubators and other controlled environment equipment.

Jackson Immunoresearch Laboratories Inc

872 W Baltimore Pike, PO Box 9, West Grove, PA 19390. Tel: 215 869 4024/800 367 5296 Fax: 215 869 Telex: 294920

Supplies a wide range of affinity purified antibodies, highly purified immunoglobulins, streptavidin and avidin. All are available unconjugated or conjugated with enzymes, fluorophores and biotin. Products are used for screening monoclonal antibodies, immunoassays, immunohistochemistry, western blotting and FACS analysis.

Lampire Biological Laboratories

PO Box 170, Pipersvillle, PA 18947 Tel: 215 795 2838 Fax: 215 795 0237

Produce monoclonal and polyclonal antibodies, culture media and microbiological diagnostic tests. Offer custom protein purification services.

Lehigh University

Center for Molecular Bioscience and Biotechnology Building 111 MTC, Bethlehem, PA 18015. Tel: 215 758 5426

Carried out interdisciplinary research in the monitoring and control of bioreactors, optimization and control of cell/protein surface interactions, separation and purification of biological molecules, design of targeted delivery systems and the application of biological markers for diagnosis and therapy.

Life Sciences Inc

1818 Market St, Philadelphia, PA 19103.

Tel: 215 299 8506 Telex: 845192 Fax: 215 299 2273

Performs specialized engineering, architectural and construction services for the life science industries. Expert in the design, construction and validation of facilities involving the application of biotechnology and pharmaceutical technology to large-scale fermentation and the manufacture of synthetic drugs, finished dosage pharmaceuticals, medical devices and related products. Experienced in cell culture, rDNA fermentation and purification design. Subsidiary of Day & Zimmermann Inc.US.

Lunaire Environmental Inc

4 Quality Street, PO Box 3246, Williamsport, PA 17701. Tel: 717 326 1770

Manufactures automated incubators for cell culture, controlled environment rooms and dry-heat sterilizers.

M-Scan Inc

137 Brandywine Parkway, Brandywine Business Center, West Chester, PA

Tel: 215 696 8370 Telex: 910 380 0510 Fax: 215 696 8370 Offer consulting and analytical services particularly in the area of mass spectrometry using a VG analytical ZAB 2SE instrument. The full range of organic mass spectrometry methods is available including as ionization techniques electron impact, chemical ionization, field desorption and fast atom bombardment (see M-Scan Ltd, UK).

Merck Sharp & Dohme

West Point, PA 19486.

Tel: 215 661 6681

Produces and markets pharmaceuticals and fine chemicals. Products include a recombinant DNA vaccine, developed in association with Chiron, US against hepatitis B.

Micromedic Systems Inc

102 Witmer Road, Horsham, PA 19044. Tel: 215 443 3000/800 523 2450 Telex: 831685/173131 Fax: TWX: 510 665 6698

Supplies automated instruments for clinical laboratories and reagents for radioimmunoassays. Products include gamma-counters, data systems, dilutors and pipettes. Subsidiary of Rohm & Haas Co, US.

Mine Safety Appliance Co

Box 426, Pittsburgh, PA 15230. Tel: 412 538 3510

Produce equipment and reference gas mixtures for calibration of gas detection instruments.

Netzsch Inc

119 Pickering Way, Exton, PA 19341-1393. Tel: (215) 363 8010 Fax: TWX: 510 663 9340

Manufacture bead mills for large scale disruption of plant, animal, yeast, fungal or bacterial cells, capable of processing up to 1000 litres of cell suspension per hour.

Pennslyvania State University

State Experimental Agricultural Station

University Park, PA 16802. Tel: (814) 865 5419

Studying production of biogas (methane) by anerobic digestion of cattle and chicken manure in a batch-fed digester including evaluation of compression ignition and spark ignition biogas engines for electricity generation.

Pennsylvania State University

Department of Civil Engineering

212 Sackett Building, University Park, PA 16802.

Tel: (814) 863 0601

Studying production of biogas (methane) by anaerobic digestion of poultry manure and cattle manure.

UNITED STATES OF AMERICA Pennsylvania - PA Part III

Pennsylvania State University

Department of Molecular & Cell Biology S-101 Frear Bldg, University Park, PA 16802. Tel: 814 865 1992

Carrying out research on the cloning and expression of genes from cyanobacteria responsible for the production of the gas vacuole membrane polypeptide. The work is aimed at introducing such genes into microorganisms of commercial interest in order to enable them to be harvested more easily, as well as preventing settling in cultures of mammalian cells.

Pennsylvania, University of

School of Veterinary Medicine Department of Clinical Studies New Boulton Centre Kennett Square, Philadelphia, PA 19348.

Undertaking studies on mammalian fertilization, in vitro fertilization, embryo culture and embryo transfer in rabbits and cows.

Pennsylvania, University of

Department of Biology

34th & Spruce Street, Philadelphia, PA 19104.

Studying structure of genes coding for histones and their transcription.

Pennsylvania, University of

School of Medicine Department of Microbiology

36th & Hamilton Walk, Philadelphia, PA 19174.

Studying uptake of DNA by cell cultures and genetic transformation in mammalian somatic cells. Investigating the nature of antibody diversity by studies of nucleotide sequences in mRNA.

Pennsylvania, University of

School of Allied Medical Professions Department of Microbiology 4001 Spruce Street, Philadelphia, PA 91974.

Using in vitro culture model with HeLa cells to evaluate pathogenic properties of Salmonella.

Pennwalt Corp

3 Parkway, Philadelphia, PA 19102. Telex: 845234 Tel: (215) 587 7000

Manufactures pharmaceutical and dental products.

Petrarch Systems Inc

Bartram Rd, Bristol, PA 19007.

Fax: TWX: 510 667 0563 Tel: 215 781 9255

Manufactures a wide range of silanes and silicones including products for treatment of glass surfaces to provide siliconized hydrophobic surfaces.

Philadelphia Biologics Center

Arsenal Business Center, 5301 Tacony St, Bldg 110, Philadelphia, PA

Tel: 215 743 0740

Obtain biological products from human blood with anticancer properties.

Pittsburgh University

Department of Biological Sciences

4200 Fifth Avenue, Pittsburg, PA 15268.

Studying structure and function of E coli genes, cloning into lambda-phage, and mapping and sequencing of amino acids and proteins. Also studying endonucleases.

Polybac Corp

954 Marcon Blvd, Allentown, PA 18103. Tel: 215 264 8740/800 523 9385 Te

Telex: 350247

Produce bacterial cultures for pollution control, agricultural and industrial applications and the conversion of biomass to fuel and chemicals.

Polysciences Inc

400 Valley Road, Warrington, PA 18976-2590. Tel: 215 343 6484/800 523 2575 Telex: 51 Telex: 510 665 8542 Fax: 215 343 0214

Manufactures high-purity chemicals and polymers for use in research and industry with applications to microscopy, immunology, electrophoresis and affinity chromatography. Offers services in custom antiserum production, dyes and stains as well as reagents for electron microscopy.

PO Corp

PO Box 258, Lafayette Hill, PA 19444. Tel: 215 941 2074

Produce silica gels for chromatography.

Presque Isle Cultures

PO Box 8191, Presque Isle, PA 16505.

Tel: (814) 833 6262

Supplies bacterial and fungal cultures, as well as media for their growth.

Pressure Chemical Co

3419 Smallman Street, Pittsburgh, PA 15201. Tel: 412 682 5882 Telex: 710 664 2151

Fax: 412 682 5864

Supplies fine research chemicals and calibration standards. Provides custom synthesis of organic chemicals.

Pressure Products Industries Inc

900 Louis Drive, Warminster, PA 18974.

Tel: 215 675 1600 Telex: 845329 Fax: 215 443 8341

Manufactures laboratory and production scale fermenters and bioreactors, non-contaminating, packless magnetic mixers and a complete line of diaphragm compressors for compression of pure, hazardous or expensive

Princo Instruments Inc

1020 Industrial Hwy, Southampton, PA 18966.

Tel: (215) 355 1500

Manufactures level and specific gravity instruments, temperature controllers and thermometers.

ProMinent Fluid Controls Inc

1005 Parkway View Drive, PO Box 4549, Pittsburgh, PA 15235. Tel: 412 787 2484

Manufacture industrial fluid handling equipment including high pressure measuring pumps for handling water at 370 to 2900 psi.

Rockland Inc

PO Box 316, Englesville Road, Gilbertsville, PA 19525.

Tel: 215 369 1008

Supplies animal blood and tissue products including serums and complement.

Rohm & Haas Co

Independence Mall West, Philadelphia, PA 19105.

Tel: 215 592 3000 Telex: 845247

727 Norristown Rd, Spring House, PA 19477.

Tel: 215 641 7000

Manufactures chemicals, plastics and speciality agricultural chemicals. Provides enzymes, radioimmunoassay equipment and supplies for laboratory research and diagnostic work. Carrying out research on factor VIII. Other interests are in plant science including hybrid seed.

The Rorer Group Inc

Rorer Center Research (Meloy)

800 Business Center Drive, Horsham, PA 19044.

Tel: 215 956 5000

Produce therapeutics.

Ruetgers-Nease Chemical Co

201 Struble Road, State College, PA 16801. Tel: (814) 238 2424 Fax: 814 238 1567

Carries out custom synthesis of bulk pharmaceuticals.

Sanki Laboratories Inc

106 Folcroft East Business Park, Sharon Hill, PA 19079. Telex: 981716 Fax: 215 583 2018 Tel: 215 583 2010

Supply equipment for liquid chromatography.

Scientific Systems Inc

349 Science Park Road, State College, PA 16801. Tel: 814 234 7311/800 441 HPLC

Manufacture systems for fast protein analysis incorporating design features by Fisher Scientific, US.

Part III Rhode Island - RI UNITED STATES OF AMERICA

Scott Environmental Technology Inc

Specialty Gas Division/Environmental Services Division

Route 611, Plumsteadville, PA 18949.

Fax: TWX: 510 665 9344 Tel: (215) 766 8861

Provides research, testing and measurement services relating to air pollution including design, fabrication, installation and maintenance of continuous monitoring installations. Also produces speciality gases, calibration gas standards and gas mixtures and related gas-handling equipment and accessories

Serono Baker Diagnostics

100 Cascade Drive, Allentown, PA 18001. Tel: 215 264 2800 Fax: 215 266 0184

Manufacture diagnostic kits (see Serono Laboratories, US).

Sharples Inc

955 Mearns Rd, Warminster, PA 18974. Tel: 215 443 4220 Telex: 4761193 Fax: 215 443 4234 Supply centrifuges. Member of the Alfa-Laval Group.

Smith Kline & French Laboratories

PO Box 1539, King of Prussia, PA 19406-0939

Carry out research and development in areas of immunology, molecular genetics, cell biology and animal models for human and animal diseases including cardiovascular, immunologic, gastrointestinal, neoplastic and viral diseases. Currently interested in transgenic animals and the production of probes for identification of specific characteristics in animals.

Smithkline Beckman

1 Franklin Plaza, PO Box 7929, Philadelphia, PA 19101. Fax: 215 751 4992 Tel: 215 751 4000 Telex: 834487

SmithKline Instruments Inc: 800 West Maude Avenue, Sunnyvale, CA

Tel: 408 732 6000

Manufactures and distributes laboratory instruments, apparatus and biological products worldwide. Products include high-speed centrifuges, high performance liquid chromatography equipment and analytical instruments. Also supplies related chemicals, process instruments and controls, electronic components, biologically active synthetic peptides, chemicals for amino acids and for density gradient centrifugation as well as enzymes for analytical and research purposes. Produces a wide variety of veterinary pharmaceuticals through its subsidiary Norden Laboratories, US. Using new genetic techniques including recombinant DNA technology. Has developed a monoclonal antibody to activated macrophages. Recently merged with Beecham, UK.

Structure Probe Inc

SPI Supplies

535 E Gay St, PO Box 656, West Chester, PA 19381. Tel. (215) 436 5400 Telex: 835367

Produce monoclonal antibodies.

Supelco Inc

Supelco Park, Bellefonte, PA 16823-0048. Tel: 814 359 3441/800 247 6628 Fax: 814 Telex: 510 670 3600

Supply laboratory separation products and bioprocessing aids such as chromatography accessories including columns and column packings as well as standards. Large scale products available through TosoHaas, US. Division of Rohm & Haas, US.

Suprex Corp

125 William Pitt Way, Pittsburgh, PA 15238412 826 5200. Tel: 412 826 5200 Telex: 910 240 2567 Fax: 412 826 5009

Manufacture a super critical fluid micxroextraction system.

Sylvan Spawn Inc

West Hills Industrial Park, Kittanning, PA 16201. Tel: 412 352 1521 Fax: 412 297 3079

Supply mushroom spawn and mycorrhizal inoculants.

Tektagen Inc

358 Technology Drive, Malverne, PA 19355. Tel: 215 640 4550/800 648 6682

Offer analytical services in product safety testing in areas of protein sequencing, peptide mapping, amino acid analysis and DNA testing.

Temple University

Suite 406, University Services Building, Broad and Oxford Streets, Philadelphia, PA 19122. Tel: 215 787 8526

Carrying out sponsored research in medicine, pharmacy, dentistry and engineering with the aim of technology transfer. Most specific technologies developed are available for licensing including nasal insulin sprays, long term delivery micro-encapsulated BTI and BTK biopesticides, assay and test kits, an arthroscopic surgical device and antiviral agents etc.

Theall Engineering Compnay

PO Box 336, Oxford, PA 19363.

Tel: (215) 932 3488 Telex: 910 997 2341

Produces a versatile linear temperature programmer designed for use in catalytic reactors, furnaces, ovens and chambers providing accurate temperature control between minus 150 to plus 1650 degrees centigrade.

TosoHaas

Rohm & Haas Building, Independence Mall West, Philadelphia, PA

Tel: 215 592 3100/800 456 4502 Telex: 845247/710 670 5335 Fax: 215 592 2567

Supply media, instruments and systems for protein chromatography. Joint venture of Tosoh Corp, Japan and Rohm & Haas Co, US.

Wyeth-Averst Laboratories

PO Box 8299, Philadelphia, PA 19101. Tel: 215 688 4400

Produces pharmaceuticals distributed worldwide. Affiliate of Pennsylvania State University, US operative programme in molecular biology. Subsidiary of American Home Products Corp, US. Products include ethical therapeutics, penicillin and bicillin, vaccines and whey or soy based infant formulas.

Zivic-Miller Laboratories Inc

122 Toll Gate Rd, Zelienople, PA 16063-0280. Fax: 412 452 4506 Tel: 412 452 5200/800 422 LABS

Supplier of specifically prepared animal cells, tissues etc and custom rodent

Puerto Rica - PR

Baxter Healthcare Corp

PO Box 2, San Juan, PR 00936. Tel: 809 792 5757 Telex: 0173

Supplies immunodiagnostics and immunoreagents.

Rhode Island - RI

Analytical Biosystems Inc

55 Access Rd, Warwick, RI 02886.

Tel: 401 732 6520

Supply clinical in vitro testing of various chemotherapeutics on individual tumour tissue samples. Joint venture between Analytical Biosystems and Brown University Research Foundation.

Brown University

Department of Physiological Chemistry

University Hall, Providence, RI 02912.

Investigating function of ribosomal RNA using restriction enzymes to provide deletions followed by cloning E coli and in vitro studying of their ability to function in reconstitution and translation assays.

Brown University

Department of Biology

PO Box 1883, University Hall, Providence, RI 02912.

Studying structure of avian sarcoma virus and its integration with host cell chromosomes. Using synchronized bovine tissue cultures to investigate replicon to replicating molecules of satellite DNA.

New England Monoclonal Resources Inc

PO Box 2128, Providence, RI 02905.

Tel: (401) 421 2600

Markets biologicals and diagnostics including human and mouse monoclonal antibodies.

UNITED STATES OF AMERICA Texas - TX Part III

Scott Laboratories

Manufactures bacterial identification systems, diagnostics, media for bacterial and cell culture, serums, growth factors and biological reagents. Using cell culture and hybridomas to develop new products. Subsidiary of Microbiological Sciences, US.

Separations Technology Inc

PO Box 63, Wakefield, Wakefield, RI 02879. Tel: (401) 789 5660

Manufacture advanced preparative HPLC systems and liquid chromatographs as well as chromatography columns for liquid systems.

SepTech

2 Columbia St, PO Box 63, Wakefield, RI 02879.

Tel: 401 789 5660 Telex: 510 601 4474 Fax: 401 792 3890

Supply HPLC equipment.

South Carolina - SC

Amtron

701 East Bay St, Charleston, SC 29403. Tel: 803 577 2931

Supply animal disease preventatives and immunological products.

Coker's Pedigree Seed Co

PO Box 340, Hartsville, SC 29550. Tel: 803 332 8151 Telex: 573343 coker's htsv

Select, produce and market seed of new varieties of maize, wheat, soya, sorghum, cotton and tobacco.

Fluor Daniel Inc

Daniel Building, Greenville, SC 29602. Tel: 803 298 3500 Telex: 570493

Full service contractor in industrial, commercial and research manufacturing facilities suited to chemical processes, as well as commercial-scale production of biological products, including hormones, interferons and vaccines. Manufacture and sell fermentation equipment using Phillips Petroleum Company high-productivity fermentation technology under licence. A subsidiary of Fluor Corp, US.

SC Applied Technology Inc

2700 Middleburg Drive, Suite 209, Columbia, SC 29204. Tel: 803 252 0769

Manufactures hand-held microcomputers pre-programmed for calculation of molar, normal and percent solutions with special function keys for milliand micro- prefixes, with display indicating the proper unit of measurement.

South Carolina, University of

Department of Biology Microbiology & Immunology Columbia, SC 29208.

Carrying out studies on cloning of the genome from Caulobacter crescentus, development of genetic maps, studies of control mechanisms and production of gene library of the total genome. Also studying artificial insemination, in vitro fertilization and hybridization in prawns.

Star Systems

Filtration Division

101 Kershaw St, PO Box 518, Timmonsville, SC 29261. Tel: (803) 346 3101 Fax: TWX: 810 680 2531

Manufacture filter papers, filtration equipment, acid resistant filters, bacteriological filters etc.

Tennessee - TN

Biotherapeutics Inc

357 Riverside Drive, PO Box 1676, Franklin, TN 37065-1676. Tel: 615 794 4797 Fax: 615 794 2418

Products include diagnostic reagents for cancer treatment and biological response modifiers. Carrying out custom research on cancer therapeutics.

Cryomagnetics Inc

739 Emory Valley Rd, PO Box 548, Oak Ridge, TN 37831.

Tel: 615 482 9551

Telex: 883945

Fax: 615 483 0406

Manufacture cryogenic and level monitors as wel as NMR spectrometers.

The Nucleus Inc

761 Emory Valley Rd, Oak Ridge, TN 37830. Tel: (615) 482 4041 Telex: 557482 Manufacture radioactive isotope counters.

Oak Ridge National Laboratory

PO Box X, Oak Ridge, TN 37830. Tel: (615) 574 6835

Investigating the splitting of water in vitro using chloroplasts and isolated enzymes in order to produce molecular hydrogen and oxygen. Also undertaking studies on hydrogen production by green algae.

Phyton Technologies Inc

7327 Oak Ridge Highway, Knoxville, TN 37931.

Tel: 615 690 9988 Telex: 534056 Fax: 615 691 3960

Develop and produce speciality plants, crop plants and forest species by tissue culture techniques.

Texas - TX

A M Biotechniques Inc

PO Box 873, Belton, TX 76513. Tel: 817 939 7778 Fax: 817 939 1955

Supplies diagnostic kits for veterinary use including parvovirus and coronavirus.

Antek Instruments Inc

6005 North Freeway, Houston, TX 77076-3998.

Tel: 713 691 2265/800 558 0087 Telex: 910 881 1792 Fax: 713 691 5606

Manufacture nitrogen analyzers and sulphur analyzers suitable for biological samples (gas, liquid or solid) as well as gas chromatographs.

Asoma Instruments Inc

12212-H Technology Blvd, Austin, TX 78727. Tel: 512 258 6608 Telex: 767177

Manufacture x-ray fluorescence instruments for determination of elements of atomic number above 12 with the capability of determining the level of up to six elements simultaneously.

Austin Biological Laboratories Inc

6620 Manor Rd, Austin, TX 78723. Tel: 512 928 1304

Produce antigens, antiserums and immunodiagnostics.

Baylor College of Medicine

1200 Moursund Avenue, Houston, TX 77025.

Studying molecular organization of centromeric regions of yeast chromosomes using recombinant DNA technology, cloning techniques, DNA sequencing and studies of microtubule associated proteins.

Bethyl Laboratories Inc

PO Box 850, Montgomery, TX 77356. *Tel*: 409 597 6111

Provide a custom antiserums production service to supplied antigens. Producer of commercial antiserums to human, rodent and domestic animal serum proteins. Carry out large scale drug studies and research projects at their animal facilities and supply radial immunodiffusion kits to the bovine, equine, canine and feline immunoglobulins.

Big Three Industries Speciality Gases

PO Box 1026, LaPorte, TX 77571. Tel: (713) 474 4477

Produce gases for laboratory use including carrier gas, standards and rare gases as well as pressure regulators and gas handling equipment.

Part III Texas - TX UNITED STATES OF AMERICA

Biosyne Corp

1939 Richmond Ave, Houston, TX 77098. Tel: 713 526 2929

Developing methods for the genetic manipulation of commercial meat-producing animals by microinjection of vectors carrying growth hormone genes into mammalian embryos which are then developed to full term using surrogate mothers. Techniques are being used with pigs, goats and rabbits. Other interests include embryo and sperm sexing as well as monitoring of water.

Biotecx Laboratories Inc

PO Box 1421, Friendswood, TX 77546.

Tel: 713 482 2672/800 636 0600 Telex: 4998324 Fax: 713 482 1070

Produce antibodies and reagents for enzyme immunoassay and radioimmunoassay.

Biotics Research Corp

4850 Wright Rd, Suite 150, Stafford, TX 77477. Tel: 713 240 8010/800 231 5777

PO Box 36888, Houston, TX 77236

Developing a range of nutritional supplements. Carrying out research on interferon, superoxide dismutase, antioxidants and microbiology.

Biotx

Biosciences Corp of Texas

201 Renner Rd, Richardson, TX 75080. Tel: 214 480 0133 Telex: 910 250 1614

Carrying out research and development of cancer therapeutics. Products include a cancer nuclear antigen diagnostic kit, DNA probes, antibodies to oncogenes and growth factors.

Bohler Brothers of America Inc

Vogelbusch Division

1625 West Belt North, Houston, TX 77043. Tel: (713) 465 8376 Telex: 762275

Offers full engineering and project management services for the design and construction of fuel alcohol (ethanol) plant based on feedstocks, including sugar cane, sugar beet, molasses, corn, milo, sorghum, potatoes, rice, wheat, barley etc, as well as by-products such as cheese whey. Technology includes continous fermentation, energy-efficient designs and full by-product recovery with integration of distillation and stillage concentration for maximum steam economy. Plant may range from small-scale, regional or cooperative facilities in the capacity range of 20,000,000 to over 500,000,000 litres per year.

Carrington Laboratories

1300 E Rochelle, TX 75062.

Developing skin and wound care products including immune stimulators.

Core Laboratories Inc

7501 Stemmons, Dallas, TX 75247.

Supplies laboratory equipment including gas chromatographs and viscometers.

Curtin Matheson Scientific Inc

9999 Stuebner-Airline, Houston, TX 77038. *Tel*: (713) 820-1661

Manufactures incubators.

Davy McKee Corp

2925 Briarpark, Suite 700, Houston, TX 77042. Tel: 713 266 8008 Fax: 713 266 6316 (see Davy McKee Corp,IL).

Diagnostic Systems Laboratories Inc

100 East NASA Rd 1, Suite 303, PO Box 57946, Webster, TX 77598. Tel: 713 332 9678

Developing monoclonal and polyclonal antibodies, enzyme- and radio-immunoassays and test kits for hormones, enzymes and receptors.

Fairleigh Dickinson Laboratories Inc

1249 Ambler Ave, Abilene, TX 79601. Tel: 915 677 1386 Telex: 3787985

Develop ELISAs for sexually transmitted diseases including herpes.

Farms of Texas Co

PO Box 1305, Alvin, TX 77512. Tel: 713 331 6481

Carrying out a joint development programme with DNA Plant Technology, US using plant protoplast fusion techniques for the production of new rice hybrids.

Frito-Lay Inc

PO Box 35034, Frito-Lay Tower, Exchange Park, Dallas, TX 75235. Tel: (214) 351 7000

Carrying out research on genetic improvement of plants such as the potato, using both conventional and in vitro techniques including cell and tissue culture.

Gamma Biologicals

3700 Magnum Rd, Houston, TX 77092. Tel: 713 681 8481/800 231 5655 Telex: 790635

Produce reagent-based diagnostic tests for human blood serums including monoclonal antibody-based tests as well as serums and antiserums. Developing AIDS diagnostics.

Genetic Designs Inc

7505 South Main, Suite 270, Houston, TX 77030.

Tel: 713 795 4686/800 2345 DNA Telex: 940536 Fax: 713 795 4344

Markets a solid-phase synthesizer for production of oligonucleotides and polypeptides as well as providing a custom DNA synthesis service. Supplies resins and chemicals for nucleic acid synthesis.

Granada Genetics Corp

100 Research Parkway, College Station, TX 778403. Tel: 409 268 7000

Carrying our research on bull genetics, shrimp farming and food production. Subsidiary of Granada Corp, ${\bf US}$.

Granada Mariculture Technologies Inc

PO Box 3128, Bryan, TX 77805. Tel: 409 776 7000

Produce shrimps and offer advice and technologies for mariculture.

Greenhills Environmental Center

7575 Wheatland Road, Dallas, TX 75249.

Developing a two-phase system for production of methane by anaerobic digestion in which the first stage is optimized for production of acid and the second stage is optimized for production of methanogenic bacteria.

Helena Laboratories

1530 Lindbergh Drive, PO Box 752, Beaumont, TX 77704-0752.

Tel: 409 842 3714/800 231 5663

Telex: 429861/910 884 5171

Fax: 409 842 6241

Supplies materials and accessories for use in electorophoresis, spectrophotometry, densitometry, chemical analysis and blood testing as well as computer accessories which provide a concise presentation of densitometrically generated data from electrophoretic and chromatographic separations, antibodies and reagents.

Heyltex Corp

10665 Richmond Ave, Suite 192, Houston, TX 77042. Tel: 713 784 6258 Fax: 713 781 0960

Produce pharmaceuticals, chemicals and monoclonal antibodies. Developing diagnostics (see Heyl, Germany).

Houston Biotechnology Inc

3606 Research Forest Drive, The Woodlands, TX 77380. Tel: 713 363 0999 Fax: 713 363 3715

Developing products for opthalmic and neurological use by protein and bioengineering, including cataract therapeutics.

Houston University

Department of Biology

Houston, TX 77004.

Investigating propagation and genetic improvement of tropical trees by regeneration of plantlets from embryos and callus cells.

UNITED STATES OF AMERICA Texas - TX Part III

Kallestad Diagnostics

1120 Capitol of Texas Hwy S, Bldg 3, Suite 300, Austin, TX 78746-6426. Tel: 512 329 5555/800 531 5111 Telex: 4630161

Manufactures a wide variety of radioimmunoassays and other immunoassay systems for medical diagnostics. Carries out diagnostic tests in areas of immunology, haematology and endocrinology on a contract basis for physicians, hospitals and research organizations.

Kernco Instruments Co Inc

420 Kenazo Ave, El Paso, TX 79927. Tel: 915 852 3375/800 325 3875 Telex: 749487 Fax: 915 852 4084

Manufactures pH meters, temperature controllers and humidity monitors.

LifeCell Corp

3606A Research Forest Drive, The Woodlands, TX 77381. Tel: 713 367 5368

Offers contract research in the applications of its patented cryobiology method for preservation, storage and revitalization of biological materials

Mathew Hall & Company Inc

Suite 3426, Entex Building, 1200 Milam, Houston, TX 77002. Tel: (816) 761 2500

Specializes in construction of plants and facilities for the process industries, including fine chemicals, pharmaceuticals, food, beverages and fermentation (see Mathew Hall Engineering, UK).

Midland Certified Reagent Co

1500 Murray Street, Midland, TX 79701. Tel: (915) 685 1224

Supplies synthetic polynucleotides as well as lyophilized terminal transferase.

Monoclonetics International Inc

18333 Egret Bay Blvd, Suite 270, Houston, TX 77058.

Produce human screening tests and diagnostics as well as epitope screens.

Novaferon Laboratories

1296 B Post Oak Rd, Houston, TX 77055. Fax: 713 683 0056 Tel: 713 683 6117

Developing human biological response modifiers.

OCS Laboratories Inc

PO Box 1940, Rt 2 (FR455), Sanger, TX 76266. Telex: 910 997 8356 osclabs Tel: 817 458 4422/800 227 0627

PO Box 2067, Denton, TX 76202

Manufacture synthetic DNA oligonucleotides, primers, linkers, adaptors and reagents for DNA synthesizers, as well as complete gene sequences. Offer services in custom oligonucleotide synthesis, computer analusis of DNA and proteins, protein and peptide sequencing, gene synthesis, DNA sequencing and antibody production against synthetic peptides.

Phoenix Electrode Co

6103 Glenmont, Houston, TX 77081. Tel: 713 772 6666 Telex: 910 881 1203

Manufactures pH electrodes as well as electrodes for dissolved oxygen and carbon dioxide.

Radian Corp

PO Box 201088, Austin, TX 78720-1088. Tel: 512 454 4797 Fax: 512 454 7129 Fax: 512 454 7129

Manufacture computer sample and analysis laboratory management systems.

Research Biogenics Inc

PO Box 764, Bastrop, TX 78602. Tel. 512 321 3971 Telex: 765102

Offer services in custom antiserum production, ascites preparation, clinical trials and toxicology studies.

Shell Oil Co

1 Shell Place, Houston, TX 77001. Tel: 713 241 6161

Develop petroleum-related biotechnology products including microbial products for agriculture and carry out research in areas of plant cell and tissue culture as well as plant and invertebrate pathology.

Southland Cryogenics Inc

2424 Lact Lane, Carrollton, TX 75006. Tel: 214 243 1311/800 872 2796 F

Fax: 214 243 1370

Manufactures cell culture equipment centrifuges and freeze dryers.

Southwest Foundation for Research & Education

PO Box 28147, San Antonio, TX 78284. Tel: 512 674 1410

Provide simian virus diagnostic service.

Texas Biological Laboratories

5901 Fitzhugh, Fort Worth, TX 76119. Tel: (817) 457 4474

Supplies diagnostic biologicals, as well as general laboratory chemicals, reagents and test solutions. Subsidiary of Anderson Laboratories Inc, US.

Texas Tech University

College of Agricultural Science Plant & Soil Science Department Lubbock, TX 79409. Tel: (806) 742 2837

Studying genetic variability in cotton and sorghum in relation to photorespiration sink size and resistance to water stress.

Texas Tech University

Department of Biological Sciences

PO Box 4149, Lubbock, TX 79409.

Tel: 806 742 2740

Carrying out research on biological pesticides including aspects of viral interactions with cultivated insect cell lines from various species and the regulation of the production of polyhedrin. Also investigating the structure and regulation of genes coding for the promotor and other regulatory sequences as a means to engineering viral pesticides with a broader spectrum of host specificity.

Texas, University of, Houston

Cancer Center Department of Molecular Biology

Texas Medical Center 6723 Bertner Avenue, Houston, TX 77030.

Carrying out studies on structure and function of tRNA using specific genetic alteration in which the code does not make sense, conversion to correct form and determination of changes in nucleotide sequences.

Texas, University of, Houston

Cancer Center Department of Biochemistry

Texas Medical Center 6723 Bertner Avenue, Houston, TX 77030. Undertaking the following studies: interaction of proteins and DNA; cloning of bacterial restriction enzyme systems.

Texas, University of, Houston

Cancer Center Department of Cell Biology

Texas Medical Center 6723 Bertner Avenue, Houston, TX 77030.

Studying structural arrangement of DNA sequences in metaphase chromosomes.

Totalah Inc

9933 Mula Rd, Stafford, TX 77477. Tel: 713 498 2239

Designs, manufactures and installs custom laboratories and animal facilties up to more than 50,000 square feet. Design capability includes genetic engineering, biomedical research, biochemistry, chemistry, environmental testing, production facilities and animal care units.

Tracor-Atlas Inc

9441 Baythorne Drive, Houston, TX 77241.

Tel: 713 462 6116 Telex: 750197 Fax: 713 462 1831

Manufacture microinjector syringe pumps and controllers for precision injection and sampling of liquids in volumes of from 50 ml down to micro-litre volumes capable of automatic, computer or manual control.

Part III Utah - UT UNITED STATES OF AMERICA

Tracor Instruments Austin

Manufactures gas chromatography systems and HPLC detectors for research, quality control and laboratory testing; specific applications for drug analysis and respiratory gases; turnkey systems with automated sampling and computerized data handling capability.

Valco Instruments Co Inc.

Manufactures equipment for research and process control including multiposition switching and sampling valves.

Vestec Corp

9299 Kirby Drive, Houston, TX 77054. Tel: 713 796 9677 Fax: 713 796 0920

Supply hyphenated chromatography equipment.

Viscotek Corp

1030 Russell Drive, Porter, TX 77365, Tel: (713) 359 5966

Manufactures viscometers

Wadley Institute of Molecular Medicine

9000 Harry Hines Boulevard, Dallas, TX 75235. Tel: (214) 351 8111

Carries out cancer research. Investigating genetic systems of various eukaryotes and prokaryotes including aspects of molecular genetics and genetic engineering with emphasis on genes responsible for coding of interferons and other blood proteins.

Wako Chemicals USA Inc

12300 Ford Road Suite 130, Dallas, TX 75287.

Tel: 214 484 7518/800 992 WAKO (9256)

Telex: 293208 wako ur Fax: 214 484 7243

Supply a wide range of products for biomedical research including reagents and standards, antibiotics, chromatography media, crosslinking reagents, enzymes, mycotoxin standards, antibodies and antiserums, lectins, prostaglandins, biologically active peptides, chiral compounds, toxins and venoms and products for nucleic acid and peptide synthesis.

Utah - UT

Applied Water Engineering Inc

Manufacture equipment for reverse osmosis.

Biomaterials International Inc

PO Box 8852, 420 Chipeta Way, Suite 160, Salt Lake City, UT 84108. Tel: 801 583 8444

Manufacture respiratory aids and gas monitoring equipment.

Cytozyme Labs

134 South 700 West, Salt Lake City, UT 84104. Tel: 801 533 9208

Supply enzyme-based animal and plant growth products, probiotics and feed additives as well as waste treatment and soil inoculants.

Evans & Sutherland

Computer Division

540 Arapeen Drive, PO Box 8700, Salt Lake City, UT 84108. Tel: 801 582 5847

Supplies computer graphics systems designed for the creation, manipulation, modification and dynamic viewing of complex three dimensional molecular structures, as well as a variety of molecular science and molecular graphics software. Systems are used by researchers in crystallography, drug design, protein research, genetic engineering and polymer research.

Gull Laboratories Inc

1011 East 4800 South Street, Salt Lake City, UT 84117.

Tel: (801) 263 3524/800 448 4855 Telex: 296480 gull ur

Supplies immunofluorescence diagnostic kits for cytomegalovirus, Epstein-Barr virus, herpes simplex virus, infectious mononucleosis virus and Toxoplasma gondii.

HvClone Laboratories Inc

1725 S State Highway 89-91, Logan, UT 84321.

Tel: 801 753 4584/800 492 5663 Telex: 358977 Fax: 801 753 4589

Supplies defined serums and media for cell and tissue culture including a gelatin microcarrier, immunochemicals, hybridomas and disposable labware. Offers services in custom immunization, monoclonal antibody production and antibody conjugation.

Lee Scientific

4426 S Century Drive, Salt Lake City, UT 84123. Tel: 801 261 2300 Fax: 801 261 2389 Supply equipment for gas chromatography.

Miami Serpentarium Labs

419 Wakara Way, Salt Lake City, UT 84108. Tel: 801 583 5050/800 248 5050

Produce snake and reptile venoms.

Multi-Technology Inc

175 South West Temple, Suite 610, Salt Lake City, UT 84101.

Tel: 801 531 1343 Telex: 3730911 multi tech Fax: 801 521 9041

Manufacture ultrafine pipette tips for sampling, injection, spotting etc, as

Manufacture ultrafine pipette tips for sampling, injection, spotting etc, as well as sealable microcentrifuge tubes, culture tubes, electrophoretic DNA sequencing equipment and custom sequencing.

Native Plants Inc

417 Wakara Way, Salt Lake City, UT 84108. Tel: 801 582 0144

Producing new varieties of potato, flower and vegetable seeds and plants as well as soil inoculants.

NPI

417 Wakara Way, University Research Park, Salt Lake City, UT 84108. Tel: 801 582 0144

Carrying out research in plant breeding as well as developing new varieties of crops such as tomatoes by combining conventional breeding techniques with the use of gene probes to identify transmission of the required genes into young seedlings.

Porphyrin Products Inc

PO Box 31, Logan, UT 84321.

Tel: (801) 753 1901 Fax: 801 753 6731

Manufactures and supplies porphyrins for research use.

Utah State University Logan

Department of Chemistry

Logan, UT 84322.

Undertaking studies on mechanism of methane production by anerobic methanogens.

Utah State University Logan

Agricultural Experiment Station Department of Biology

Main Building, Logan, UT 84321.

Investigating biochemistry and genetics of photorespiration using photosynthetic bacteria. Developing gene maps for structural and regulatory genes of the photorespiratory systems.

Utah, University of, Salt Lake City

Department of Molecular Biology

1400 Second Street, Salt Lake City, UT 84112.

Investigating human linkage mapping using recombinant DNA probes.

Utah, University of, Salt Lake City

Department of Biology

1400 Second Street, Salt Lake City, UT 84112.

Studying transformation of mouse cell cultures by herpes genes inserted into plasmid pBR 322, regulation of gene control by SV 40 control of protein synthesis and structure of mitochondrial DNA.

Vistatech Partnership Ltd

PO Box 21718, Salt Lake City, UT 84121. Tel: 801 942 3207 Fax: 801 942 1436

Licensing technologies for gold recovery based on microbial leaching and biological techniques for metal removal from industrial waste and process waters. Successor business to Advanced Mineral Technologies.

UNITED STATES OF AMERICA Virginia - VA Part III

Wescor Inc

459 South Main Street, Logan, UT 84321.

Tel: 801 752 6011/800 453 2725 Telex: 4930393/910 971 5870

Fax: 801 752 4127

Manufactures automated cell separator, vapour pressure and colloid osmometers, haematology and microbiology slide stainers, sweat collection systems and asweat conductivity analyzer.

Vermont - VT

Bio-Tek Instruments Inc

Highland Park, PO Box 998, Winooski, VT 05404-0998.

Tel: 802 655 4040/800 451 5172 Telex: 940136 bio tek shvt Fax: 802 655 7941

Develops and manufactures ELISA and microplate readers accommodating all colorimetric assays and featuring many computerised functions.

Virginia - VA

A H Robins Co

1407 Cummings Drive, PO Box 26609, Richmond, VA 23261. Tel: 804 257 2000 Telex: 828317 Fax: 804 257 2120

Major international company involved in manufacture and marketing of health care products, cosmetics, perfumes and fragrances, as well as pet care products and animal vaccines through it subsidiary Agri-Bio Corp,

Amano International Enzyme

PO Box 1000, Troy, VA 22974. Tel: 800 446 7652 Telex: 822438

Supply a wide range of diagnostic and food-grade enzymes, analytical kits based on enzymic assay for free fatty acids and monoclonal antibodies. Subsidiary of Amano Pharmaceutical Co, Japan.

Artek Systems Corp

14340 Sullyfield Circle, Chantilly, VA 22021. *Telex:* 221219 Manufacture cell disintegrators and temperature control systems. Subsidiary of Dynatech Corp, US.

Astre Corporate Group

1228 Prince St, Alexandria, VA 22314. Tel: 703 739 0397/800 83 ASTRE

Using microbial technology to develop biopesticides and systems for lipase production and ammonia degradation as well as for bioextraction of gold and degradation of wastes. Offer analytical and process development

Biological Monitoring Inc

PO Box 184, Blacksburg, VA 24063. Tel: 703 953 2821

Carries out environmental monitoring of water quality using computer monitoring equipment and fish as indicators.

BioTherm Corp

3260 Wilson Blvd, Arlington, VA 22201. Tel: 703 522 1705 Fax: 703 522 2606 Manufacture a dry bath.

Cel-Sci Corp

601 Wythe St, Suite 202, Alexandria, VA 22314.

Tel: 703 549 5293 Telex: 440527 Fax: 703 549 6269

Manufactures lymphokines, interleukin 1 and 2. Developing plasmatic human interleukin inducing protein and an AIDS vaccine. (Formerly Interleukin-2 Inc).

Cruachem Inc

460 Spring Park Palace, Suite 500, Herndon, VA 22070. *Tel*: 703 689 3390/800 EASY DNA *Telex*: 887036 *Fax*: 703 689

Markets biologicals, pharmaceuticals and diagnostics. Major products are related to DNA synthesizers and synthesis chemicals. Subsidiary of Cruachem Ltd.

Dynatech Laboratories Inc

14340 Sullyfield Circle, Chantilly, VA 22021-1617.

Tel: 703 631 7800/800 336 4543 Telex: 899454 Fax: 703 631 7816

Manufacture immunochemicals and immunological reagents including solid-phase absorbed antibodies with low cross reactivity as well as enzyme immunoassay systems and anti-mycoplasma kits. Products include blood typing kits, microplate readers, tissue culture supplies, sample preparation equipment and computer image analysis systems and software.

Ethyl Corp

330 South Fourth St, Richmond, VA 23219. Tel: 804 788 5000

Produces alcohols and related organic chemicals.

Eurotherm Corp

11485 Sunset Hills Rd, Reston, VA 22090. Tel: 703 471 4870 Telex: 899449 Fax: 703 437 3182

Supply equipment for temperature monitoring, control and recording in industrial plant.

Flow General Inc

7655 Old Springhouse Road, McLean, VA 22102. Tel: 703 893 5915 Telex: 230 965 3439

Design, manufacture and market products for medical, veterinary and biological research, vaccine production, testing and clinical trials. These include living cells, media and serums for cell culture, viral reagents, bacterial diagnostics, laboratory instrumentation equipment and disposable laboratory ware. Acquired the Microbial Profile System (used for the determination of antimicrobial susceptibility) from 3-M Co, US.

Flow Laboratories Inc

7655 Old Springhouse Road, McLean, VA 22102.

Tel: 703 893 5925/800 368 FLOW (3569) Telex: 440543 Fax: 703 893 6727

Manufactures and distributes a wide variety of products for the biomedical industry including: microplate readers, washers, pipetters and related accessories for ELISA; liquid and powder cell culture media as well as custom media, serums and disposable plasticware; an advanced interactive control bench-top cell culture fermenter for mammalian cell culture technology; biohazard and Class II hoods, carbon dioxide incubators, ultra-low temperature freezers and ductless fume hoods; products for removal of heavy metal pollutants from industrial wastewaters by direct addition and dried bacterial cultures for municipal and industrial waste treatment.

Glen Research Corp

PO Box 1047, Herndon, VA 22070. Tel: 703 437 6091/800 327 GLEN

Fax: 703 435 9774

Supply DNA and DNA synthesizers, oligonucleotide purification cartridges, nucleosides and nucleotides.

Hazleton Biotechnologies Co

Produces laboratory reagents and equipment, media, monoclonal and polyclonal antibodies, complement fixation test reagents, radioisotopes, rapid diagnostic tests for interferon and developing diagnostics and cancer gene products. Subsidiary of Hazleton Laboratories, US.

Hazleton Laboratories Corp

13873 Park Center Rd, Herndon, VA 22071. Tel: 703 478 9450 Telex: 4972832 Fax: 70

Felex: 4972832 Fax: 703 478 9457

Offer contract analytical services and custom synthesis of monoclonal antibodies.

Hunter Associates Laboratory Inc

Manufactures a computerized colour analysis system which simulates visual observations.

Part III Washington - WA UNITED STATES OF AMERICA

Industrial Microgenics Ltd

PO Box 5146, Charlottesville, VA 22905. Tel: 804 973 9702

Produce lipase and amylase and microbial cultures for treating waste organics, including ammonia and chlorinated organics, as well as Bacillus thuringiensis strains.

Jouan Inc

PO Box 2716, Winchester, VA 22601. Tel: 703 665 0863/800 662 7477 Telex: 0904348 Fax: 703 665 8002

Supplies carbon dioxide incubators and centrifuges as well as a wide range of reagents for use in biochemistry and blood bank applications.

Mediatech Inc

13884 Park Center Rd, Herndon, VA 22071. Fax: 703 471 0363 Tel: 703 471 5955/800 CELLGRO

Manufactures liquid and powdered cell culture media and related products.

Melov Laboratories Inc

6715 Electronic Drive, Springfield, VA 22151. Tel: 703 354 2600 Telex: 899440

Supplies reagents and services for immunology and mutagenesis testing, as well as products for molecular biology, including hybridoma and recombinant DNA research. Products include restriction enzyme A, cosmids, phage arms, Charon 9 Hind III and 4A EcoR I. Working on interferon, including collaborative clinical trials. Subsidiary of Revlon Inc, US. Member of Rorer Group, US.

Mitre Corp

Research and development company concerned with energy policy analysis, program development, systems engineering etc. Has carried out a number of assessments of terrestrial biomass energy systems, including bioconversions and alcohol fuel production.

Murtagh & Associates

1523 Yale Drive, Winchester, VA 22601. Tel: 703 667 7757

Consultants offering a complete service in alcohol production, process plant improvement and improving alcohol product quality.

Skatron Inc

108 Terminal Drive, PO Box 530, Sterling, VA 22170. Tel: 703 478 5190/800 336 0191 Telex: 64392 ska inc

Supplies laboratory and diagnostic equipment including systems for the determination of reverse transcriptase activity as a confirmation of retrovirus infection and automatic microplate washers, for use with radioimmunoassays. Products of Skatron AS, Norway.

Teledyne Hastings-Raydist

PO Box 1275, Hampton, VA 23661. Tel: 804 723 6531

Supply a range of mass flow instruments including flowmeters and

The Tintometer Co

309A McLaws Circle, Williamsburg, VA 23185. Tel: 804 220 2900 Telex: 710 882 2260 Fax: 804 229 0472

Produce colour analysis equipment, colorimeters, photometers, spectrophotometers, titrators, electrodes and related accessories.

Virginia Commonwealth University

Medical College of Virginia

1200 East Broad Street, Richmond, VA 23298.

Undertaking studies on the cloning and translation of SV40 antigen genes.

Virginia Commonwealth University

Department of Microbiology

901 West Franklin Street, Richmond, VA 32384.

Studying gene organization and structure in E coli and investigating total tRNA. Also investigating the role of Streptococcus mutants in dental caries and identification of mutants in and plasmids for sucrase activity. Isolating and reconstituting the Azolla-Anabaena association.

Virginia Polytechnic Institute and State University

Department of Chemical Engineering & Chemistry

Blacksburg, VA 24061. Tel: (703) 961 7673

Developing microbial and enzyme processes for the large-scale conversion of lignin into commercially valuable materials.

Virginia, University of

Department of Biology

Garrett Hall, Charlottesville, VA 22901.

Investigating transfection and genetic transformation in Rhizobium and use of plasmids for cloning rhizobial genes. Also investigating mechanism of regulation of genes and studying ultrastructure of genes of Xenopus and Drosophila, organization and regulation of genes coding for muscle proteins in Drosophila, and control of muscle protein synthesis.

Virginia, University of

School of Medicine Department of Biochemistry

PO Box 246, Charlottesville, VA 22901.

Studying mechanisms of DNA replication.

Washington - WA

Bartels Immunodiagnostic Supplies Inc

PO Box 3093, Bellevue, WA 98009.

Tel: 206 882 2008

Produce tissue culture media and diagnostic tests for Herpes simplex virus and chlamydia.

Bio Techniques Labs Inc

15555 NE 33 St/Biotech Rd, Redmond, WA 98052. Tel: 206 883 9518

Produce feed additives.

Biocontrol Systems

19805 North Creek Parkway, Bothell, WA 98011. Tel: 206 395 3300

Developing biosensors. Offer tests for food and water.

Biomed Research Labs Inc

1720 130th Ave NE, Bellevue, WA 98005. Tel: 206 882 0448 Telex: 283803 biom ur

Develop and supply veterinary products including vaccines against microbial infections and other treatments for fish.

Biotechniques Laboratories

15555 NE 33rd & Biotech Rd, Redmond, WA 98052. Tel: 206 883 9518/800 548 3222

Produce microbial feed additives and silage inoculant.

Biotope Inc

12277 134th Court NE, Suite 100, Redmond, WA 98052. Tel: 206 281 9600/800 553 1123 Telex: 910 380 5905 Fax: 206

Produces polyclonal antibodies, analyzers, clinical diagnostics and research assay kits including enzyme- and radio- immunoassays.

Cyanotech Corp

18748 142nd Ave NE, Woodinville, WA 98072. Fax: 206 485 6918 Tel: 206 481 2173 Telex: 269803

Manufactures phycobiliproteins from algae for use as fluorescent markers in medical diagnostics and research based on flow cytometry, image analysis and immunoassay. Also manufactures Spirulina and beta-carotene. Carrying out research on nitrogen fixing microorganisms for soil improvement and recombinant technologies applied to microalgae.

Elanex Pharmaceuticals Inc

22121 17th Ave SE, Suite 115, Bothwell, WA 98021. Tel: 206 487 3526

Developing erythropoietin and blood related products.

UNITED STATES OF AMERICA Washington - WA Part III

Endorphin Inc

1000 Senaca Street, Seattle, WA 98101. Tel: (206) 624 1144

Research and development company working on production of pancreatic endorphin. Has joint agreement with University College, University of London, UK to support research in this area.

Fred Hutchinson Cancer Research Center

1124 Columbia Street Seattle WA 98104

Carrying out studies on gene function in relationship to chromosome structure and investigation of control sites in Drosophila. Also investigating unintegrated and integrated forms of murine leukaemia viruses and molecular mechanisms underlying avian leukosis virus-induced neoplasms. Performing sequence analysis of human globin genes.

Genetic Systems Corp

3005 First Avenue, Seattle, WA 98121. Tel: 206 728 4900/800 472 8378 Telex: 532050

Produces immunological products, especially monoclonal antibodies, for use in research and in diagnosis of human disease, cancer and cell typing for transfusions and tissue transplants. Carrying out research on therapeutic use of monoclonal antibodies. Has joint ventures with Syva Co, US for development of diagnostics for herpes virus, with Cutter Laboratories, US and with the Pacific Northwest Research Foundation, US to develop monoclonal antibodies to human disease antigens. Developing AIDS test based on Pasteur Institute, France virus, retroviral vectors, tissue targeted delivery systems and diagnostics for Legionnaires disease. Subsidiary of Bristol-Myers, US.

Immunex Corp

Research and development company working on immunoregulation by lymphokines. Products include interleukin-1 to -4 and -7, interleukin-1 receptor and granulocyte macrophage colony stimulating factor.

IMRE Corp

130 Fifth Avenue North, Seattle, WA 98109-4933. Fax: 206 448 1007 Tel: 206 448 1000 Telex: 296357 Manufactures protein A and immuno blood purifier systems.

Kent Laboratories Inc

23404 NE 8th St, Redmond, WA 98053. Tel: 206 868 6200 Telex: 271467

Manufacture antiserums to human proteins, conjugated antiserums and radial immunodiffusion plates. Offer services in custom immunization, immunoassay development, antibody purification and affinity isolation, as well as enzymic or fluorochrome antibody labelling.

NeoRx Corp

410 W Harrison St, Seattle, WA 98119. Tel: 206 281 7001

Developing monoclonal antibody based reagents for detection and treatment of cancer including a melanoma imaging agent with technetium.

Oncogen

3005 First Avenue, Seattle, WA 98121. Tel: 206 728 4800

New company focusing on areas of cancer diagnosis and treatment. Research areas include monoclonal antibodies to human cancers and tumour viruses, viral and cellular oncogenes, growth factors and inhibitory peptides and hormones and their receptors. Subsidiary of Bristol-Myers,

Panlabs Inc

11804 North Creek Parkway South, Bothell, WA 98011-8805. Tel: 206 487 8200 Telex: 517335 Fax: 206 467 3787

Carrying out contract research on microbial strain improvement for fermentation processes. Offers services in pharmacological evaluation and fermentation process development.

Panlabs Inc

Pharmacology Division

9725 3rd Ave NE, Suite 302, Seattle, WA 98115. Tel: 206 526 5309 Telex: 517335 Fax: 206 526 1090

Offer services in research and screening of synthetic and natural compounds.

Protan Laboratories Inc

PO Box 462, Redmond, WA 98073-0462. Tel: 206 881 6464

Supplies algal products. Subsidiary of Protan AS, Norway.

R & A Plant/Soil Inc

24 Pasco/Kahlotus Rd, Pasco, WA 99301. Tel: 509 545 6867

Supplies cultures of bacteria, algae and cyanobacteria to farmers for use as soil conditioners and fertilizers. Investigating use of cyanobacteria as a means of nitrogen fixation in agriculture.

Upchurch Scientific Inc

2969 North Goldie Rd, PO Box 1529, Oak Harbor, WA 98277. Fax: 206 679 Tel: 206 679 2528/800 426 0191 Telex: 152465

Manufacture a wide range of HPLC fittings.

Veterinary Research & Development Inc

PO Box 502, Pullman, WA 99163. Tel: 509 334 5815

Produce reagents for immunodiagnostics and offer services in custom blood and serum collection, custom antiserum production etc, as well as immunodeficiency analysis for Arabian horses.

PO Box 502, NW 115 State, Pullman, WA 99163. Tel: 509 334 5815/800 222 8673

Developing veterinary diagnostics.

Washington State University

Department of Genetics & Cell Biology

Pullman, WA 99164.

Tel: 509 335 3634

Carrying out research on the cloning and expression of bovine interleukin 2 in mammalian cells, bacteria and yeasts as well as investigating therapeutic use in cattle.

Washington State University

College of Agriculture Department of Agronomy

Pullman, WA 99163.

Studying molecular genetics of nitrate reductase. Investigating nucleocytoplasm hybrids of wheat.

Washington State University

Department of Bacteriology

Administration Building, Pullman, WA 99163.

Developing bacteriophage as cloning vectors for use with gram negative bacteria and studying cloning in E coli, Serratia, Klebsiella and Rhizobium.

Washington State University

College of Agriculture Department of Plant Pathology

Pullman, WA 99163.

Studying role of histones as disease resistance factors in higher plants.

Washington, University of, Seattle

Department of Genetics

A-300 Health Sciences Center, Seattle, WA 98195.

Studying replication in eukaryotic chromosomes and transmission of multiple copy genetic elements.

Weyerhauser Co

255 S 336th St, Tacoma, WA 98477. Tel: 206 924 2345

Developing new varieties of crop and horticultural plants using tissue culture techniques

ZymoGenetics Inc

4225 Roosevelt Way NE, Seattle, WA 98105. Tel: 206 547 8080 Telex: 294890 Fa

Fax: 206 548 2329

Undertakes contract research in relation to genetic engineering of yeasts and other fungi. Developing growth factors for wound repair and coagulation proteins for haemophilia and thrombolysis.

Part III Wisconsin - WI UNITED STATES OF AMERICA

West Virginia - WV

Allelic Biosystems

Rte 1, PO Box 230, Kearneysville, WV 25430. *Tel*: 304 725 5255

Products include veterinary tests for toxins, probes and reagents.

Wisconsin - WI

Agracetus

8520 University Green, Middleton, WI 53562. Tel: 608 836 7300 Fax: 608 836 9710

Carries out research and development on agricultural projects using new technologies of molecular genetics and plant cell culture. Target crops include corn, soybean and cotton. Projects include inserting Bt genes into crops to produce insect resistance. Also developing microbial crop treatment products and animal health products including diagnostics, vaccines and pesticides (termiticide). Partnership of Cetus Madison Corp, US and Grace ASC Corp (subsidiary of WR Grace & Co), US.

Agrigenetics Advanced Science Co

5649 E Buckeye Rd, Madison, WI 53716.

Tel: 608 221 5000 Telex: 262029 Fax: 608 221 5008

Developing improved seeds for agricultural crops and vegetables including transgenic corn with pest resistance. Division of Agrigenetics Corp.

Aldrich Chemical Co Inc.

1001 West St Paul Avenue, PO Box 2060, Milwaukee, WI 53201. Tel: 414 273 3850/800 558 9160, Telex: 910 262 3052

Supplies fine organic and inorganic chemicals, stains and dyes, spectrophotometric solvents including deuterated compounds and other reagents for nuclear magnetic resonance studies, atomic absorption standards, specialized glassware, software, books, equipment etc, for both research and industry. Joint company with Sigma Chemical Co, US which handles biochemicals with medical, genetic engineering and microbiological uses.

Bio-Technical Resources Inc

1035 South 7th St, Manitowoc, WI 54220. Tel: 414 684 5518 Fax: 414 684 5519

Contract research organization employing bioengineers, microbiologists and chemists. Services provided include market research for malting, brewing, distilling, food, chemical and allied industries, analytical, engineering and design services, process development and scale-up.

Chr Hansen Laboratory Inc

9015 West Maple St, Milwaukee, WI 53214. *Tel:* 414 476 3630

Manufacture enzymes for dairy industries and microbial protein. Develop microbial strains by recombinant DNA techniques. Subsidiary of Chr Hansen, Denmark.

DDS Filtration

1600 County Road F, Hudson, WI 54016. Tel: 715 386 9371 Fax: 715 386 9376

Engineers and manufacturers of ultrafiltration, microfiltration and reverse osmosis membrane separation systems for purification and concentration of fermentation products.

Dnastar Inc

1801 University Avenue, Madison, WI 53705.

Tel: 608 233 5525/251 9685 Fax: 608 251 9685

Supplies an integrated DNA, RNA and protein analysis software package and complete range of compatible hardware including an advanced gel assembly program SEQMAN. Offers annotated databases for genetics and molcular biology.

FIAtron Systems Inc

510 South Worthington St, Oconomowoc, WI 53066. Tel: 414 567 3810 Fax: 414 567 4047

Supply HPLC equipment and dialysis and ultrafiltration supplies as well as sample handling systems and pumps.

Forgene Inc

7014 Fire Tower Rd, PO Box 1370, Rhinelander, WI 54501. Tel: 715 369 2801

Research company using plant tissue culture methods and genetic engineering for development of improved lines of both conifers and hardwood trees including genetically engineered herbicide resistance, as well as supplying elite poplar clones and non-proprietary varieties through a direct marketing division.

Fotodyne Inc

16700 West Victor Road, New Berlin, WI 53151-4131.

Tel: 414 785 785 7000/800 362 3686 Telex: 260127 Fax: 414 785 7013

Manufactures and markets illumination amd photodocumentation systems (ultraviolet and visible) for biotechnology research. Also supplies electrophoresis equipment, microcentrifuges and accessories, autoradiography films and developing supplies, shakers, liquid handling instruments and accessories, power supplies and instant image films. Features an analytical and preparative DNA transilluminator.

Gilson Medical Electronics Inc

3000 W Beltine Highway, PO Box 27, Middleton, WI 53562.

Tel: 608 836 1551/800 445 7667 Telex: 265478 Fax: 608 831 4451

Manufacture a wide range of equipment for analytical and preparative liquid chromatography as well as automatic and manual equipment for handling liquid samples including adjustable pipettes, diluters and dispensers.

Incell Corp

9075 W Heather Ave, PO Box 23767, Milwaukee, WI 53223.

Tel: 414 354 3311/800 545 4141 Telex: 650 308 2625 Fax: 414
354 2126

Produces and markets biochemicals for research, pharmaceutical, chemical and food companies. Specializes in application of organic synthesis and recombinant DNA techniques to peptide chemistry. Other interests include antibodies, diagnostic and analysis kits, synthetic peptide hormones and custom synthesis of peptides for a wide range of research and pharmaceutical uses. Products include amino acids and derivatives, reagents and chemicals, somatomedin C, hypothalamic, immunoregulatory, opioid, pituitary and vasoregulatory peptides and their analogues, cancer therapeutic-laminin pentapeptide, cyclosporin analogue and intermediate as well as penicillin precursor.

L William Teweles & Co

777 E Wisconsin Avenue, Milwaukee, WI 53202. Tel: 414 273 4854 Fax: 414273 8140

Management consultants specializing in plant crops and national and international seed industries. Also active in seed company mergers and acquisitions. Carry out multi-client studies in areas of seed technology such as coating and pelleting, hybrid seeds, plant genetics etc.

Lachat Instruments

10500 N Port Washington Rd, Mequon, WI 53092. Tel: 414 241 3872

Supply bioreactor process closed-loop monitor and controlling systems with associated software for simultaneous monitoring of up to four analytes for laboratory, pilot plant and full scale production plant.

Mattson Instruments Inc

1001 Fourier Court, Madison, WI 53717.

Tel: 608 831 5515 Telex: 262008 Fax: 608 831 2093

Manufacture infrared spectrometers.

Miller Brewing Co

3939 West Highland Boulevard, Milwaukee, WI 53201. Tel: (414) 931 2000

Major producer of beer carrying out research into yeast genetics and other aspects of yeast microbiology.

Molecular Biology Resources Inc

5520 W Burleigh St, Milwaukee, WI 53210. Tel: 414 871 7199/800 626 7873 Telex: 910 290 0536

Supply reagents, DNA and RNA modifying enzymes and nucleic acids.

Part III Wisconsin - WI UNITED STATES OF AMERICA

Niro Atomizer Inc

Membrane Filtration Systems

1600 County Road F, PO Box 268, Hudson, WI 54016.

Tel: 715 386 9371 Telex: 24677 atomna Fax: 715 386 9376

Supplies membrane filtration systems, laboratory scale to production scale.Subsidiary of Niro Atomizer AS, Denmark.

Nitragin Co

3101 West Custer, Milwaukee, WI 53029.

Tel: 414 462 7600

Produce nitrogen fixing bacteria inoculants. Subsidiary of Allied Corp, US.

The Nitragin Company Inc

3101 W Custer Avenue, Milwaukee, WI 53209.

Tel: 414 462 7600

Manufactures and markets inoculants for soyabean and other legumes. Subsidiary of Allied Corp, US.

Nor-Lake Scientific

PO Box 248, Second & Elm, Hudson, WI 54016.

Tel: (715) 386 2323/800 826 3304

Manufactures refrigerators and freezers. Division of Nor-Lake Inc. US.

Pabst Brewing Co

917 West Jameau Avenue, Milwaukee, WI 53201.

Major brewing company producing beer as well as food and animal feed products through its subsidiary PMP Fermentation Products Inc, US.

PMP Fermentation Products Inc

7670 N Pt Washington, Milwaukee, WI 53217.

Manufactures industrial enzymes for use in paper manufacture, desizing (de-starching textiles) etc, as well as sodium gluconate and gluconic acid. Has an active research group developing new industrial, food and animal feed products based on fermentation and microbiology. Subsidiary of Fujisawa Pharmaceutical Co Ltd, Japan.

Promega Corn

2800 S Fish Hatchery Road, Madison, WI 53711-5305.

Tel: 608 274 4330/800 832 6362 Telex: 910 286 2738 Fax: 608

273 6967

Produces enzymes for molecular biology including restriction enzymes, Taq DNA polymerase, as well as lambda DNA packaging systems with high efficiencies of plaque formation and vector/enzyme systems for analyzing the structure, location and function of genes.

Prototype Design Services Inc

6524 Seybold Rd, Madison, WI 53719

Tel: 608 276 3100 Fax: 608 276 3110

Offer custom services in production. Supply electrophoresis equipment.

Sanofi Bio Ingredients Inc

620 Progress Ave, Waukesha, WI 53186. Tel: 414 547 5531/800 558 2317 Te Telex: 026889

Manufacture enzymes for use in cheese making and for food flavourings. Subsidiary of Sanofi, France.

Scientific Protein Laboratories

PO Box 158, Waunakee, WI 53597.

Tel: 608 849 5944 Telex: 265479 Fax: 608 849 4053

Manufactures animal derived products in bulk.

Sigma-Aldrich Corp

1001 West St Paul Avenue, Milwaukee, WI 53233.

Tel: 414 273 3850 Telex: 26843 aldrich mi

Produces a wide range of biochemicals, organic and inorganic chemicals (see Sigma Chemical Co, US and Aldrich Chemical Co, US).

Tech-Line Instruments

Tri Campus Park, PO Box 1236, Fond du Lac, WI 54935-1836. Fax: 414 922 1085 Tel: 414 922 6970/800 328 7518

Supply laboratory equipment for determination of biological oxygen demand in wastewaters. Division of Tech-Line/Antech International Inc,

Tecklad Test Diets

PO Box 4220, Madison, WI 53711.

Tel: (608) 274 9008

Supplies ingredients for test diets for laboratory animals, including vitamin and mineral mixtures, vitamins and amino acids, as well as manufacturing custom research diets to order.

Tri-Clover Inc

Kenosha WI 53141

Manufacture stainless steel flow control products for use in sterile production facilities of food, beverage, pharmaceutical and cosmetic industries. Products include pumps, valves, fittings and flow controllers.

United States Department of Agriculture

Forest Products Laboratory, USDA Forest Services

One Giffordddd Pinchot Drive, Madison, WI 53705.

Tel: 608 231 9200

Research seeks to expand the understanding of all aspects of conversion and use of the timber resource. Current areas of research and technology transfer are wood products; pulp, paper and composites; protection and market; microbial and biochemical conversion; energy from wood; and international forest products.

Universal Foods Corp

433 E Michigan St, Milwaukee, WI 53210.

Tel: (414) 347 3938/800 445 4746

Major producer of yeast for food and animal feed products. Production of torula yeast includes Kluveromyces fragilis grown on whey. Also produces ethanol, yeast hydrolyzates and plant proteins.

Waukesha Foundry Division

Abex Corn

1300 Lincoln Avenue, Waukesha, WI 53186.

Tel: 414 542 0741

Manufacture aseptic pumps for use in the food industry. Also manufacture engine generator systems for heat and electricity production fuelled on landfill gas, biogas or mines gas.

Wisconsin, University of

McArdle Laboratory for Cancer Research

Madison, WI 53706. Tel: 608 262 1256

Carrying out research on the use of DNA adapter molecules in extending the use of restriction enzymes by permitting cleavage at any location. The techniques which have applications in gene transfer are being developed commercially by New England Biolabs, US.

Wisconsin, University of, Madison

Department of Agricultural Engineering

Madison, WI 53706.

Tel: (608) 262 1106

Has carried out detailed studies on the performance of an on-farm large-scale poultry manure anaerobic digester.

Wisconsin, University of, Madison

Agricultural Experiment Station

116 Agricultural Hall, Madison, WI 53706.

Studying production of twins in cattle using techniques of embryo transfer and use of plasmids from Agrobacterium tumefaciens as a vector for transfer of genetic material to higher plants.

Wisconsin, University of, Madison

Molecular Biology Laboratory

500 Lincoln Drive, Madison, WI 75706.

Undertaking studies on transposable DNA elements in yeasts.

Wisconsin, University of, Milwaukee

Graduate School Bolton Hall, Milwaukee, WI 53201.

Carrying out studies on construction in vitro of chimeric Ti plasmids and their use to transfer foreign genes into cells of higher plants.

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