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DNAGEL: a computer program for determining DNA fragment sizes using a small computer equipped with a graphics tablet

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The program DNAGEL is used to determine the size of DNA fragments run on agarose or polyacrylamide gels. The positions of the bands are read from gel photographs by means of a digitizer. Standard curves are calculated by

the method of Southern (1979). The bands, as they are measured, are reproduced on the screen so that erroneous input can be recognized and corrected immediately. Similarly the estimated fragment sizes are printed in a table in the same relative positions as the bands on the gel. This makes it especially easy to relate fragment sizes with the bands on the gel picture. As an additional function the calculated positions of bands can be displayed on the screen. The program DNAGEL is written in APPLESOFT BASIC, suitable for APPLE II computers with 48 K memory connected to a monitor, printer and a HOUSTON graphics tablet.

Announcements

Federal Republic of Germany

29th international congress of pure and applied chemistry

Cologne, June 5-10, 1983

The 29th IUPAC congress, organized by the Gesellschaft Deutscher Chemiker, will present main lectures on 'New advances in inorganic chemistry', 'New advances in organic chemistry', 'New advances in physical and theoretical chemistry', 'Progress in the production of chemical basic materials', and 'Education in chemistry'. Plenary lectures on 'Removal of chemical wastes' and 'Removal of wastes of origin other than chemical industry'.

Further information by the General Secretariat, c/o Dr W. Fritsche, P.O. Box 900440, D-6000 Frankfurt a.M. 90/ FRG.

Instructions to Authors

Experientia is a monthly journal of natural sciences devoted to publishing articles which are interdisciplinary in character and which are of general scientific interest. Considered for publication will be hitherto unpublished papers that fall within one of four categories:

Reviews (one-man and multi-author reviews) Full Papers (in-depth reports not exceeding 4-6 printed pages) Mini-reviews (1-2 printed pages) Short Communications (1-2 printed pages)

Papers reporting on work that is preliminary in nature, or wherein animal experiments have been conducted without the appropriate anesthesia, will not be accepted.

Manuscripts (including all tables and figures) must be submitted in triplicate and must be in English. Title pages should bear the author's name and address (placed directly below the title) and a brief abstract (of approximately 50 words for short communications) mentioning new results only. References should be numbered consecutively and presented on a separate page. Footnotes must be avoided. Tables, and then figures, are to follow the body of the text and should be marked with self-explanatory captions and be identified with the author's name. All *data* should be expressed in units conforming to the Système International (SI). Drawings are to be on heavy bond paper and marked clearly in black. Photographs should be supplied as glossy positive prints.

3rd international symposium on invertebrate reproduction

Tübingen, August 22-27, 1983

The symposium is organized by the International Society of Invertebrate Reproduction (ISIR), with 5 sessions with invited speakers covering: 1. Cellular differentiation and cellular events in invertebrate reproduction, especially gametogenesis and fertilization; 2. endocrine control of invertebrate reproduction; 3. environmental adaptations of invertebrate reproduction; 4. population dynamics, reproductive strategies of invertebrate reproduction and their genetical background; 5. manipulation and control of invertebrate reproduction.

Further information by Prof. Dr W. Engels, LS Entwicklungsphysiologie, Auf der Morgenstelle 28, D-7400 Tübingen/FRG.

Authors are requested to specify under which section heading they would wish their communication to appear:

- 1. Chemistry, Physics, Biomathematics
- Physiology 2
- 3. Biochemistry
- Anatomy, Histology, Histochemistry Pharmacology, Toxicology Molecular Biology 4.
- 6.
- 7. Immunology
- 8. Cellular Biology
- 9. Genetics, Developmental Biology, Aging
- 10. Oncology
- 11. Endocrinology
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