

## GASTROINTESTINAL PHARMACOLOGY

### Senior Investigator

Abbott, a leader in the health care field, seeks an individual at the doctoral level (M.D. and/or Ph.D.) with a background in gastrointestinal pharmacology or physiology as a senior investigator in the field of peptic ulcer and other gastrointestinal research. Biochemical minor work desirable. The position is flexible from the standpoint of being able to accommodate the new M.D. and/or Ph.D. or the seasoned researcher.

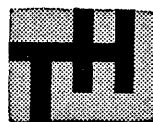
The individual will be responsible for the development of innovative methodology and the evaluation of novel anti-secretory and other gastrointestinal agents. He must be able to accept primary responsibility in these areas and in supervision of laboratory personnel.

He will have direct liaison with research management in one of the outstanding research facilities in the country. We offer an attractive salary/benefits package in a suburban location.

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Technische Hogeschool Delft

## DELFT UNIVERSITY OF TECHNOLOGY

The Department of Chemistry and Chemical Engineering of the University of Technology of Delft invites applications for the position of

## PROFESSOR OF BIOLOGY

The Department would specially welcome applications from physiologically orientated biologists (botanical or zoological) with a good chemical background. The responsibilities of the post include teaching at a fundamental level and stimulation of research into the problems of chemical origin that affect a technological society—particularly environmental health and food technology.

Additional information will gladly be furnished.

The salary will be not less than 65.000 guilders (£7370/\$17.800) p.a. plus 6% holiday pay and appropriate family allowances.

Applications, including curriculum vitae, giving full details of qualifications, experience and names of at least two referees should be addressed to:

Prof. ir. J. P. W. Houtman  
c/o Bureau Afdeling Scheikundige Technologie  
Julianalaan 136  
Delft, Netherlands

## Personnel Placement

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**POSITIONS OPEN:** \$110 per inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Ads over 1 inch will be billed to the nearest half inch. Payment in advance is required except where satisfactory credit has been established.

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### POSITIONS WANTED

**Analytical/Biochemist, Ph.D.** Experience in red cell metabolism, electrophoresis, enzyme assays. Seeks research position in Colorado, New England, Chicago. Box 176, SCIENCE. X

**Biochemical Pharmacologist, Ph.D.** 1969. Post-doctoral and teaching experience; publications. Prefers research/teaching or industrial position. Will consider research associate or similar position. Box 177, SCIENCE. X

### POSITIONS WANTED

**Biologist, Ph.D.**, 35, 9 years of university experience. Particular interest in innovative undergraduate teaching, core curriculum development. General, genetic, cellular, statistical, evolutionary, invertebrate biology. German language facility. Any location. Box 178, SCIENCE. X

**Developmental Biologist, Ph.D.** 1957. Interests in developmental biology, vertebrate and invertebrate embryology. Extensive teaching experience in endocrinology, anatomy and general biology. Teaching/research position desired. Box 179, SCIENCE. 4/30 X

**Electron Microscopist, Ph.D.** More than 10 years' experience. Also histology, virology background. Desires teaching-research position. Box 180, SCIENCE. X

**Electron Microscope Technician.** German, English-speaking, fully trained in basic EM-techniques, routine EM-maintenance, experienced with various tissues, seeks position anytime within the year. Box 181, SCIENCE. X

**Mathematical Biologist, 33, Ph.D.** (biology). Publications in hematology, growth and development, mathematical modeling of biologic systems. Training and experience in use of computers as research tools. Interests: mathematical biology, development, hematology, epistemology, general biology, innovative undergraduate teaching. Special skill in synthesis and communication of concepts from both arts and sciences. Seeks teaching/research position. Box 182, SCIENCE. X

**Microbiologist-Serologist, Ph.D.**, 29. Experience in applied immunology to soil ecological systems as a Research Associate. Also teaching experience in general and medical microbiology, immunology, publications. Seeks teaching-research position at college or university. Box 183, SCIENCE. X

**Nuclear Chemist, Ph.D.** 1968, 3 years' postdoctoral experience, extensive teaching experience. Knowledgeable in radiochemical methods, use of dielectric track detectors, and computer programming. Seeks position in small college or university. Box 184, SCIENCE. X

### POSITIONS WANTED

**Physical Bio-Organic Chemist, Ph.D.**, desires research associate position in magnetic resonance laboratory in research institute, medical school or industry. Publications, experience, and interests applications of nuclear magnetic resonance to biochemical, biological problems. Box 185, SCIENCE. X

**Physical Chemist/Spectroscopist** desires teaching/research position. Ph.D. 1969, 2 years post-doctoral. Knowledge of infrared and microwave instrumentation. Publications. Box 186, SCIENCE. X

**Physiologist-Biochemist Ph.D.** Seeks academic (teaching and/or research) position for 1 to 2 years. Many publications, years of research and teaching experience. Visiting professors position acceptable. Box 187, SCIENCE. X

**Predoctoral Fellowship or Research Wanted:** Medical Science-Chemistry-Radiobiology B.A., B.S., M.S., plus. Graduate honors 3.6/4.0. Three years' VA isotopes research. Honorably discharged. Interest: Cancer. 1613-74th Street, Kenosha, Wisconsin (414) 657-3702. X

**Russian-English Translator/Abstractor.** Full-time professional seeks free-lance assignments. Rates on request. Charles Parsons, 5914 Pulaski Avenue, Philadelphia, Pennsylvania 19144. X

**Seeking Something Exciting in Science.** Teaching/research experience: prefer another approach. Ph.D., biology. Philadelphia/environs. Box 188, SCIENCE. X

**Plant Physiologist-Biochemist Ph.D.**, 34. Teaching/research experience in plant biochemistry, phytohormones, growth regulation. Also background in ecology, vertebrate zoology, agriculture, and administration. Box 189, SCIENCE. X

**Scientific Writing, Editing, Abstracting and Translation** by literate Ph.D. in molecular genetics (1967) with publications in molecular biology and extensive experience abstracting French, Italian, English medical articles. Fast service. Box 190, SCIENCE. X

## POSITIONS OPEN

### THE UNIVERSITY OF MANCHESTER, ENGLAND

#### Radiological Protection Service Distribution of Fallout in Soils and Agricultural Produce LEVERHULME RESEARCH GRANT

A **CHEMIST or SOIL SCIENTIST** is required for an investigation into the mechanisms of retention and migration of radioactive isotopes through soil into growing plants. Some research experience is expected but previous experience of radiochemistry is not essential. The appointment will be for an initial period of 3 years and arrangements could be made for a suitably qualified person to read for a higher degree. Salary in the range £2000 × £100 to £2200 p.a. Applications to the Registrar, The University, Manchester, M13 9PL, giving full curriculum vitae, names, and addresses of three referees, by 7 May. Quote ref: 61/71/S. Arrangements made for interviewing candidates in the United States.

**DIRECTOR OF RESEARCH:** Ph.D., experience and publications REQUIRED. Desire broadly based scientist interested in life science research basic to the understanding of the nervous system to direct private research foundation in Washington D.C., area. The foundation is a general biomedical research institute which emphasizes an interdisciplinary approach and owns its own laboratory facilities. Individual must be familiar with government grant and contract work. This position requires a scientist with creative and innovative research ideas to develop and assist other staff scientists. Opportunities exist for independent research. Immediately.

Box 191, SCIENCE

### DIRECTOR OF AN INSTITUTE OF ENVIRONMENTAL SCIENCE

Applications are invited for the position of Director of an interdisciplinary Institute of Environmental Science which is involved in both teaching and research activities. A Master's Degree in Environmental Science is to be implemented this fall (1971). Two large field stations are presently under development. The Institute includes faculty from some 25 academic departments on campus.

Candidates will be considered from a variety of fields; research and administrative experience are desirable; position open as to age, rank, and salary. Applications, including curriculum vitae and three letters of reference, should be sent to Dr. Gary W. Barrett, Acting Director, IES, 109 McGuffey, Miami University, Oxford, Ohio 45056.

### ENVIRONMENTAL SCIENTIST

Applications are invited from Environmental Scientists, qualified at least to the Ph.D. level, for a faculty position that could commence as early as 1 July 1971. Candidates should have a well-established research interest in one of the following areas: Ecology, Population Biology, Environmental Physiology, Chemistry and Physics of Atmospheric Pollutants, Environmental Mutagenesis. The formal academic appointment will be to one of the Biology, Chemistry, or Physics Departments of the Faculty of Science. The appointment could be made in any professional rank at the appropriate salary level.

Applications consisting of a curriculum vitae and the names of two referees should be sent to The Dean, Faculty of Science, York University, 4700 Keele Street, Downsview 463, Ontario, Canada, quoting reference ES/2.

**IMMUNOCHEMIST-IMMUNOLOGIST.** Immediate opening for a Ph.D. with 0-3 years of post-doctoral experience to develop and apply radioimmunoassays for prostaglandins, steroids and catecholamines in studies on reproductive biology and endocrinology conducted by a multidisciplinary group. Salary negotiable. Send curriculum vitae to:

Personnel Officer  
Worcester Foundation for Experimental Biology  
Shrewsbury, Massachusetts 01545

Outstanding opportunity as an **ASSISTANT PROFESSOR OF PHYSIOLOGY.** The successful applicant will be expected to participate in the normal undergraduate and graduate teaching program of the department and to develop a strong research program. Research facilities and support are extremely good. Applications containing curriculum vitae, names of three referees and a statement of research interests, should be sent to Dr. R. B. Stein, Department of Physiology, University of Alberta, Edmonton, Canada. Closing date for applications is 1 June.

## POSITIONS OPEN

### MICROBIOLOGIST and BIOMATHEMATICIAN

The Department of Biology of Washington University has regular faculty positions open in microbiology and biomathematics. Rank and salary are open. Brief curricula vitae should be addressed to Chairman's Office, Department of Biology, Washington University, St. Louis, Missouri 63130.

### THE UNIVERSITY OF WESTERN ONTARIO

LONDON

CANADA

#### DEPARTMENT OF GEOLOGY

Applications are invited from suitably qualified Earth Scientists for the position of Chairman of the Geology Department. This is a renewable term appointment. At present there are twelve full-time faculty members in the department and both graduate (to Ph.D. level) and undergraduate programs are offered. The well-equipped department is situated in a modern building and occupies 25,000 square feet. Members of the department are currently active in research in a wide variety of fields including both experimental and field-oriented studies.

The position is open from 1 July 1972, but appointment at an earlier date will be considered.

Applications should include curriculum vitae together with names of three referees and should be addressed to:



Dr. Andrew E. Scott,  
Dean, Faculty of Science,  
Natural Science Centre,  
The University of Western Ontario,  
London 72, Ontario, Canada

### THE UNIVERSITY OF WESTERN ONTARIO

LONDON

CANADA

#### DEPARTMENT OF PLANT SCIENCES

Applications are invited from suitably qualified candidates for the position of Chairman of the Department of Plant Sciences. This is a renewable term appointment.

At present there are twenty full-time faculty members in the department and both graduate (to Ph.D. level) and undergraduate programs are offered. The well-equipped department is situated in a modern building and occupies 39,000 square feet. Members of the department are currently active in research in a wide variety of fields.

The position is open from 1 July 1972, but appointment at an earlier date will be considered.

Applications, together with a curriculum vitae and the names of three referees should be addressed to:



Dr. Andrew E. Scott,  
Dean, Faculty of Science,  
Natural Science Centre,  
The University of Western Ontario,  
London 72, Ontario, Canada

### THE UNIVERSITY OF BRITISH COLUMBIA DEPARTMENT OF ZOOLOGY

Applications and/or nominations are invited for the position of Head of the Department of Zoology at the University of British Columbia, duties to begin not later than 1 July 1972, salary to be negotiated. The Department comprises 40 members, representing four main divisions: cell and developmental biology, community and population biology, comparative physiology and biochemistry, and evolutionary biology. The applicant should be a distinguished scientist with an active interest in teaching and research, and with a curriculum vitae, names of two persons who can provide letters of reference, and should be addressed to Dr. R. F. Scagel, Associate Dean, Faculty of Science, University of British Columbia, Vancouver 8, B.C., Canada. To be considered applications must be received not later than 31 May 1971.

## POSITIONS OPEN

**PATHOLOGIST, Ph.D.** to assist in teaching Pathology labs and lectures. Recent graduate or doctoral candidate acceptable. Position available 1 July or 1 September 1971. Dr. I. H. Zaidi, Kansas City College of Osteopathic Medicine, 2105 Independence Ave., Kansas City, Mo. 64124

## SUMMER INSTITUTES

### NUCLEAR POWER REACTORS AND THEIR ENVIRONMENTAL EFFECTS 13 July to 20 August 1971

An opportunity for Physical Science and Engineering Teachers to obtain an understanding of nuclear power and its environmental interactions. Biological Science Teachers with some mathematics and physics background also will find the program profitable. Stipends available. For information, write: R. G. Cochran, Nuclear Engineering, Texas A&M University, College Station, Texas 77843.

## CONFERENCE

### THE BIOLOGY OF CANCER CELLS

A conference on current research in fields representing diverse approaches to the problem of neoplasia will take place 14-16 July 1971, at the University of Colorado, Boulder. The areas that will be considered and the corresponding speakers are as follows: The Comparative Biochemistry of Early Neoplastic Changes in *VIVO*, H. Pitot, W. Rutter, E. Farber, V. Potter; Developmental Genetics of Neoplasia, C. Markert, L. Stevens, A. Knudson; Surface Properties of Normal and Transformed Cells, A. Pardee, H. Eagle, S. Kornfeld; Cell Fusion and Transformation, G. Klein, C. Basilico; Viral Carcinogenesis, G. Todaro, J. Sambrook, R. Martin, R. Weiss, K. Takemoto, H. Green. The fee for the conference is \$60, which includes room and board. Application can be made by submitting a curriculum vitae and list of pertinent publications to The Biology of Cancer Cells, Molecular, Cellular and Developmental Biology Department, University of Colorado, Boulder, Colorado, 80302.

## PROFESSIONAL SERVICES

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### ISOTOPES

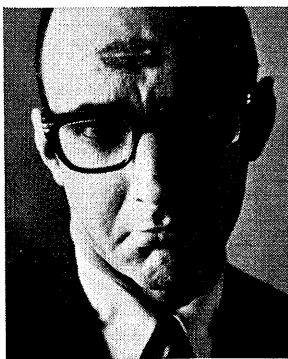
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Picker Facs-1 Computer Controlled X-ray Diffractometer, PDP/8i Computer Stoe Camera, other extras. Complete Single Crystal Facility. Equipment list will be sent to interested individuals. Contact J. E. Zarembo (F90), SK&F Labs., 1530 Spring Garden St., Phila., Pa. 19101. (215) 564-2400, Ext. 437.

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# Chromatix model 1030

## A new UV radiation source

Shown at right is the Model 1030 Fixed Frequency UV Doubler, a new accessory for the Chromatix Nd:YAG Laser System. The Model 1030 provides average power of greater than 50 milliwatts ( $>7 \times 10^{16}$  photons/sec) at 266 nm in a bandwidth of approximately 0.01 nm. Since the output of the system is diffraction limited it may readily be focused to yield high power densities. For example, an average power density of  $5 \times 10^7$  ergs/mm<sup>2</sup>/sec is readily obtained in a five centimeter long sample. If an experiment requires high peak power, the Model 1030 has available a minimum of one kilowatt in a pulse width of 80 nanoseconds with a repetition rate of 75 pulses per second. In addition, the system provides a trigger signal for synchronizing gated detector circuits with the pulsed output.

Figure 1 illustrates the versatility of the Chromatix System. The basic laser may be employed to pump either the tunable oscillator or the UV doubler to provide photons in various regions of the spectrum. This versatility makes the Chromatix System applicable to a wide range of research problems. It will be useful not only in your initial experiment, but also for future research programs in the years to come.

Applications include fluorescent studies, optical pumping, two photon spectroscopy, air pollution absorption measurements, initiation of chemical reactions, excited state spectroscopy, photodetachment of negative ions, resonance Raman, and testing of photodetectors. To receive a detailed list of applications, technical specifications and prices, write or call us at the address below. We will be pleased to send complete information on these versatile new systems.



For photographic purposes, the spatial position of the UV output beam was established by passing a fluorescing material along the beam while the camera shutter remained open.

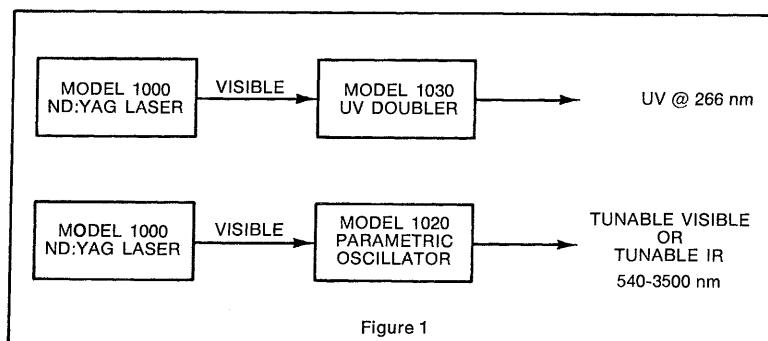


Figure 1

chromatix

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