

**Psychopharmacology of Aggression.** L. Valzelli, Ed. Karger, Basel, 1978. viii, 180 pp. \$42.50. Modern Problems of Pharmacopsychiatry, vol. 13.

**Psychopolitics.** Milton Greenblatt. Grune and Stratton, New York, 1978. xx, 278 pp. \$18.50.

**Putnam's Geology.** Peter W. Birkeland and Edwin E. Larson. Oxford University Press, New York, ed. 3, 1978. x, 660 pp., illus. + plates. \$16.

**Quinolines.** Part 1. Gurnos Jones, Ed. Interscience (Wiley), New York, 1978. x, 898 pp., illus. \$100. The Chemistry of Heterocyclic Compounds, vol. 32.

**Reflection Seismology.** A Tool for Energy Resource Exploration. Kenneth H. Waters. Wiley-Interscience, New York, 1978. xvi, 378 pp., illus. \$28.

**Regulation of Fatty Acid and Glycerolipid Metabolism.** Proceedings of a symposium, Copenhagen, 1977. Raymond Dils and Jens Knudsen, Eds. Pergamon, New York, 1978. viii, 120 pp., illus. \$16. Proceedings of 11th FEBS Meeting, vol. 46. *To order this book circle No. 400 on Readers' Service Card*

**Regulatory Mechanisms of Carbohydrate Metabolism.** Proceedings of a symposium, Copenhagen, 1977. Viggo Esmann, Ed. Pergamon, New York, 1978. x, 360 pp., illus. \$43. Proceedings of the 11th FEBS Meeting, vol. 42. *To order this book circle No. 401 on Readers' Service Card*

**Regulatory Proteolytic Enzymes and Their Inhibitors.** Proceedings of a symposium, Copenhagen, 1977. Staffan Magnusson, Martin Ottesen, Bent Foltmann, Keld Danø, and Hans Neurath, Eds. Pergamon, New York, 1978. viii, 236 pp., illus. \$30. Proceedings of the 11th FEBS Meeting, vol. 47. *To order this book circle No. 402 on Readers' Service Card*

**Structural Pattern Recognition.** T. Pavlidis. Springer-Verlag, New York, 1977. xii, 304 pp., illus. \$19.80. Springer Series in Electrophysics, vol. 1. *To order this book circle No. 403 on Readers' Service Card*

**Studies in Automatic Programming Logic.** Zohar Manna and Richard Waldinger with contributions by Shmuel Katz and Karl Levitt. North-Holland, Amsterdam, 1977 (U.S. distributor, Elsevier, New York). viii, 192 pp., illus. \$15.95. Artificial Intelligence Series. The Computer Science Library.

**Sun/Earth.** How to Use Solar and Climatic Energies. Richard L. Crowther. Scribner, New York, 1978. viii, 232 pp., illus. Paper, \$8.95.

**Systems Engineering for Power.** Program Report, January 1978. U.S. Department of Energy, Washington, D.C., 1978 (available from National Technical Information Service, Springfield, Va.). vi, 200 pp. Paper, \$9.25; microfiche, \$3.

**Technical Data on Fuel.** J. W. Rose and J. R. Cooper, Eds. Halsted (Wiley), New York, ed. 7, 1977. xii, 344 pp., illus. \$70.

**A Technology Assessment of Coal Slurry Pipelines.** Office of Technology Assessment, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). xvi, 156 pp., illus. Paper, \$3.25.

**Die Tenebrioniden des papuanischen Gebietes.** I. Strongyliini (Coleoptera: Tenebrionidae). Z. Kaszab. Department of Entomology, Bishop Museum, Honolulu, 1977. 220 pp., illus. Paper, \$10.50. Pacific Insects Monograph 33.

**Textbook of Veterinary Parasitology.** Norman D. Levine. Burgess, Minneapolis, 1978. xii, 236 pp., illus. \$34.95.

**The Tides of the Planet Earth.** Paul Mel-

chior. Pergamon, New York, 1978. xii, 610 pp., illus. \$75. *To order this book circle No. 404 on Readers' Service Card*

**Time Bomb. LNG: The Truth about Our Newest and Most Dangerous Energy Source.** Peter van der Linde with Naomi A. Hintze. Doubleday, Garden City, New York, 1978. vi, 184 pp. \$6.95.

**Tomol.** Chumash Watercraft as Described in the Ethnographic Notes of John P. Harrington. Travis Hudson, Janice Timbrook, and Melissa Rempe, Eds. Art work by Jane Jolley Howorth. Ballena Press, Socorro, N.M., and Santa Barbara Museum of Natural History, Santa Barbara, Calif., 1978. 198 pp., illus. Paper, \$8.95. Ballena Press Anthropological Papers No. 9.

**Toward a Metric of Science.** The Advent of Science Indicators. Papers from a conference, Stanford, Calif., June 1974. Yehuda Elkana, Joshua Lederberg, Robert K. Merton, Arnold Thackray, and Harriet Zuckerman, Eds. Wiley-Interscience, New York, 1978. xiv, 354 pp. \$19.95. Science, Culture, and Society.

**Trace Metals in the Environment.** Ivan C. Smith and Bonnie L. Carson. Ann Arbor Science, Ann Arbor, Mich., 1978. Vol. 1, Thallium. xii, 394 pp. \$24. Vol. 2, Silver. xxvi, 470 pp. \$24. Vol. 3, Zirconium. xviii, 406 pp. \$24. Vol. 4, Palladium and Osmium. Ivan C. Smith, Bonnie L. Carson, and Thomas L. Ferguson. x, 194 pp. \$24.

**Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the 1974 European Meeting of Statisticians.** Vol. A. Prague, Aug. 1974. Reidel, Boston, 1977. 602 pp. \$52.

**Transient Techniques in Electrochemistry.** Digby A. Macdonald. Plenum, New York, 1977. xii, 330 pp., illus. \$37.50.

**The Twenty-Ninth Day.** Accommodating Human Needs and Numbers to the Earth's Resources. Lester R. Brown. Norton, New York, 1978. xvi, 364 pp., illus. Cloth, \$11.95; paper, \$3.95. A Worldwatch Institute Book.

**Ulcerative Colitis and Crohn's Disease and Other Diseases of the Alimentary System in Childhood.** Papers from a symposium, Obergurgl, Austria, Jan. 1976. P. P. Rickham, W. Ch. Hecker, and J. Prévot, Eds. Urban & Schwarzenberg, Baltimore, 1978. vi, 242 pp., illus. \$24.50. Progress in Pediatric Surgery, vol. 11.

**Understanding Chemical Patents.** A Guide for the Inventor. John T. Maynard. American Chemical Society, Washington, D.C., 1978. 146 pp. \$12.50. *To order this book circle No. 405 on Readers' Service Card*

**The Visual System in Vertebrates.** Frederick Crescitelli, Ed. Springer-Verlag, New York, 1977. xii, 816 pp., illus. \$16.40. Handbook of Sensory Physiology, Vol. 7/5. *To order this book circle No. 389 on Readers' Service Card*

**Weeding and Sowing.** Preface to a Science of Mathematical Education. Hans Freudenthal. Reidel, Boston, 1978. x, 314 pp. \$34.

**Wernher von Braun.** Erik Bergaust. National Space Institute, Washington, D.C., 1978 (distributor, Stackpole Books, Harrisburg, Pa.). xviii, 590 pp., illus. \$13.95.

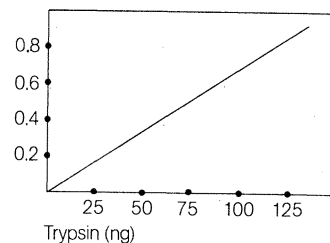
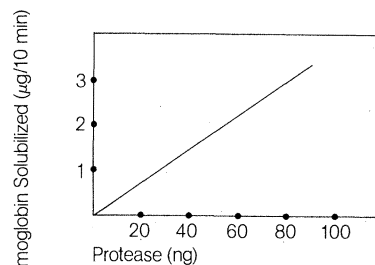
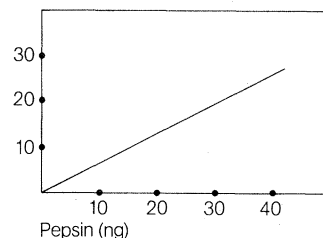
**World Minorities.** Vol. 1. Georgina Ashworth, Ed. Quartermaine House, Sunbury, England, 1977 (U.S. distributor, Transatlantic Arts, Levittown, N.Y.). xxii, 168 pp. Paper, \$7.50.

**Your Option.** How to Successfully Develop Put and Call Strategies. Keith H. Kretschmer and William E. Grieb, Jr. Bask Publishing Co., Pacific Palisades, Calif., 1978. vi, 154 pp., illus. \$14.95.

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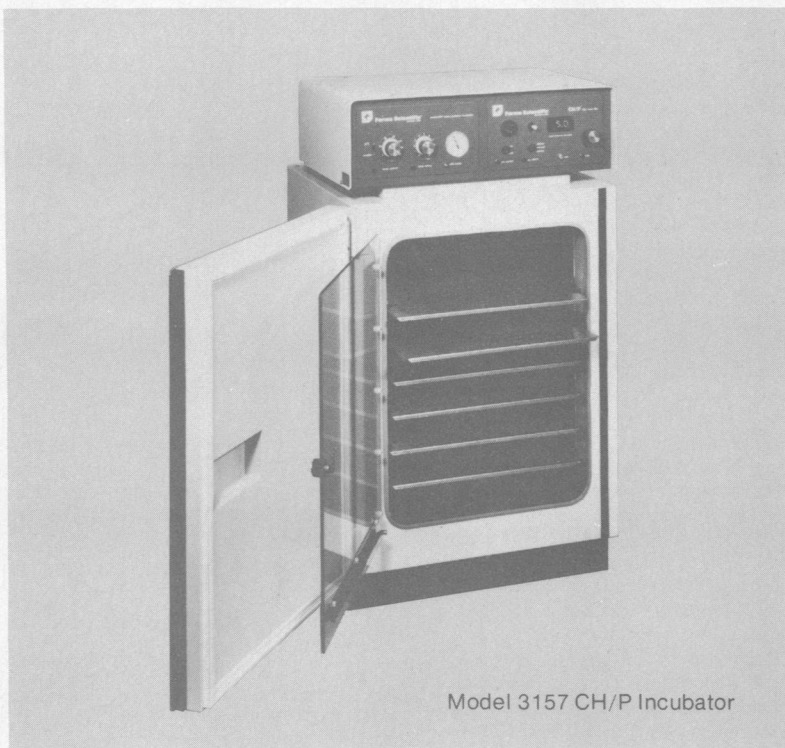
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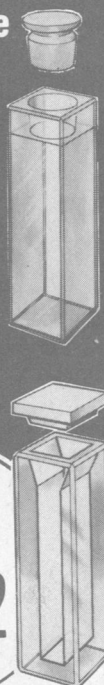
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# Personnel Placement

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**Biomathematician** (Ph.D., 1974). Currently in a medical statistics department. Seeks teaching-research position in a mathematics, statistics, or interdisciplinary department. Ph.D. thesis in probability theory. Experience includes applied n-dimensional analysis, applications in pharmacology and clinical medicine, as well as error studies in various quantitatively analytic determination techniques. August 1979. Box 298, SCIENCE. X

**Clinical Biochemist**. M.T., Ph.D. (biochemistry), specialist in chemistry (ASCP), clinical chemist (NRCC), Board-eligible. Broad experience in clinical chemistry, radioimmunoassay, automation, radioreceptor assay, method development; publications. Seeks hospital/medical school position. Box 299, SCIENCE. X

**Immunochemist**. Ph.D., M.S. pathology. Major interest in elastin metabolism. Capacity for original, independent research and ability to teach at graduate and undergraduate levels. Citation index good indication of research status. Seeks academic or industrial position. D. W. Smith, Dental Anatomy, University of Pennsylvania, 4001 Spruce Street, Philadelphia, Pennsylvania 19104. Telephone: 215-243-8811. X

**Immunologist**. Ph.D. microbiology. Extensive experience in tumor immunology, tissue culture, cancer research. Strong background in biochemistry and laboratory techniques. Publications. Box 288, SCIENCE. 9/15, 22

**Toxicologist/Pharmacologist**. Ph.D. 1971. Two and one-half years of NIH postdoctoral experience in environmental toxicology. Presently working as research assistant professor of pediatrics and pharmacology in a major university. Research interests: biochemical mechanisms of drug induced teratogenesis, regulation and environmental modification of drug disposition and action. Publications: developmental pharmacology and toxicology. Wide supervisory and research experience in analytical and biochemical techniques. Desires industry, institute, or academic position. Box 295, SCIENCE. X

**Virologist/Immunologist**. D.V.M., Cornell Ph.D. Sixteen years of experience in mammalian and avian virology/immunology research, cell-culture work. Publications. Seeks research position in academia, government, or industry. Available immediately. Box 297, SCIENCE. X

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**ANATOMIST**. Ph.D. Responsible for teaching gross anatomy and human dissection. Accredited chiropractic college. Possible immediate appointment. Salary negotiable.

Send letter of application, three recent letters of reference, and curriculum vitae information to: **Dr. Gerald R. Konsler, Assistant Executive Secretary, Council on Chiropractic Education, 3209 Ingersoll Avenue, Des Moines, Iowa 50312.**

**ASSISTANT PROFESSOR, BIOLOGICAL SCIENCES** (repeat announcement). Open positions for scientists with promise of creative and dynamic research programs in: (i) behavioral and neurobiology, (ii) cell biology, and (iii) tumor virology or microbiology. Post-Ph.D. experience and quality of research will be prime considerations. Appointee will be expected to teach standard course and to develop specialty course for advanced undergraduate and graduate students. For someone who may be especially qualified, the rank of associate professor may be considered. *Applications from women and members of minority groups will be particularly welcome.* Send résumé to: **A. Eisenstark, Director, Division of Biological Sciences, Tucker Hall, University of Missouri-Columbia, Columbia, Missouri 65211.**

15 SEPTEMBER 1978

## POSITIONS OPEN

### ADMINISTRATIVE OFFICER

Private organization in Washington, D.C., seeks a program officer to administer postdoctoral award programs for advanced research experience and professional development. The program officer will participate in the determination and implementation of program policies, share administrative duties, and assume responsibility for management of programs as assigned. Significant travel within the United States is required.

Applicants should be highly energetic and have background in research or academic administration, a broad knowledge of the natural sciences, engineering and technology, plus laboratory research experience (preferably at the doctoral level), and be familiar with the graduate education process. Prior experience in the management of people-oriented programs preferred.

Excellent compensation and fringe benefits (including TIAA/CREF) and a challenging opportunity to contribute meaningfully to advanced education in the sciences and engineering. *Women and minority persons are encouraged to consider this opportunity.* Please submit résumé and salary history to: **Box 291, SCIENCE. An Equal Opportunity Employer.**

**ANALYTICAL LABORATORY MANAGER**. Two-year appointment available 1 September for manager of an analytical laboratory responsible for quantitation of drugs in human body fluid (renewable depending on performance and funding). Basic knowledge in wet chemistry techniques and experience in operation and maintenance of analytical instrumentation (GC, HPLC, TLC, RIA, and fluorescence) essential. Ph.D. desirable but not mandatory. Salary negotiable depending on training and experience. Send curriculum vitae to: **Charles Hignite, Clinical Pharmacology, University of Kansas Medical Center, Kansas City, Kansas 66103.**

### ANIMAL LEARNING PSYCHOLOGIST

Animal learning psychologist, rank open. Must be able to teach introductory course in drugs and behaviour. Research interest to dovetail with present faculty. Salary in accordance with rank and qualifications. Starting date is 1 January 1979, if possible. Apply to: **Dr. G. R. Skanes, Head, Department of Psychology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9.** Position subject to availability of funds.

### ASSISTANT PROFESSOR

The Salk Institute is seeking candidates for basic research positions at the assistant professor level in the area of cell differentiation and developmental biology related to cancer. Candidates are expected to establish their own research programs and seek outside funding. Candidates should send curriculum vitae, publication list, names of references, and a description of proposed research to:

**Dr. Walter Eckhart, Director  
Armand Hammer Center for Cancer Biology  
The Salk Institute  
P.O. Box 1809  
San Diego, California 92112**

*The Salk Institute is an Equal Opportunity Employer, M/F.*

**ASSISTANT TO FULL PROFESSOR**, Department of Bioengineering, University of Utah, seeks applicants for one or two tenure-track faculty positions. Please submit complete curriculum vitae, representative publications, and three references to: **Dr. J. Janata, Chairman, Search Committee, Department of Bioengineering, University of Utah, Salt Lake City, Utah 84112** by 15 January 1979. *An Affirmative Action/Equal Opportunity Employer.*

The University of California, San Francisco, is seeking an individual with demonstrated competence in **academic metabolism and endocrinology** to be employed at the **ASSISTANT PROFESSOR** level at the San Francisco VA Hospital. Position requires research expertise and productivity in any of the areas of metabolism: diabetes, carbohydrate or lipid metabolism, and/or mechanism or regulation of insulin or glucagon secretion. Qualified candidates will have demonstrated clinical excellence in diabetology and ability to teach this area both at bedside and in a didactic setting. Inquiries and curriculum vitae to: **Marvin D. Siperstein, M.D., Metabolism Section (111-F), San Francisco VA Hospital, 4150 Clement Street, San Francisco, Calif. 94121.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR**—Departments of Pharmacology and Oncology beginning 1 January 1979. Applicants must have an M.D. or M.D./Ph.D., experience in cellular oncology, mouse genetics, immunochemistry, and biochemistry. Duties will include teaching in pharmacology and oncology and a research program in mouse genetics, animal cell culture, immunochemistry, animal cell biology. Candidates must have demonstrated excellence in research confirmed by published scientific material. Salary range: \$20,000 to \$30,000.

Send curriculum vitae, bibliography, and references to:

**Thomas August, M.D.  
Professor and Director  
Department of Pharmacology  
Johns Hopkins University  
Baltimore, Maryland 21205**

*Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

**ASSISTANT/ASSOCIATE PROFESSOR** in university teaching hospital new critical care/emergency medicine section. Must be academically qualified, Board-certified, or Board-eligible ABIM. *An Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae and references to: **Robert J. Bolt, M.C. Chairperson, Department of Medicine, 204 UCD Professional Building, 4301 X Street, Sacramento, California 95817.** Open until 31 January 1979.

### ASSISTANT PROFESSOR, IN-RESIDENCE, CLINICAL CHEMISTRY

University of California, Irvine, Department of Pathology, is recruiting for faculty position at assistant professor level. Required: M.D., clinical Board-eligible/qualified, service experience in clinical chemistry, demonstrated interest in independent research. Duties: teach medical students and house staff, limited administrative responsibility in area of clinical chemistry. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and references to: **H. Simpkins, M.D., Ph.D., Department of Pathology, University of California, Irvine, California 92717** by 23 October 1978.

### ASSISTANT PROFESSOR OF MICROBIOLOGY

Position open for molecular cell biologist (2 to 5 years postdoctoral) to do research and teaching in areas related to immunology and/or virology at the University of Virginia School of Medicine. Active research, graduate, and postdoctoral training programs. Send résumé to: **Chairman, Department of Microbiology, University of Virginia School of Medicine, Charlottesville, Va. 22908.** *An Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT RESEARCH CHEMIST/ARCHAEOLOGIST** position is available in the Ocean Research Division, Scripps Institution of Oceanography. The individual will be responsible for: (i) designing and carrying out experiments on the aging implications of amino acid racemization in metabolically stable proteins in living mammals, and (ii) developing, coordinating, and supervising projects in the newly formed Marine Archaeology Program at Scripps. Applicants should have a Ph.D. in either biology or chemistry and postdoctoral experience relevant to both of the areas of responsibility listed above. Salary range: \$17,500 to \$22,000, commensurate with experience. Applicants should send curriculum vitae, bibliography, and the names and addresses of three references to: **Chair, Ocean Research Division A020, Scripps Institution of Oceanography, La Jolla, Calif. 92093.** *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

Virginia Mason Research Center, *an Equal Opportunity Employer*, is seeking a candidate to fill a combined position as an **ASSOCIATE MEMBER** in the Tumor Immunology Program (3/4 time) and as **ASSISTANT DIRECTOR FOR CLINICAL RESEARCH** (1/4 time). Minimum qualifications for this position are: M.D. licensure, or eligibility for such in the state of Washington; completion of a postdoctoral fellowship in cellular or tumor immunology; at least 3 years of relevant experience in the conduct and administration of stages 1 and 2 immunotherapy trials in man; and a specialty interest and expertise in the treatment of human solid tumors. It is anticipated that this position will be open as of 1 January 1979.

Please send résumés to: **John C. Houck, Ph.D., Director, Virginia Mason Research Center, 1000 Seneca Street, Seattle, Washington 98101.**

## POSITIONS OPEN

**ASSISTANT PROFESSOR OF ORGANIC CHEMISTRY**—Tenure-track position, beginning September 1979; postdoctoral experience desirable. Position includes teaching at undergraduate and graduate levels and development of a strong research program. Applicant's research interests, as they may complement those of other members of the department, will be considered. Send résumé, transcripts, description of research interests, and three letters of recommendation to: **Dr. Grant Gill Smith, Chairman, Search Committee, Department of Chemistry and Biochemistry, UMC 03 Utah State University, Logan, Utah 84322.** Closing date for application is 1 November 1978. *Utah State University is an Equal Opportunity/Affirmative Action Employer.*

## ASSOCIATE PROFESSOR

Position available for M.D. with Ph.D. in immunology, graduate training in pathology and immunogenetics, and a strong interest in cancer research and teaching. Expertise with techniques such as thymectomy and thoracic duct cannulation of mice and familiarity with adoptive transfer systems is necessary. Salary range: \$25,000 to \$30,000. Submit replies to: **Box 293, SCIENCE.**

**BIOCHEMIST-INSECT VIROLOGIST.** Postdoctoral position for Ph.D. in biochemistry with strong expertise in enzymology and protein chemistry and knowledge in insect virology. Employment from 1 October 1978 to 31 July 1979. Stipend: \$10,000 to \$14,000 per annum. Closing date for applications: 22 September 1978. *The University of California is an Equal Opportunity Employer.* Send curriculum vitae and names of three references to: **Dr. Y. Tanada, Division of Entomology and Parasitology, 333 Hilgard Hall, University of California, Berkeley, Calif. 94720.**

Independent liberal arts college in the Baltimore-Washington area seeks a Ph.D. **BIOLOGIST** for tenure-track position at assistant professor rank beginning September 1979. Courses to be taught are ecology, perspectives in biology, and a principles of biology course. Candidate should have a concentration in ecology and a sound botanical background. Salary and fringe benefits competitive. *An Equal Opportunity/Affirmative Action Employer.* Apply before 30 November 1978. Address pertinent materials to: **Jean Kerschner, Department of Biology, Western Maryland College, Westminster, Maryland 21157.**

University of California, Los Angeles (UCLA), School of Medicine, seeks appropriate candidates for the **DELLA MARTIN CHAIR IN PSYCHIATRY**, newly endowed professorship for distinguished academic psychiatrist (English-speaking, eligible California licensure) committed to research especially on major mental illnesses of adolescents and young adults. *Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae, letter discussing career goals, and five references to:

**Arnold B. Scheibel, M.D., Chairman  
Della Martin Search Committee  
760 Westwood Plaza  
Los Angeles, California 90024**

The University of California, Irvine, College of Medicine, is seeking a **CHAIRMAN** for the Department of Psychiatry and Human Behavior. Candidates will have demonstrated excellence in research and teaching and will have administrative experience. Candidates should be able to provide academic leadership for the department. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Send curriculum vitae, before 1 December 1978, to: **Calvin S. McLaughlin, Chairman of the Search Committee, Dean's Office, College of Medicine, University of California, Irvine, Calif. 92717.**

**CHAIRPERSON**—Seton Hall University invites applications for the position of chairperson, Department of Chemistry, to be filled in July 1979. Candidates should combine a record of scholarship with a history of extramural contract or grant support, and should have demonstrated leadership in development of educational and research programs. Research interests may be in any area of chemistry. The department has strong programs at all levels through the doctorate, and maintains close ties with the large New Jersey industrial community. Applications, including a list of at least three references, should be sent to: **Chairperson, Search Committee, Chemistry Department, Seton Hall University, South Orange, N.J. 07079.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### CHAIRPERSON Department of Biological Structure School of Medicine UNIVERSITY OF WASHINGTON

Applications for this position are invited from scholars committed to biological research and education in the health sciences. Established fields of investigation in the department relate to developmental biology, cell differentiation in the hemopoietic and immune systems, reproductive biology, neurobiology, ultrastructure, and x-ray crystallography. Departmental teaching responsibilities include gross, microscopic, neuro- and developmental anatomy in a progressive medical and graduate educational program. Send curriculum vitae, bibliography, and three references by 30 November 1978 to: **Dr. E. G. Krebs, Chairman, Search Committee, Department of Pharmacology, SJ-30, School of Medicine, University of Washington, Seattle, Wash. 98195.** *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

### CURATOR OF PLANTS

Advanced degrees plus 3 to 5 years of experience desirable. Knowledge of plants of the Sonoran desert, their natural history, management under cultivation, nutrition, and diseases. Departmental administration. Send résumé to: **Personnel Manager, Arizona-Sonora Desert Museum, Box 900—Route 9, Tucson, Arizona 85704.**

### DEAN SCHOOL OF MEDICINE

Emory University is conducting a search for qualified candidates for the position of dean of the School of Medicine of the university's Woodruff Medical Center. This position becomes vacant 1 September 1979 following the retirement in August 1979 of Dean Arthur P. Richardson. The School of Medicine is one of three academic schools involved in the Medical Center programs of teaching, research, and patient care. Other schools and facilities include the School of Dentistry, School of Nursing, Emory University Clinic, Yerkes Regional Primate Center, Emory University Hospital, Crawford W. Long Memorial Hospital, and various affiliate institutions. The Woodruff Medical Center is located on the main campus of Emory University in suburban Atlanta, Georgia. The dean is responsible to the vice president for health affairs and director of the Woodruff Medical Center and for administration of the School of Medicine and for the school's instructional and research programs. The dean also participates in the development of Woodruff Medical Center policy.

Minimum qualifications are a medical degree and demonstrated academic medical administrative, research, clinical, and teaching experience.

Interested candidates should submit a résumé and names of three professional references by 1 November 1978 to: **E. Garland Herndon, Jr., M.D., Vice President for Health Affairs and Chairman of the Search Committee, Emory University, Atlanta, Georgia 30322.**

*An Equal Opportunity/Affirmative Action Employer*

### DEAN—VETERINARY MEDICINE

North Carolina State University invites applications and nominations for the position of the first dean of the School of Veterinary Medicine.

North Carolina State University is a land-grant institution with broad academic offerings and extensive research and public service programs. The School of Veterinary Medicine has recently been established and the dean will have the responsibility of providing leadership for developing all activities within the school by formulating and undertaking policies and programs that effect the instructional, research, and service functions of the school.

Applicants must possess the D.V.M. and Ph.D. degrees and have a record of research and scholarly achievements, teaching, clinical, and other professional experience to qualify for tenured rank in the university faculty. Applicants must be able to represent the school before public, professional, and private agencies at state and national levels.

Applications and nominations should include current curriculum vitae and the names and addresses of at least three references who can assess the candidate's strengths and experience. These should be submitted by 15 October 1978 to:

**W. H. Simpson  
Secretary, Search Committee  
Dean of Veterinary Medicine  
North Carolina State University  
Raleigh, North Carolina 27650**

*Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

### DEAN—SCHOOL OF MEDICINE

The University of California, Davis, invites applications and nominations for the position of dean of the School of Medicine. The school, established in 1966, offers degree programs leading to the M.D., Ph.D., M.S., M.A., H.H.S., and an extensive residency program in all specialties. The dean has responsibility for academic leadership, representing the school to the administration; articulating to the community the goals and programs of the school; management of resources; participating with the Director of Hospital and Clinics in the management of clinical affairs in the university-owned hospital and in campus-wide policy development through membership on the Council of Vice Chancellors and Deans. The dean reports to the chancellor.

Qualifications include distinguished performance in teaching and research equivalent to that required for appointment to a professorship; commitment to high-quality medical education; interest in and demonstrated capability for academic administration. Salary is commensurate with experience and qualifications.

Nominations of candidates or direct applications, including a current professional résumé and supporting documents, should be sent to: **Chancellor James H. Meyer, University of California, Davis, Calif. 95616** by 15 November 1978.

*An Affirmative Action/Equal Opportunity Employer*

## DIRECTOR OF RESEARCH REHABILITATION RESEARCH AND TRAINING CENTER #8

### TEMPLE UNIVERSITY SCHOOL OF MEDICINE

The Rehabilitation Research and Training Center #8 at Temple University is recruiting for the position of Director of Research. This requires an individual to direct, coordinate, review, and participate in the research activities of the center in accordance with federal, state, and regional procedures. The center's research activities are concerned with the problems of the movement-disabled patient, including visuo-motor behavior, locomotion, and neuromuscular and cardiopulmonary requirements of movement.

The educational requirements specify an M.D. or Ph.D. in rehabilitation or an allied field, for example, physiology. Faculty rank and salary commensurate with experience, basic and applied research, publications in recognized professional journals, and achievement in the field of rehabilitation medicine (or related field).

Submit applications and résumés to: **Dr. Dorothea D. Glass, Project Director, Rehabilitation Research and Training Center #8 (Moss Rehabilitation Hospital), 12th Street and Tabor Road, Philadelphia, Pa. 19141.** *An Equal Opportunity/Affirmative Action Employer.*

### POSITION IN FISHERIES BIOLOGY

#### Appalachian Environmental Laboratory University of Maryland Center for Environmental and Estuarine Studies

The University of Maryland is seeking a Ph.D.-level person to fill a tenure-track assistant professor position in fisheries biology at the Appalachian Environmental Laboratory, Center for Environmental and Estuarine Studies, University of Maryland, Frostburg, Maryland. Twelve-month appointment.

**QUALIFICATIONS:** The successful applicant is expected to teach graduate-level courses in fisheries management/aquaculture and advanced fisheries science. Résumé and transcript of course work must reflect strong fisheries background, with training in biometrics and computer programming. The preferred applicant will have a good publication record, a demonstrated ability to secure funding through contracts and grants, and an ability to independently establish a research program that will complement ongoing activities of the Appalachian Environmental Laboratory.

**SCHEDULE:** Closing date for applications is 15 October 1978, with starting date December 1978.

**CONTACT:**

**Dr. Dan M. Harman  
Chairman, Search Committee  
Appalachian Environmental Laboratory  
Center for Environmental and Estuarine Studies  
University of Maryland  
Frostburg State College  
Frostburg, Maryland 21532**

*An Equal Opportunity/Affirmative Action Employer*



## POSITIONS OPEN

**FACULTY POSITION—ORGANIC CHEMISTRY.** The Department of Chemistry, University of Arizona, is seeking to fill a tenure-track position at the assistant professor level. Candidates will be expected to demonstrate the ability to develop an outstanding research program and to participate actively in the organic chemistry teaching program. Applicants should submit a résumé, a statement of research interests, and have three letters of recommendation sent to: **Professor Victor J. Hruby, Department of Chemistry, University of Arizona, Tucson, Arizona 85721.** Closing date for applications and all supporting materials: 23 October 1978. *An Equal Opportunity/Affirmative Action/Section 504 Employer.*

### THE UNIVERSITY OF MICHIGAN

Five faculty positions available at the instructor through professor level in the Department of Internal Medicine, University of Michigan Medical Center and affiliated hospitals. Reply to: **Box 290, SCIENCE.** Code 600B0. *A nondiscriminatory, Affirmative Action Employer.*

**TWO FACULTY POSITIONS.** Department of Veterinary Biology, University of Minnesota.

1) **ANIMAL PHYSIOLOGIST.** A strong research orientation in neuro-, gastrointestinal, or cardiovascular physiology is preferred but applications are invited from individuals with research experience in other areas. Teaching responsibilities will be shared with other faculty.

2) **VETERINARY PHARMACOLOGIST.** Applicants should have a commitment to teaching veterinary students and demonstrated excellence in research. Specialty open, except toxicology.

Ph.D. required. Rank (assistant to full professor) and salary open for both positions. Positions are available 1 July 1979 and application deadline is 1 February 1979. Send curriculum vitae and names of three references to: **Dr. T. F. Fletcher, Department of Veterinary Biology, University of Minnesota, St. Paul, Minnesota 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

## POSITIONS OPEN

The **UNIVERSITY OF KONSTANZ**, West Germany, is pleased to offer two new faculty positions:

1) A full professorship (C-4 professor) for **PHYTOPATHOLOGY**

Candidates are expected to have established themselves scientifically in the field of plant physiology. Particular emphasis should be given to interactions with environmental pathogens. This chair is part of a newly established program for ecology in the Department of Biology.

2) A tenured associate professorship (C-3 professor) for

### MICROBIAL ECOLOGY

We are looking for a microbiologist who is familiar with microbial ecosystems and is capable of carrying out an innovative research program. Close collaboration with already existing groups of biochemical microbiology and limnology is expected.

Candidates for both positions should be fluent in spoken and written German. Applications with the usual papers (including reprints of recent publications and a list of teaching record) should be submitted to:

**Fachbereich Biologie**

**Universität Konstanz**

**7750 Konstanz, West Germany**

by 27 October 1978.

### ORGANIC CHEMISTRY POSTDOCTORAL RESEARCH ASSOCIATE

Position available now for research in vinyl monomer carcinogenesis study. This is a temporary, full-time position and may be renewable. State-of-art instrumentation (HPLC, FT-NMR, and so forth) available. Close interaction with medical school cancer research groups. Salary competitive. Send résumé, salary history, and transcripts to: **Professor John L. Wong, Department of Chemistry, University of Louisville, Louisville, Kentucky 40208,** by 31 October 1978. Also, two letters of recommendation should be sent directly from persons who will write for you. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**GEOLOGIST—STRUCTURAL, ECONOMIC.** An assistant professor position (tenure-track), appointment effective as early as 15 January 1979, is anticipated contingent on administrative approval. Ph.D. required; some teaching experience helpful; salary commensurate with qualifications. The successful applicant will participate in a rapidly growing undergraduate program by teaching structural geology, economic geology, field geology, and related courses including introductory geology as well as carrying on active research. Preference will be given to field-oriented applicants with a strong interest in developing an undergraduate program. A normal teaching load is 12 didactic hours. It is anticipated that the geology program will become degree granting in 1980–1981. The school is located 15 miles west of Washington, D.C., and 15 miles south of the USGS National Center at Reston. Applicants for this potential position should submit a résumé, the names of three references, and a statement concerning research activities by 1 November 1978 to: **Dr. Douglas Mose, Department of Chemistry, George Mason University, 4400 University Drive, Fairfax, Virginia 22030.** *Affirmative Action/Equal Opportunity Employer.*

**GROUNDWATER GEOLOGIST.** A leading international consulting firm dealing primarily with the electric utility and coal mining industries has an immediate permanent opening for an experienced hydrogeologist. Experience with numerical modeling desired. Work will be in the United States and abroad. Minimum qualifications include a graduate degree and several years of academic or field experience. Opportunity for advancement. Reply to: **Box 292, SCIENCE.** *An Equal Opportunity Employer.*

### UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The University of Michigan is seeking a sub-specialty Boarded M.D. in neonatal-perinatal medicine for a faculty position in **PEDIATRICS.** Candidates should have a research interest in some aspect of perinatal medicine. Position available 1 July 1979. Reply to: **Box 294, SCIENCE.** *A nondiscriminatory, Affirmative Action Employer.*

## POST DOCTORAL RESEARCH ASSOCIATES

Positions are available in the following areas of atmospheric and ecological research:

- Studies of long range atmospheric transport using tracer compounds. Ultra-trace determination of electronegative compounds. Experience in capillary chromatography is highly desirable. Laboratory development and field deployment.

- Development of techniques for trace analysis of environmental samples by derivatization chromatography. Experience in two or more of the following areas is desirable: HPLC, capillary GC, microchemical techniques, fluorescence spectroscopy.

- Studies of the uptake and reaction of trace gases in rain and cloud water responsible for acid rain and atmospheric cleansing by precipitation. Requires familiarity and experience in chemical thermodynamics, and reaction kinetics. Laboratory and field studies.

- Development of techniques for the characterization and determination of trace atmospheric constituents (gases and aerosols) by laser techniques, including RAMAN, fluorescence and opto-acoustic spectroscopy. Familiarity with laser optics and low-level detection is desirable.

- Experimental and analytical studies of turbulence mixing of miscible fluids and suspensions. Requires familiarity in fluid mechanics, transport phenomena, and thermodynamics. Some knowledge of aerosol dynamics and atmospheric diffusion is helpful.

Appointments will be tenable initially for one year.

Applicants should include a curriculum vitae and arrange for three letters of reference to be forwarded to:

**Dr. Leonard Newman**  
Head, Atmospheric and Analytical Chemistry,  
Department of Energy and Environment,  
Brookhaven National Laboratory,  
Associated Universities, Inc.  
Upton, Long Island, New York 11973  
*An Equal Opportunity Employer M/F*

## POSTDOCTORAL RESEARCH

The National Research Council will make approximately 250 awards for research in federal laboratories in 1979. The Research Associateship programs provide scientists and engineers opportunities for post doctoral research in fields of:

**ATMOSPHERIC & EARTH SCIENCES  
CHEMISTRY  
ENGINEERING  
ENVIRONMENTAL SCIENCES  
LIFE SCIENCES  
MATHEMATICS  
PHYSICS  
SPACE SCIENCES**

Some programs are restricted to U.S. citizens. For information on specific research opportunities, program details, and application materials, write, giving research area of interest, to:

Associateship Office (JH 608-S1)  
**NATIONAL RESEARCH COUNCIL**  
2101 Constitution Avenue, N.W.  
Washington, D.C. 20418

**National Research Council**

### THE UNIVERSITY OF TEXAS AT AUSTIN MARINE SCIENCE INSTITUTE DIRECTOR

The University of Texas Marine Science Institute invites applications for the position of director.

The Marine Science Institute is headquartered in Austin, Texas, and has the Galveston Geophysics Laboratory in Galveston, Texas; with extensive research programs in marine geology, marine geophysics, solid earth and planetary geophysics, and the Port Aransas Marine Laboratory in Port Aransas, Texas, with a basic and applied research program in the biological sciences, chemistry, sedimentation, physical oceanography, and engineering. The institute also has a mariculture facility in Port Aransas, Texas, and a field station in St. Croix, U.S. Virgin Islands. The institute conducts research programs throughout the world, has a multidisciplinary graduate teaching program in conjunction with the Department of Marine Studies at the University of Texas at Austin, operates three ships (165-foot, 130-foot, and 85-foot) as well as many smaller vessels, and has a thoroughly diversified marine research program as well as a solid earth and planetary geophysics program.

Candidates should possess recognized scientific credentials, must qualify for a tenure appointment in the Department of Marine Studies, and be capable of dealing with leadership and policy issues. Extensive experiences in scientific research in the marine sciences is required. Administrative and teaching experience is important in the selection process. Responsibilities include providing administrative direction for academic and world-wide research programs, coordination of research directions, and intellectual and philosophical leadership in continuing the development of an outstanding marine science program.

Application, personal résumé, and the names of at least three referees should be sent to: **H. Eldon Sutton, Vice President for Research, The University of Texas at Austin, Austin, Texas 78712.** The deadline for receipt of materials is 1 October 1978. Do not include materials which must be returned.

*The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**FISHERIES BIOLOGIST—AQUACULTURE**, Michigan State University. Assistant professor, 12-month, tenure-track. Major responsibilities: teaching (40 percent)—a senior-level course in aquaculture and an introductory course in fisheries/wildlife management. Research (40 percent)—develop research program and supervise graduate students. Extension (20 percent)—develop program primarily in aquaculture. Qualifications: Ph.D., fisheries biology and aquaculture; additional expertise in fish toxicology preferred. Submit letter of application, résumé and supporting materials, and three letters of reference by 31 October 1978 to: **Dr. Daniel R. Taltelm, Search Committee Chairman, Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan 48824.**

*Equal Opportunity/Affirmative Action Employer*

### HEINRICH PETTE-INSTITUT FÜR EXPERIMENTELLE VIROLOGIE UND IMMUNOLOGIE AN DER UNIVERSITÄT HAMBURG

Applications are invited for the position of  
**HEAD OF THE DIVISION OF  
IMMUNOLOGY**

The institute consists of six divisions. It is a foundation concerned with research on the biology of human viruses, the pathogenesis of virus diseases, and defense mechanisms of the host and related problems.

We are looking for a scientist whose main interest lies in the field of cell biology and/or virology.

Curriculum vitae, list of publications, and further documents should be sent to: **the Board of Directors of the Heinrich Pette-Institut, Martinistrasse 52, D-2000 Hamburg 20, Federal Republic of Germany, by 1 November 1978.**

**IMMUNOCHEMISTRY POSTDOCTORAL** available fall 1978. Individual must have strong biochemical background with interest in immunological aspects of cell-cell interactions and membrane chemistry. Research involves characterizing the immunogenicity human tumor cell surface antigens, and involves liposome biology. Salary: \$11,500 to \$12,500. Send curriculum vitae with two letters of reference to: **Dr. B. H. Tom, Division of Organ Transplantation, The University of Texas Medical School, Houston, Texas 77030.** *An Equal Opportunity Employer.*

**MOLECULAR BIOLOGY/ENDOCRINOLOGY OF VITAMIN—POSTDOCTORAL POSITIONS.** Two positions are available: one immediately and one for 1 December 1978. One position is to study the steroid hormone properties of the vitamin D metabolite,  $1,25(\text{OH})_2\text{D}_3$  viz gene expression, and RNA, protein synthesis; experience with cDNA, and mRNA isolation and translation, and so forth, is desirable. The second position is to isolate and characterize receptors for vitamin D metabolites. Experience with protein chemistry and affinity chromatography desirable. Send résumé and names of three references to: **Dr. Anthony W. Norman, Department of Biochemistry, University of California, Riverside, California 92521.** *An Equal Opportunity/Affirmative Action Employer.*

### UNIVERSITY OF SHERBROOKE

**PLANT BIOGEOGRAPHER AND ECOLOGIST.** Effective 1 November 1978. Professor to participate in the teaching of plant ecology, phytosociology, and plant biogeography and to collaborate in existing research. Candidates should hold a Ph.D. and are expected to teach in French. Send curriculum vitae before 15 October to: **Dean, Faculty of Science, University of Sherbrooke, Sherbrooke, Quebec, Canada J1K 2R1.**

**POSTDOCTORAL FELLOW** in behavioral endocrinology, Division of Entomology and Parasitology, University of California, Berkeley. Applicant must have 1 or 2 years of postdoctoral experience and professional level skill in microsurgery, histology, transmission and scanning electron microscopy, pheromone research and behavioral assay techniques, preferably in *Orthoptera*. Closing date for applications: 15 October 1978. Send curriculum vitae and the names of three persons to be used as references to: **Professor W. J. Lohr, 201 Wellman Hall, University of California, Berkeley, California 94720.** *The University of California is an Equal Opportunity Employer.*

## POSITIONS OPEN

**HEAD**, Department of Biology, University of Minnesota, Duluth. The department invites applications and nominations for the position of head to begin 1 September 1979. Appointment will be as associate or full professor with tenure. We seek individuals with administrative experience, a commitment to teaching and a demonstrated record of scholarly achievement in research, preferably in the area of ecology. Applicants should submit curriculum vitae plus a statement of professional goals and three references by 1 November 1978. Applications, nominations, and requests for information should be sent to:

**Dr. B. O. Krogstad, Chairman  
Department Head Search Committee  
Department of Biology  
University of Minnesota, Duluth  
Duluth, Minnesota 55812**

*Equal Opportunity/Affirmative Action Employer*

### NEUROMORPHOLOGIST/NEUROBIOLOGIST

The Department of Cell Biology is seeking a faculty member at the level of assistant professor. Formal teaching duties include teaching in the medical neuroscience course. The successful applicant will be expected to establish an independent research program in the field of neurobiology and contribute to an active research environment. Applicants should submit curriculum vitae, including a list of publications and names of references, to:

**Dr. D. J. Woodward  
Faculty Research Committee  
Department of Cell Biology  
The University of Texas  
Health Science Center at Dallas  
Southwestern Medical School  
5323 Harry Hines Boulevard  
Dallas, Texas 75235**

*The University of Texas is an Equal Opportunity/Affirmative Action Employer, M/F/H.*

### OCEANOGRAPHER ALASKA OUTER CONTINENTAL SHELF OFFICE

The Alaska Outer Continental Shelf Office, Bureau of Land Management, which plans, contracts, and manages studies in support of oil and gas development, is seeking applicants for a 2-year assignment as oceanographer. Successful applicant will be a member of an interdisciplinary team which monitors, inspects, and makes recommendations on studies for the OCS program. Only persons in government or institutes of higher learning who can obtain a 2-year leave of absence for mutual benefit of the agencies are eligible. Salary and other costs will be negotiated with the home institution. Obtain further information from: **Alaska OCS Office, Box 1159, Anchorage, Alaska 99510; telephone: 907-276-2955.**

**PHARMACOLOGIST.** The Department of Pharmacology, College of Medicine, University of South Alabama, invites applications from qualified individuals for a position at the associate professor or professor level. Candidates should possess the Ph.D. or M.D. degree and have demonstrated a commitment to quality teaching and research. All areas of research interest will be considered, but special attention will be given to individuals working in cardiovascular, renal, or neuropharmacology. The department is rapidly developing and currently consists of nine faculty members responsible for teaching medical students, nursing students, and graduate students. Interested individuals should send letters of inquiry along with curriculum vitae and names of three references to: **Thomas M. Glenn, Ph.D., Chairman, Department of Pharmacology, College of Medicine, University of South Alabama, Mobile, Alabama 36688.** *An Affirmative Action/Equal Opportunity Employer.* Applications should be received prior to 1 October 1978.

**POSTDOCTORAL POSITION** available immediately in nutrition-cancer program. Experience in nutrition and/or biochemistry (RNA and protein) desired. Send curriculum vitae and name of two references to: **Dr. H. Sidransky, Department of Pathology, The George Washington University Medical Center, Washington, D.C. 20037.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study the biochemistry of recombination in bacteriophage T4. Applicants must have biochemistry background, preferably in nucleic acid metabolism. Salary: \$13,000 per year. Send curriculum vitae and references to: **Dr. Susan S. Wallace, Department of Microbiology, New York Medical College, Valhalla, New York 10595.**

## POSITIONS OPEN

**PHARMACOLOGIST.** Assistant professor in basic dental sciences to teach predoctoral and dental specialty students pharmacology, with 50 percent of time for research. Major interest in analgesics and anesthetics preferred. Send curriculum vitae and three letters of reference to: **Dr. Parker E. Mahan, Department of Basic Dental Sciences, Box J-424, J. Hillis Miller Health Center, Gainesville, Florida 32610.** *An Equal Opportunity/Affirmative Action Employer.*

**PHYSICAL OCEANOGRAPHER.** M.S. or Ph.D. to participate in R & D and project work. Position requires strong background in ocean currents and waves, including knowledge of wind-wave generation, propagation, and decay. Experience with spectral techniques, data analysis, numerical modeling, and computer techniques is desirable. Send résumé to: **J. Buckles, OCEANROUTES, Inc., 3260 Hillview Avenue, Palo Alto, Calif. 93404.** *Equal Opportunity Employer.*

**POSTDOCTORAL POSITION.** For research on interaction of chemical carcinogens with liver cells in culture. Recent Ph.D. required. Position available immediately; annual salary: \$13,000. Submit curriculum vitae to: **Gary M. Williams, M.D., Chief, Division of Experimental Pathology, Naylor Dana Institute for Disease Prevention, American Health Foundation, Dana Road, Valhalla, N.Y. 10595.** *An Equal Opportunity Employer, M/F.*

### POSTDOCTORAL POSITIONS AVAILABLE IMMEDIATELY

- 1) Protein chemist/biochemist interested in cultivation of bacteria in heavy water and isolation of enzymes from these organisms for NMR studies. Experience in microbiology or NMR desirable but not essential.
- 2) Physical biochemist interested in biological and spectroscopic approaches to the study of gallium tumor-scanning agents.
- 3) NMR spectroscopist interested in determination of peptide conformations by NOE measurements and paramagnetic probes.

Bruker HX-90, CXP-270 and WH-400 available for NMR studies. Send résumé and names of three references to: **Dr. Ted T. Sakai (1), or Dr. Robert Lenkinski (2, 3), Comprehensive Cancer Center, University of Alabama in Birmingham, Birmingham, Alabama 35294.** *An Equal Opportunity/Affirmative Action Employer.*

Two **POSTDOCTORAL POSITIONS** available immediately to study: (i) membrane interactions in coated vesicle self assembly, or (ii) LDL transport into chicken oocytes. Salary: \$11,000 to \$14,000. Experience in cell biology or biochemistry desirable. Send curriculum vitae and telephone numbers of three referees to: **Dr. Thomas F. Roth, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228.**

*An Affirmative Action/Equal Opportunity Employer*

**POSTDOCTORAL POSITION** available immediately: research on effects of environmental toxins on structure and function of brain barrier systems. Experience with SEM, TEM, and/or in vivo isolation of neural tissues desirable. Stipend according to qualifications. Contact: **L. A. O'Tuama, M.D., 320 B.S.R.C. 220H, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately for enzymologist/neurochemist to work on regulation of GABA synthesis in brain. Studies involve purification and regulatory properties of brain glutamate decarboxylase and may include tests of regulatory properties in brain slices or in vivo. Experience in purification, mechanism or structure of proteins or enzymes is desirable. Send résumé and names of three references to: **Dr. David L. Martin, Biochemistry Division, Department of Chemistry, University of Maryland, College Park, Maryland 20742.** *Affirmative Action/Equal Opportunity Employer.*

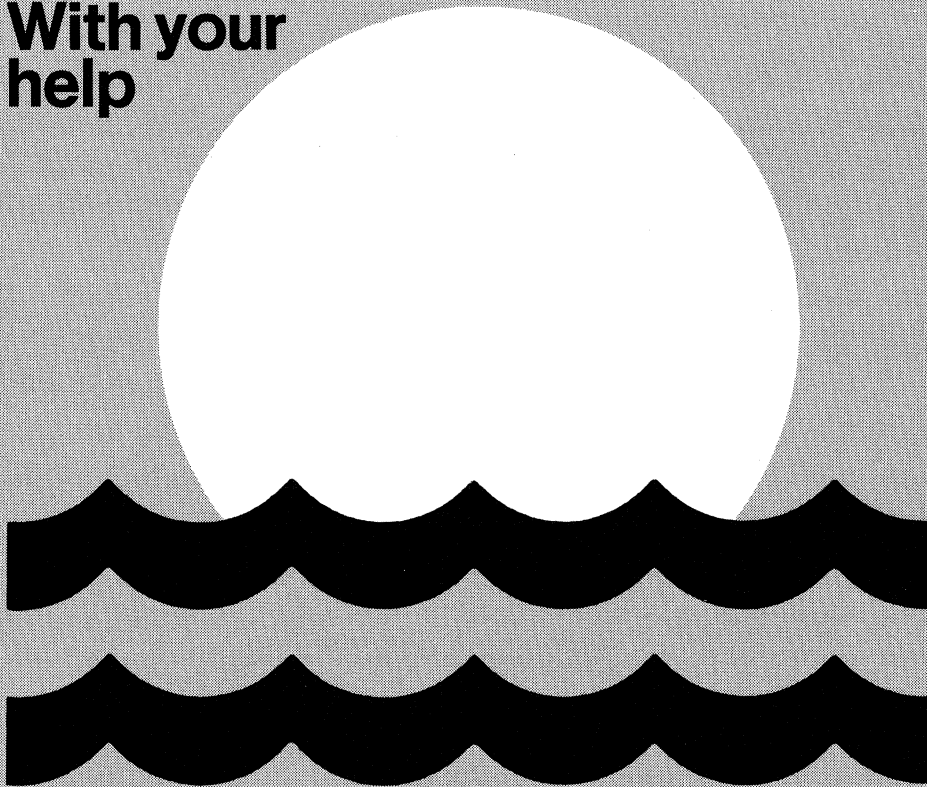
**POSTDOCTORAL POSITION** available immediately to work on DNA repair in eukaryotes. Applicants with graduate training in biochemical genetics, enzymology, or recombinant DNA should contact: **Dr. N. C. Mishra, Department of Biology, University of South Carolina, Columbia, S.C. 29208; telephone: 803-777-5938.** Excellent laboratory facilities available and salary commensurate with candidate's experience. *An Equal Opportunity/Affirmative Action Employer.*



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Please send your resume and salary history in absolute confidence to: V.T. Jasper, Metrek Division, The MITRE Corporation, 1820 Dolley Madison Blvd., McLean, VA 22102. An equal opportunity employer m/f/h.

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## POSITIONS OPEN

**POSTDOCTORAL POSITION** in insect neurobiology for 1 or 2 years. Available immediately. Experience in intracellular recording and staining techniques desirable. Inquiries to:

Dr. K. G. Pearson  
Department of Physiology  
University of Alberta  
Edmonton, Canada T6G 2H7

**POSTDOCTORAL RESEARCH ASSOCIATE**—Beginning July 1979 for studies of leukemia and melanoma cell surface glycoproteins, lectin binding, metastasis, adhesiveness, and aggregation. Recent graduate preferred. Please send curriculum vitae to: Robert N. Taub, M.D., Ph.D., Chairman, Division of Medical Oncology, Box 230, Medical College of Virginia, Richmond, Virginia 23298.

### POSTDOCTORAL POSITION

Available immediately to persons with a strong background in the molecular biology of nucleic acids. The program involves analysis of gene organization and replication in eukaryotes. Send curriculum vitae and the names of three references to: Dr. Peter J. Stambrook, Department of Biology, Case Western Reserve University, Cleveland, Ohio 44106.

A new **POSTDOCTORAL POSITION** available immediately for a Ph.D. in endocrinology/nutrition at university research laboratory for 1 year. Prior experience in biochemistry, enzymology, and thyroid research preferable. Ongoing projects involve riboflavin metabolism, thyroid hormones, zinc, and drugs. Both clinical and animal investigations are planned. Send curriculum vitae to: Dr. Richard S. Rivlin, 215 Black Building, Columbia Presbyterian Medical Center, 630 West 168 Street, New York, N.Y. 10032.

**POSTDOCTORAL RESEARCH POSITION** available immediately to study the biochemical basis of altered hepatic microsomal drug metabolism in tumor-bearing animals. Experience in protein purification and/or cytochrome P-450 biochemistry preferred. Send curriculum vitae and three references to: William T. Beck, Ph.D., St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tenn. 38101. *Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH POSITION.** To participate in studies on the control of gene expression in differentiated eukaryotic cells in culture. Experience in modern molecular biological techniques is desirable. Apply to: Secretary, Laboratory of Pharmacology, Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, Mass. 02115.

The University of Alexandria Research Centre (UNARC), Alexandria, Egypt, announces **POSTS** (starting 15 September 1979) for experts with at least 5 years of postdoctoral research experience in: (i) corrosion science, (ii) semiconductors and/or integrated circuits, and (iii) laser physics. There is also a post (iv) for a laboratory engineer having a B.E. with adequate practical experience. The experts will be required to conduct and supervise predoctoral research, collaborate with the postdoctoral fellows, give advanced courses, and hold seminars in their respective specializations. The laboratory engineer will maintain, repair, and design the laboratory equipment, as well as train local counterparts in laboratory operations.

Appointments will be made on contractual basis for 1 year at the candidate's present substantive salary, to be paid in the United States, plus different allowances and passage money (for candidate and family), including transportation of household.

Working language is English, with knowledge of Arabic desirable. Interested scientists should apply before 1 December 1978 to: Director, UNARC, Box 832, Alexandria, Egypt. Further information is available from: Edgar Pike, NE/Tech., U.S. AID, U.S. Department of State, Washington, D.C. 20523.

### RECEPTOR BIOCHEMISTRY

Postdoctoral position for a recent graduate with solid training in biochemistry. Unique interdisciplinary institute. Research on membrane taste receptor characterization. Send curriculum vitae and names of three references to: Dr. Robert H. Cagan, Monell Chemical Senses Center, University of Pennsylvania, 3500 Market Street, Philadelphia, Pa. 19104. *An Equal Opportunity Employer.*

## POSITIONS OPEN

### PSYCHOLOGICAL RESEARCHER IN NEUROSCIENCE DEPARTMENT OF PSYCHOLOGY MEMORIAL UNIVERSITY OF NEWFOUNDLAND

Psychological researcher in neuroscience to teach graduate and undergraduate courses in physiological psychology. Rank open. Salary in accordance with rank and qualifications. Starting date is 1 September 1979. Apply to: Dr. G. R. Skanes, Head, Department of Psychology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9. Position subject to availability of funds.

### RESEARCH ASSOCIATE

Required to engage in investigations with Iodine-125 and its effect on biological systems. Experience in radiation physics and/or radiobiology desirable. Send curriculum vitae to: Dr. E. J. Hall, Columbia University, Radiological Research Laboratory, 630 West 168 Street, New York, N.Y. 10032. *An Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATES**—Three postdoctoral positions are available immediately to study electrolyte and nonelectrolyte transport in the intact intestine as well as in isolated and reconstituted intestinal and renal luminal and contraluminal membranes. Send curriculum vitae, two references, and supporting materials to either: Dr. Don W. Powell, Department of Medicine, or Dr. Robert G. Faust, Department of Physiology, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514. *Affirmative Action/Equal Opportunity Employer.*

## RADIOCHEMISTRY STAFF AND POSTDOCTORAL OPPORTUNITIES Trace-element migration

The Chemistry Division of Argonne National Laboratory has regular staff and postdoctoral positions available for individuals who have a Ph.D. in chemistry and experience in radiochemistry. Background or interest in geochemistry is highly desirable.

Selected candidates will participate in an ongoing research program investigating trace-element migration in the lithosphere. Laboratory studies will be conducted on the interactions of selected nuclides with various geological materials. This research is directly related to feasibility and safety studies of potential radionuclide waste depositories.

Positions offer fully commensurate compensation, both in terms of salary and benefits, as well as excellent potential for professional recognition and career advancement. Send résumé, including salary history, to: Robert P. Maxwell, Box CHM 1983, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Ill. 60439.



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## POSITIONS OPEN

### PROFESSOR OF PATHOLOGY

Applications are sought for the position of professor of pathology in the Eastern Virginia Medical School. We seek a candidate with M.D. degree and experience in anatomical pathology both at the academic- and hospital-practice level to participate in an active educational program for the teaching of medical students and residents. Excellent department research facilities available, including electron microscopy. Applications should include curriculum vitae, bibliography, and letters of recommendation. Please send to: Robert J. Faulconer, M.D., Chairman, Department of Pathology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Virginia 23501. *An Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSISTANT PROFESSOR OR SENIOR RESEARCH ASSOCIATE

Ph.D. in biochemistry with postdoctoral research experience concerning HMG-CoA reductase in cholesterol biosynthesis. Job involves supervision and research concerning the enzyme HMG-CoA reductase as it relates to the regulation of cholesterol biosynthesis. Salary: \$15,000 to \$16,000, depending upon qualifications and experience. Send applications to: Dr. T. J. Scallen, Biochemistry Department, University of New Mexico School of Medicine, 915 Stanford, NE, Albuquerque, N.M. 87131. All applications should be received by 15 October.

### RESEARCH ASSOCIATE IN NEUROCHEMISTRY

Position available for Ph.D. biochemist or molecular biologist to pursue collaborative research into the molecular differentiation of neuroblastoma in cell culture. Special interests in immunochemical approaches, cell surface glycoprotein or receptor changes, and transcriptional or posttranscriptional control of differentiation are encouraged.

*We are an Equal Opportunity Employer.* Send letter and curriculum vitae to: Roger N. Rosenberg, M.D., Chairman, Department of Neurology, Laboratory of Molecular Neurobiology, the University of Texas Health Science Center at Dallas, Dallas, Texas 75235.

### SENIOR RESEARCH ADMINISTRATORS PHYSIOLOGY, CELLULAR, AND MOLECULAR BIOLOGY

The National Science Foundation, Division of Physiology, Cellular, and Molecular Biology, is seeking qualified applicants to head senior positions in basic research covering (i) primarily biochemical areas, including metabolism, genetics, biochemistry, and biophysics and (ii) physiology, cellular, and developmental biology. These positions are excepted from the competitive civil service. They are at a grade level equivalent to GS-16 (\$42,423 to \$47,500) and may be filled as permanent appointments or as rotational appointments of 2 years, depending upon applicant qualifications. Applicants must have a Ph.D. or equivalent in the biological sciences or a closely related field, have established a national or international reputation for high-quality research in one of the fields named above, and have demonstrated successful leadership in administration. Applicants should submit a statement of interest and a résumé or Standard Form 171, Personal Qualifications Statement, to: Division of Personnel and Management, Attention: Section B, Room 212, 1800 G Street, NW, Washington, D.C. 20550; telephone: 202-632-4107. Applications will be accepted until the positions are filled. *The National Science Foundation is an Equal Opportunity Employer.*

**STAFF OR RESEARCH ASSOCIATE.** Position available for biochemist, biophysicist, or physiologist to participate in research on fluid movements across epithelial membranes. Extensive experience in techniques, instrumentation, and laboratory management highly desirable. Send curriculum vitae to: Dr. Jorge Fischberg, Eye Research Division, Columbia University, 630 West 168 Street, New York, N.Y. 10032. *An Affirmative Action/Equal Opportunity Employer.*

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The University of Texas Health Science Center at San Antonio, Department of Family Practice, seeks a **SOCIAL SCIENTIST**: primarily to participate in the teaching of family medicine to senior medical students and other medical trainees in a medical school-directed Family Health Center; secondarily to engage in research in problems of cross-cultural health care delivery and in the training of primary health care providers. Applicants should be committed to teaching social science concepts in a clinical medical setting.

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**Professor John W. Clark**  
Search Committee Chairman  
Department of Physics  
Washington University  
St. Louis, Mo. 63130

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The School of Veterinary Medicine, Purdue University, is seeking applications and nominations for the head of the Department of Veterinary Physiology and Pharmacology.

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**Dr. Billy E. Hooper**  
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**VIROLOGY.** The Cell Biology Group of the Worcester Foundation for Experimental Biology announces faculty-level positions in animal cell virology. We are seeking individuals with outstanding research potential. Inquiries should be directed to Drs. Ronald Luftig, Harriet Robinson, or Thoru Pederson through the Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts 01545. *The Worcester Foundation for Experimental Biology is an Affirmative Action, Equal Opportunity Employer.*

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Application materials and additional information are available from: **Office of Admissions, Marine Biological Laboratory, Woods Hole, Mass. 02543. Telephone: 617-548-3705.** *An Equal Opportunity/Affirmative Action Institution*



## TRAINING PROGRAM

### POSTDOCTORAL TRAINING PROGRAM IN ARTERIOSCLEROSIS RESEARCH

Postdoctoral fellow positions will be available after 1 July 1979 in an NIH-sponsored program of training in the broad field of arteriosclerosis research. Interdisciplinary training in basic research and/or clinical investigation will be available in the areas of lipid and lipoprotein metabolism, hyperlipidemia, platelet and coagulation biochemistry and disease, biomathematics and computer modeling, regional myocardial blood flow and the coronary circulation, and electrophysiology and arrhythmias. Applicants, for 1- to 3-year appointments, should possess the M.D. or Ph.D. degree or equivalent and be U.S. citizens or permanent residents. Send curriculum vitae to: **Dr. DeWitt S. Goodman, Columbia University College of Physicians and Surgeons, New York, N.Y. 10032.**

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## FELLOWSHIPS

### TWO POSTDOCTORAL FELLOWSHIPS IN THE EARTH AND PLANETARY SCIENCES

The Lamont-Doherty Geological Observatory of Columbia University invites scientists interested in any field of the earth and planetary sciences to apply for the following fellowships.

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Award announcements will be made 28 February 1979.

A **POSTDOCTORAL FELLOWSHIP** is available at the University of Delaware, Institute for Neuroscience and Behavior. Candidates should have a strong interest in the structure and function of the vertebrate visual system. Submit curriculum vitae and names of three references to: **C. Groot, Institute for Neuroscience and Behavior, University of Delaware, Newark, Delaware 19711.** *An Equal Opportunity/Affirmative Action Employer.*

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## FELLOWSHIPS

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### C. H. BEST FOUNDATION POSTDOCTORAL FELLOWSHIP

Applications are invited for the C. H. Best Foundation postdoctoral fellowship, in the Banting and Best Department of Medical Research. The fellowship is tenable after 1 July 1979 for 2 years with a taxable stipend of \$14,200 for the first year, plus travel and dependents' allowance. The fellowship is available to a candidate who has recently graduated or who has had less than 2 years of postdoctoral experience. Research interests of the department include molecular biology, differentiation, structure and function of membranes, lipid metabolism, immunology, and molecular endocrinology. A list of staff members and their research interests will be sent on request. Applications, complete with curriculum vitae, transcripts (if available), and three letters of reference, must be received by 15 November 1978. Please address applications or inquiries to: **Dr. J. H. Dorrington, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario, Canada M5G 1L6.**

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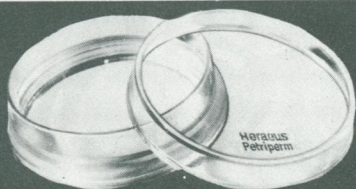
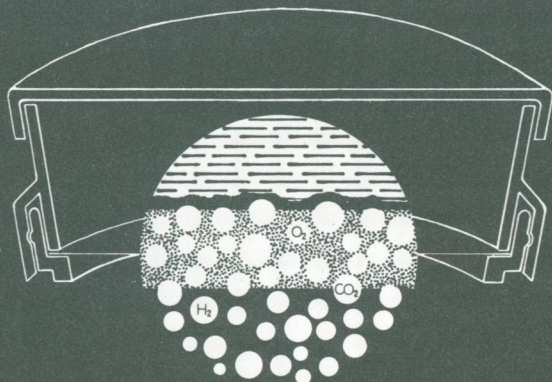
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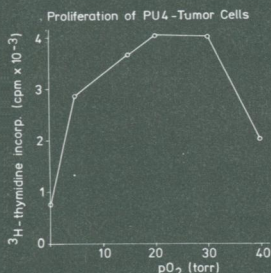
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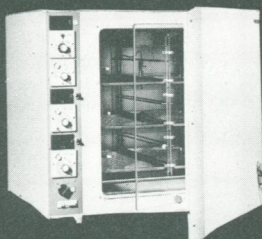
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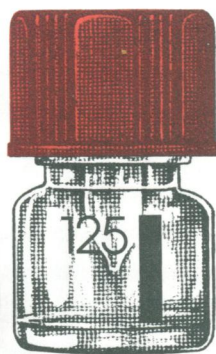
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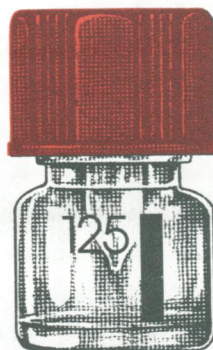
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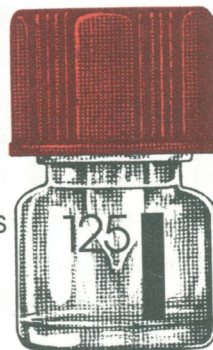
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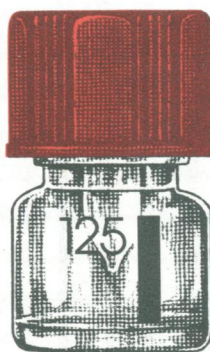
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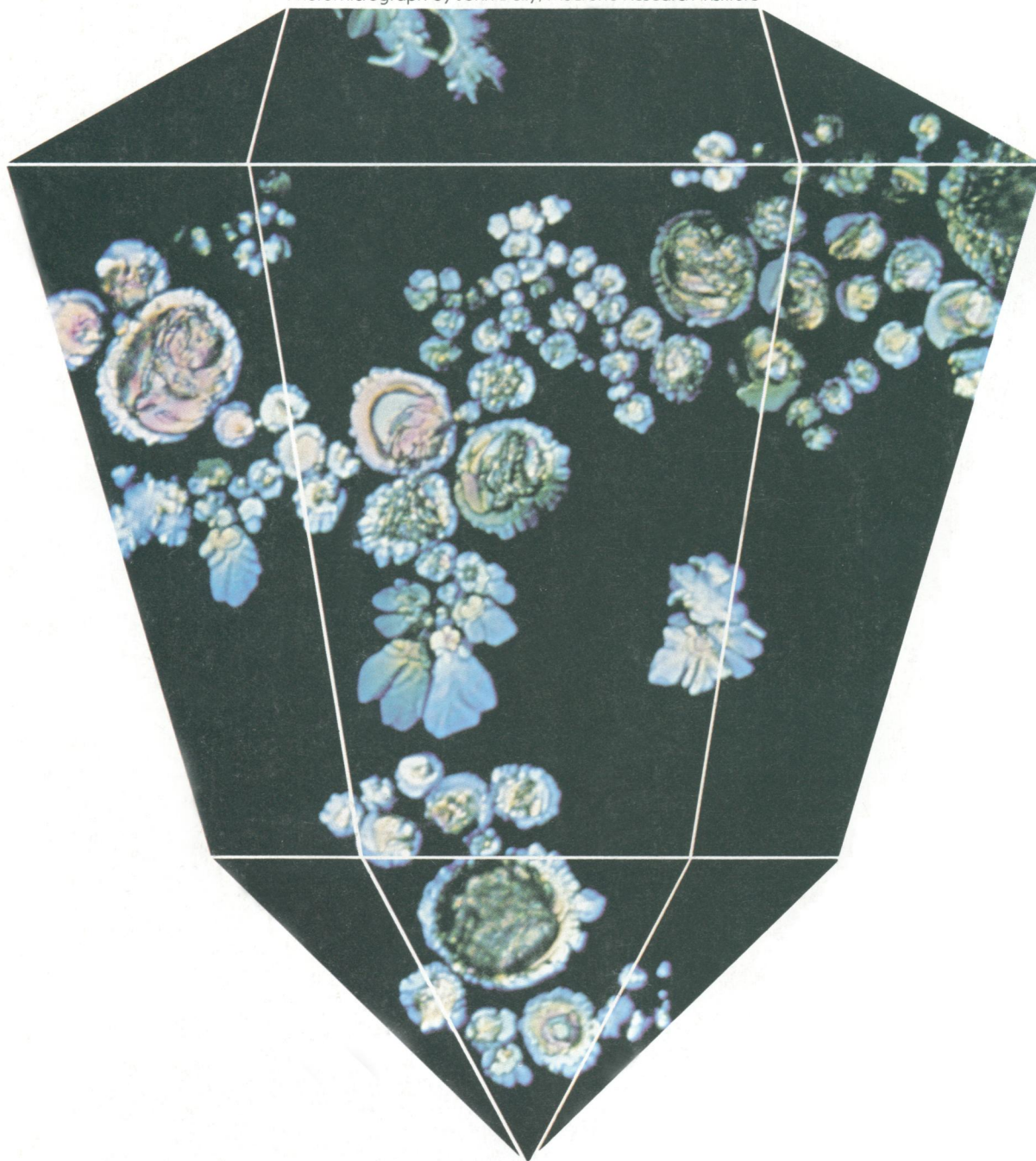
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