

---

## Announcements

---

### 3rd International Symposium on Quantitative Luminescence Spectrometry in Biomedical Sciences

23–26 May 1989 Ghent, Belgium

This Conference, the third of its kind, to be held at the Faculty of Pharmaceutical Sciences of the State University of Ghent, envisages a report on the current status and future developments in the field of luminescence techniques used in drug quality control, clinical analysis, biochemical, toxicological and environmental analysis and in related areas.

Specific topics include drug and bioanalysis via fluorescence, laser fluorescence, delayed fluorescence, phosphorescence (LTP, RTP, micellar) and chemiluminescence; chemiluminescence immunoassays; thermochemiluminescence techniques; luminescence detection techniques in chromatography; chemical derivatization methods; the development of fluorogenic reagents; the development of highly specific and sensitive luminescent systems for the determination of macromolecules in biological samples; the use of expert systems in the analysis of luminescence data generated by HPLC; fiber optical sensors in biomedical sciences; biomedical applications of luminescence in micellar and cyclodextrin media; the development of high resolution luminescence methods; use of fluorescence and chemiluminescence labels and substrates; the fluorogenic estimation of enzyme activities; the use of three-dimensional fluorescence spectra; the application of computer-aided fluorescence spectroscopy to the determination of drugs and metabolites; . . . .

Outstanding specialists in the field of quantitative luminescence spectrometry will present recent developments through plenary, keynote and invited lectures. Original research papers can be presented as oral (20 min) or poster communications.

A technical exhibition session (instruments, materials, books) will present newest developments in the field of analytical luminescence measuring instruments and an industrial forum will treat highlights in the field of luminescence analysis.

Symposium proceedings will be published in a special issue of *Analytica Chimica Acta* (Elsevier).

#### Information:

Dr. Willy R. G. Baeyens  
Symposium Chairman  
State University of Ghent  
Pharmaceutical Institute  
Laboratory of Pharmaceutical Chemistry  
and Drug Quality Control  
Harelbekestraat 72  
B-9000 Ghent, Belgium  
Tel.: 091/21 89 51 ext. 254

#### First Circular

### 7th Danube Symposium on Chromatography

August 21–25, 1989 Leipzig, German Democratic Republic

The Karl-Marx-Universität Leipzig, Sektion Chemie in association with the Chemische Gesellschaft der DDR, Fachverband Analytik, Arbeitsgruppe Chromatographie cordially invite to the 7th Danube Symposium on Chromatography to be held at Leipzig.

The symposium will take place in the University complex located in the city centre of Leipzig from Monday 21st to Friday 25th of August 1989.

The scientific programme will comprise invited plenary lectures, poster presentations and discussion sessions covering the whole field of chromatography.

In connection with the symposium an exhibition of chromatographic instruments, columns, accessories and chromatographic literature is planned.

The official language of the symposium will be English and no translation service will be provided.

An attractive social programme is in preparation, including tours and visits for persons accompanying active symposium participants.

The second circular including information concerning the scientific and social programme, travel, accommodation, final registration, fees etc. will be distributed in October 1988.

The symposium will be organized by a local Committee in collaboration with the permanent Scientific Committee of this Symposium series.

All correspondence concerning registration and exhibition should be addressed to:

7th Danube Symposium on Chromatography, Karl-Marx-Universität of Leipzig, Department of Chemistry, Talstr. 35, Leipzig, DDR-7010; Tel.: Leipzig 7 16 50; Telex: 5 1 350.

---

## New Products

---

### **Waters Protein-Pak™ Glass Columns**

Quickly purify components of complex biological mixtures while retaining biological activity.

**Protein-Pak Ion Exchange Glass Columns.** Separate a wide variety of proteins in minutes with superior resolution and higher recovery than traditional open column techniques.

**Protein-Pak Gel Filtration Glass Columns.** Protein-Pak gel filtration columns provide rapid separation, purification and characterization of proteins based on their size in solution.

**Protein-Pak Hydrophobic Interaction Glass Columns.** The Protein-Pak Phenyl-5PW glass column can be used as a complement or alternative to gel filtration and ion exchange for the separation of biologically active proteins.

**A complete purification strategy on a single system.** By utilizing the Waters Protein-Pak glass columns with the Waters 650 Advanced Protein Purification System you can develop a complete protein separation strategy on a single system, from processing crude samples to final analysis.

Further information: Waters Millipore GmbH, Hauptstr. 71–79, D-6236 Eschborn, FRG; Tel. (061 96) 4 94-0; Telex 4 07 204; or Waters Chromatography Division, Millipore Corporation, 34 Maple Street, Milford, MA 01757, USA; Tel. (6 17) 4 78-20 00.

## New Products

### New Philips Analytical Chromatography Data Systems Bring Super-Fast Method Development and Analysis

The simplification of chromatography data handling has long been a key issue for the busy analytical laboratory. Another significant step forward is now provided in a new generation of Windows-based chromatography data systems announced by Philips Analytical.

The PU6000 integration system allows even the newcomer to tackle the complete procedure of data acquisition, integration and reporting with confidence. Complex sequences of key strokes are a thing of the past in a new, simplified and logical approach that guides the user through the software.



Operating in the IBM environment, the PU6000 bases its advanced capabilities on Windows technology which offers the considerable benefits of multitasking and interactive data handling to the analyst. This means that it is now possible to collect data, develop a method and produce a report all at the same time.

Further information from: Philips Analytical, Pye Unicam Ltd., York Street, Cambridge, CB1 2PX, UK; Tel.: (0223) 358886; Telex (0223) 312764.

### A New Journal is Born

Nordion Instruments Oy Ltd. has published the first issue of *Nordion Analytical News* — a journal that specializes in capillary gas chromatography applications for environmental and food chemistry. This first issue is devoted to pesticide residues, a field the importance of which is growing and in which Nordion has a lot of experience. Internationally well-known scientists have written the leading articles on residual pesticide analysis. In addition, this issue contains practical application information on the multiresidue method. The Nordion Analytical News is circulated free of charge on request.

Please write or call: Nordion Instruments Oy Ltd., Atomitie 5A3, P. O. Box 1, SF 00371 Helsinki, Finland; Tel. (nat.) 90-562 62 11; (int.) 3 58-0-562 62 11; Telex 1 25 408 nordi sf.

### Multi-Instrument Chromatography Software for Hewlett-Packard Chemstations

The availability of a chromatography software package compatible with Hewlett-Packard Company's HP Chemstation system (HP 9000 Model 310 computers) has been announced by Nelson Analytical, Inc. Called XTRACHROM, the software package transforms the HP Chemstation from a chromatography data system dedicated to a single chromatograph to a chromatography data system able to simultaneously handle data from up to 15 chromatographs. This means improved cost-effectiveness of already expensive computer resources for the analytical laboratory.

Using this software package, the HP Chemstation can collect chromatography data and calculate Area %, Internal or External Standards, and store the raw data on disk. Runs can subsequently be recalled and the advanced graphics on the Chemstation can be used to change baselines, identify peaks, ratio, subtract, and compare chromatograms. Special software routines to generate acquisition methods, sequences for autosampler operations, and reprocess the data are provided.

Parts of the software use a BASIC compiler so that operations which require extensive CPU time such as peak detection, integration, and graphics presentation are performed quickly. However, the rest of the code is open and available for user modification or alteration. The code is written in HP BASIC.

Multiple chromatographs can connect to the hardware by means of an Intelligent Interface (analog-to-digital converter) that Nelson Analytical provides. Each chromatograph requires these dual-channel, 20-bit precision converters.

For more information contact: Nelson Analytical, Inc., 10040 Bubb Road, Cupertino, CA 95014, USA; Tel.: (408) 725-1107.

### 1000A Anion Exchanger for Bio-HPLC

A new high performance polymeric strong anion exchanger with quaternary amine functionality, the PL-SAX 1000A, has been introduced by Polymer Laboratories.

Specifically designed for fast high performance protein and peptide chromatography, the PL-SAX has wide ranging applications in Bio-HPLC — yet with few limitations on operating conditions and creative chromatography.

Uniquely, the packing is stable from pH 1–13, thus allowing compatibility with a wide range of eluents. The column can be routinely decontaminated with sodium hydroxide and organics, if necessary. The combination of high chemical stability and excellent physical strength of the PL-SAX packing now offers reliable and reproducible fast protein HPLC.

Analytical and preparative columns packed with 8 $\mu$ m and 10 $\mu$ m PL-SAX 1000A material are available, fully computer tested, in dimensions from 4.6mm to 25mm i.d. An economical guard cartridge system for the analytical columns offers long-term column protection. Loose media in 15–25 $\mu$ m particles are also available for medium pressure preparative chromatography.

Further information: Polymer Laboratories Ltd., Essex Road, Church Stretton, Shropshire SY6 6AX, UK; Tel. (06 94) 72 35 81; Telex 3 5621.

---

## New Products

---

### New Autosampler for LC Carries 5-Year Warranty

Spectra-Physics Autolab Division announces the introduction of the SP8775 Autosampler, their latest addition to a complete modular liquid chromatography system. It is designed with reliability and simplicity of operation, and has a free five-year warranty.

The SP8775 offers many of the same features and capabilities as its cousin, the SP8780. It easily connects to any pump or data system. Four removable trays accommodate 80 samples, plus a priority vial, and accept either crimp-top or screw-cap vials. An automatic flush after each injection prevents sample carryover from one injection to the next. And with a precision rating of less than 0.5% reliability and repeatability are ensured.

The keyboard is designed so that parameter entry, file setup, and diagnostic testing are simple and straightforward. A keyboard-locking feature protects against accidental interruption of a sampling run, and autosampler functions are clearly indicated on the display panel during all stages of operation.



The SP8775 can be configured for micro-LC as well as large-volume sample injections. An optional communications board provides a full range of communications choices: BCD, RS-232, or LABNET<sup>®</sup>, Spectra-Physics' local LC instrument network. As part of a Chrom-Net/modular LC system, it is possible to set up all files and parameters from a single keyboard, and store files on disk.

For further information, contact Spectra-Physics, Autolab Division, 3333 North First Street, San Jose, CA 95134; Tel.: (408) 432-3333.

### New Supelco Reporter

The Supelco Reporter Volume VI, Number 5 is now available. This popular 12-page bimonthly features technical articles that solve problems for chromatographers.

Featured in the current issue are: *New Capillary Column Eliminates Peak Tailing for Many Acidic Compounds*, *Efficiently Monitor Toxic Airborne Compounds*, *TOYOPEARL<sup>®</sup> Resin Gel Packings for Rapid Biopolymers Analyses*, *Is Your Gas Purifier Giving You a False Sense of Security?* and much more.

The Supelco Reporter is free on request from Supelco Inc., Bellefonte, PA 16823-0048, USA; Tel. (814) 359-3441.

### Philips Analytical Refractive Index Detector Gives Superb Sensitivity and Stability

The new PU4026 refractive index detector from Philips Analytical features high quality optics and innovative fluid mechanics, making it the ideal instrument for the universal monitoring of all compound types.

Sensitivity improvement comes from the Fresnel flowcell design. Refractive index changes are determined as a result of light refraction on a glass/liquid interface. This is measured against a reference cell, which has a unique purge valve to make operation the easiest yet.

Increased stability is achieved by accurate temperature control of the flowcell via the Peltier thermoregulator. The flowcell design enables complete compatibility with dynamic mixing liquid chromatography systems, such as Philips Analytical's quaternary PU-4100.

In addition the digital display ensures ease of use and successful diagnostic control of the detector.

The PU4026 refractive index detector is available as a module or as part of Philips Analytical's innovative PU4100 quaternary liquid chromatograph.



Further information from Philips Analytical, Pye Unicam Ltd., York Street, Cambridge, CB1 2PX, UK; Tel. (02 23) 3588 66; Telex 8 17 331.

### New Discharge Ionization Detector

Tracor's Discharge Ionization Detector utilizes proven photoionization principles combined with a new innovative design to quantify compounds at the low ppb level. More sensitive than an FID for many compounds, the DID is highly stable and is not affected by temperature and flow variations. Samples are ionized in an atmosphere of pure helium and the resulting electrons are collected and processed with a standard electrometer.

Ideally suited for critical trace gas applications, the DID measures common impurities such as hydrogen, argon, oxygen, nitrogen, methane, carbon monoxide and carbon dioxide. Other inorganic compounds such as nitrous oxide, ammonia and water vapor are also readily detected.

Further information: Tracor Instruments Austin, Inc., 6500 Tracor Lane, Austin, Texas 78725-2100, USA; Telephone 5 12: 9 29 20 51; TWX 910 874 1366.

## New Products

### Model 8660 On-Stream XRF Analyzer

A 12-page brochure is available describing an automatic elemental analyzer. Any element or combination of elements from Al to U can be monitored continuously.

Results may be reported on a digital display or fed to a plant computer for process control purposes. The XRF technique lends itself to simple, reliable instrumentation.

The analyzer can be user configured and user calibrated for up to ten stored analysis modes. Switching from mode to mode is easily achieved via a control keypad, or can be done automatically.

The instrument can monitor liquid streams, solid moving sheets, or granular streams, and can handle several streams sequentially.

Send for the ASOMA Model 8660 On-Stream XRF Analyzer brochure by writing: Asoma Instruments, Inc., 12212-H Technology Blvd., Austin, Texas 78727, USA. Tel.: (512) 258-6608; Telex: 76-7177.

### Alltech Product News

Das neue Alltech „Technische Informationsblatt“ No. 701 ist erschienen und berichtet über die Analyse von Triglyceriden auf RSL-300.

Der neue „Einkaufsführer“ BG-781 informiert über Universal-Säulenadapter, über Werkzeugfreie GC-Fittings, über Metallfreie HPLC-Verbindungsstücke und über eine neue HPLC-Säule: RSiL Alkaloid.

Weitere Information: Alltech Germany, Südstraße 8, D-8025 Unterhaching; Tel (089) 611 33 67, oder Alltech Europe, Begoniastraat 5, B-9731 Eke, Belgien; Tel. (091) 85 55 11.

### Quantitative DC-Auswertung mit Labordatensystem

Der CAMAG TLC SCANNER II wird in Verbindung mit dem Labordatensystem Hewlett Packard 310 zum derzeit leistungsfähigsten System für die quantitative Auswertung von Dünnschicht-Chromatogrammen *und* Transparenten Objekten.

Mit dem umfangreichen CAMAG Softwarepaket löst das rechnergesteuerte System folgende Aufgaben:

- Automatisches Aufsuchen und Optimieren der Trennzonen
- Ergebnisberechnung sowohl nach Peakhöhe als auch nach Peakfläche (beide werden in einem Meßgang erfaßt)
- Video-Integration und Gauss-Approximation zur Auswertung problematischer Trennungen
- Spektrenaufnahme zur Substanzidentifizierung, Sicherstellung der Identität und der Einheitlichkeit einzelner Fraktionen
- Mehrwellenlängenmessung
- Untergrundsubtraktion
- Erstellung des kompletten Analysenprotokolls in der vom Benutzer gewünschten Ausführlichkeit; sämtliche Grafiken können wahlweise auf Printer oder Plotter dargestellt werden.

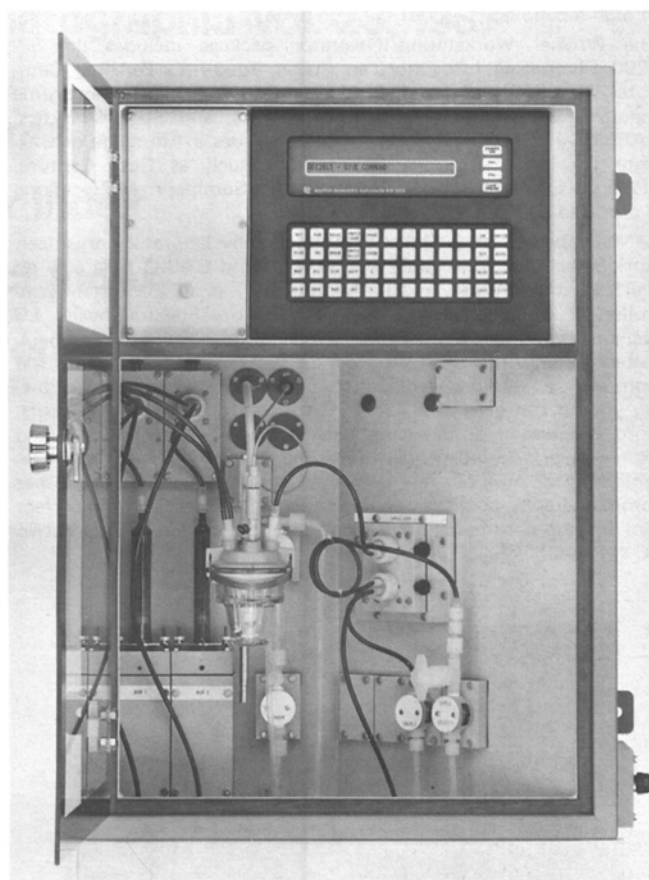
Die rechnergesteuerte Chromatogrammauswertung bietet Komfort, erhöhte Genauigkeit und vor allem Analysen-Sicherheit.

Weitere Information: CAMAG, Bismarckstraße 27-29, D-1000 Berlin 41; Tel. (030) 795 7081, oder CAMAG, Sonnenmattstraße 11, CH-4132 Muttenz; Tel. (061) 61 34 34.

### On-line-Wasserbestimmung vor Ort

„Von wohlmeinenden Kollegen wurde ich damals sehr gewarnt, durch Publikation einer in mehrfacher Hinsicht undurchsichtigen Brühe meinen unbekanntem Namen aufs Spiel zu setzen“, dies bemerkte Karl Fischer, der 1935 noch nicht ahnen konnte, wie vielseitig seine Wasserbestimmungsmethode eingesetzt wird und daß deren Anwendung sich ständig erweitert.

Genauere Ergebnisse, verknüpft mit einer hohen Analysenfrequenz, werden heute durch die Prozeßtitratoren ADI 2015 und ADI 2020 ermöglicht, die über eine spezielle Auswertmethode für die KF-Titration verfügen und die Probe direkt vor Ort on-line analysieren.



Die Probe wird vom Prozeßtitrator über eine Ringleitung übernommen, volumetrisch abgemessen, nach Konditionierung des Solvents ins Titriergefäß überführt und dort automatisch mit KF-Reagens titriert. Der Wassergehalt wird berechnet (ppm, %) und über Analogausgänge (4-20 mA) oder eine serielle Schnittstelle (RS 232, current loop) zur Protokollierung oder Regelung ausgegeben.

Weitere Information: Deutsche Metrohm, Elektrische Meßgeräte, Plattenhardt, In den Birken, D-7024 Filderstadt; Tel. (0711) 77 20 44; Telex 7 255 855.

---

## New Products

---

### Complete Chromatography Workstation Integrator

Spectra-Physics Autolab Division is pleased to announce the introduction of their new low-cost chromatography Workstation/INtegrator, *WINner*. As a complete computer workstation, with computing software and computing integrator, *WINner* is designed to be the cost-effective solution to the laboratory in need of high technology without the high price.

The *WINner* Workstation/INtegrator package includes the SP-4290 Computing Integrator, an Epson Equity I+ Personal Computer with 640K of RAM, 20MB hard drive, Epson monochrome monitor and Hercules-compatible graphics, and Spectra-Physics' LABNET networking system. It also includes a full range of software for chromatography applications, such as Data Capture, SPMenu, Display, Windows, Batch, and Summary. Multi-tasking is provided by DoubleDOS, also included.

*WINner* operates as the ideal chromatography laboratory organizer, storing methods, raw data, reports, files and BASIC programs on the hard disk for easy recall. Additionally, as an LC system controller, it can set up and operate an entire Spectra-Physics LC system from one keyboard, and then store all of the LC parameters (pump files, detector conditions, and autosampler files) from each analysis. It provides true multitasking capability, allowing you to run general purpose PC software (such as spreadsheets, word processors, or database managers) while data are collected from one or two independent data channels. Add to this batch re-processing of multiple raw data files, summary reports, and other chromatography applications software, and the result is the perfect tool for the chromatography laboratory comprised of one or two LC systems.

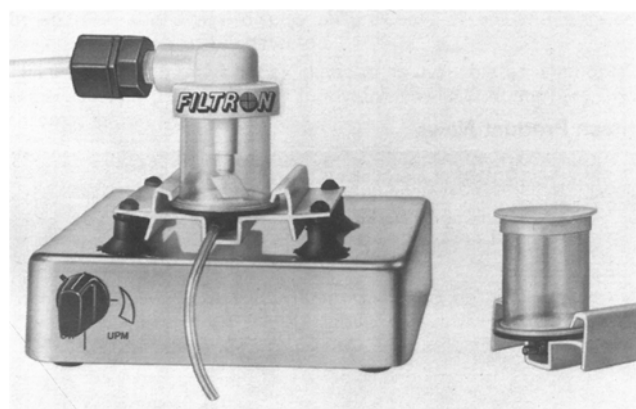


For further information contact Spectra-Physics, Autolab Division, 3333 North First Street, San Jose, California 95134; Tel.: (408) 432-3333, (800) 424-7666.

### Trennung von HIV Virus und Humanproteinen

Eine Ultrafilter-Membran, die Viren quantitativ zurückhält, jedoch Proteine wie IgG, IgM, Albumin und Interferone passieren lassen kann, wird jetzt erstmalig angeboten.

Unter der Typenbezeichnung OM3012VP bringt FILTRON als erstes Unternehmen eine Ultrafiltermembran auf den Markt, die Retroviren quantitativ zurückhalten kann. Mehr zufällig kam dieser Doppelleffekt – Passage der Humanproteine bei quantitativer Retention von Viren – bei einer Studie an einem namhaften Europäischen Forschungs-Institut zutage.



Diese Membran, eingebaut in alle Systeme des Filtron-Geräteprogramms von 5 Quadratzentimeter in Laborsystemen bis zu 26 Quadratmeter für die Produktion großer Volumina, werden sowohl bei der Analyse als auch bei der Produktion von Humanplasmapräparaten und von biotechnologischen Produkten eine maßgebliche Rolle spielen, da das getestete Mustervirus mit 70 Nanometer fast nur als halb so groß wie das HIV-Virus ist.

Weitere Information von Filtron GmbH, Welzheimer Straße 19a, 8757 Karlstein, Tel. 0 61 88/57 59.

### New Product Bulletin for High Performance Microbore LC

Applied Biosystems, Santa Clara Analytical Division, has just published a new product bulletin on the MicroGradient™ System for high performance microbore liquid chromatography.

The MicroGradient™ System meets the stringent demands on instrumentation imposed by microbore LC. It offers accurate, precise gradient elution at low flow rates and convenient microprocessor control.

The new bulletin has a complete description of system capabilities, specifications and ordering information.

To obtain a copy, contact Applied Biosystems, Santa Clara Analytical Division, 2045 Martin Avenue, Santa Clara, CA 95050. For immediate assistance, call (800) 231-4038. In California call (408) 727-1346.