

BOOKS RECEIVED

(Continued from page 1404)

Murmurs of Earth. The Voyager Interstellar Record. Carl Sagan, F. D. Drake, Ann Druyan, Timothy Ferris, Jon Lomberg, and Linda Salzman Sagen. Random, New York, 1978. xii, 276 pp., illus. \$15.

Muskeg and the Northern Environment in Canada. By the Muskeg Subcommittee of the NRC Associate Committee on Geotechnical Research. N. W. Radforth and C. O. Brawner, Eds. University of Toronto Press, Buffalo, N.Y., 1977. xii, 400 pp., illus. + plates. \$35.

An Overture to Social Anthropology. Robert F. Murphy. Prentice-Hall, Englewood Cliffs, N.J., 1979. vi, 218 pp. Paper, \$7.95.

The Paranormal. Stan Gooch. Harper and Row, New York, 1979. vi, 314 pp., illus. \$10.

Perception and Cognition. Issues in the Foundations of Psychology. Papers from a conference, Minneapolis, June 1975. C. Wade Savage, Ed. University of Minnesota Press, Minneapolis, 1978. x, 502 pp., illus. \$25.

Persistent Viruses. Proceedings of a symposium, Keystone, Colo., Feb. 1978. Jack G. Stevens, George J. Todaro, and C. Fred Fox, Eds. Academic Press, New York, 1978. xii, 820 pp., illus. \$35. ICN-UCLA Symposia on Molecular and Cellular Biology, vol. 11.

Perspectives in Interactional Psychology. Lawrence A. Pervin and Michael Lewis, Eds. Plenum, New York, 1978. xvi, 336 pp. \$20.

Psychology and Biology of Language and Thought. Essays in Honor of Eric Lenneberg. Papers from a conference, Ithaca, N.Y., May 1976. George A. Miller and Elizabeth Lenneberg, Eds. Academic Press, New York, 1978. xiv, 294 pp., illus. \$19.50.

The Pure Theory of International Trade and Distortions. Bharat R. Hazari. Halsted (Wiley), New York, 1978. xii, 206 pp., illus. \$22.50.

Quantitative Enzyme Immunoassay. E. Engvall and A. J. Pesce, Eds. Blackwell, Oxford, England, 1978 (U.S. distributor, University Park Press, Baltimore). vi, 130 pp., illus. \$24.75. *Scandinavian Journal of Immunology*, Supplement No. 7, Vol. 8.

QuSAR. Quantitative Structure Activity Relationships of Analgesics, Narcotic Antagonists, and Hallucinogens. Papers from a meeting, Silver Spring, Md., April 1978. Gene Barnett, Milan Trsic, and Robert E. Willette, Eds. National Institute on Drug Abuse, Rockville, Md., 1978 (available from National Clearinghouse for Drug Abuse Information, Rockville, Md.). viii, 314 pp., illus. Paper. NIDA Research Monograph 22.

Receptors and Recognition. Series A. Vol. 6. P. Cuatrecasas and M. F. Greaves, Eds. Chapman and Hall, London, and Halsted (Wiley), New York, 1978. x, 200 pp., illus. \$27.50.

Recombinant DNA Research. Vol. 3, Documents Relating to "NIH Guidelines for Research Involving Recombinant DNA Molecules," November 1977–September 1978. National Institutes of Health, Bethesda, Md., 1978 (available from the Superintendent of Documents, Washington, D.C.). Two volumes. vi, 608 pp.; and appendices, variously paged. Paper, \$1.50. DHEW publications No. (NIH) 78-1843/1844.

Retrieval of Medicinal Chemical Information. Based on symposium, Anaheim, Calif., Mar. 1978. American Chemical Society, Washington, D.C., 1978. viii, 232 pp., illus. \$23. ACS Symposium Series 84.

Scholars as Managers. Or How Can the Managers Do It Better? Report of a workshop on management techniques in archeology. Alice W. Portnoy, Ed. Interagency Archeological Services, U.S. Department of the Interior, Washington, D.C., 1978. viii, 212 pp., illus. + figures. Paper.

Science on the Move. Some Research Activities in the Netherlands. Government Publishing Office, The Hague, 1978 (available from Informational Department, Ministry of Education and Science, The Hague). 172 pp., illus. Paper.

Seeing and Hearing and Space and Time. N. O'Connor and B. Hermelin. Academic Press, New York, 1978. viii, 158 pp., illus. \$14.

Selected Papers. Shih-shen Chern. Springer-Verlag, New York, 1978. xxxii, 476 pp. \$24.80.

Sustained and Controlled Release Drug Delivery Systems. Joseph R. Robinson, Ed. Dekker, New York, 1978. xii, 774 pp., illus. \$19.95. *Drugs and the Pharmaceutical Sciences*, vol. 6.

System Modelling and Control. J. Schwarzenbach and K. F. Gill. Halsted (Wiley), New York, 1978. x, 230 pp., illus. Paper, \$14.95.

Theory of Science. An Introduction to the History, Logic and Philosophy of Science. George Gale. McGraw-Hill, New York, 1978. xviii, 298 pp., illus. \$10.95.

Thermodynamique et Biologie. Tome 2, L'Ordre Issu du Hasard. Jacques Tonnelat. Maloine, Paris, 1978. x, 240 pp., illus. paper, 90 F. *Recherches Interdisciplinaires*.

Thin Film Processes. John L. Vossen and Werner Kern, Eds. Academic Press, New York, 1978. xii, 564 pp., illus. \$49.50.

Threatened Deer. Proceedings of a meeting, Longview, Wash., Sept. 1977. International Union for Conservation of Nature and Natural Resources, Morges, Switzerland, 1978. 434 pp., illus. Paper, \$18.

To the Red Planet. Eric Burgess. Columbia University Press, New York, 1978. x, 182 pp., illus. \$19.95.

Topics in Antibiotic Chemistry. Vol. 2, Antibiotics from Marine Organisms, Oligosaccharides, Anthracyclines and Their Biological Receptors. P. G. Sammes, Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1978. 284 pp., illus. \$42.50.

Topics in Functional Analysis. Essays Dedicated to M. G. Krein on the Occasion of His 70th Birthday. I. Gohberg and M. Kac, Eds. Academic Press, New York, 1978. xxii, 396 pp. \$41. *Advances in Mathematics Supplementary Studies*, vol. 3.

Water. Planets, Plants and People. Papers from a symposium, Canberra, Apr. 1977. A. K. McIntyre, Ed. Australian Academy of Science, Canberra City, 1978. iv, 184 pp., illus. Paper, A\$3.95.

Why Not Say It Clearly. A Guide to Scientific Writing. Lester S. King. Little, Brown, Boston, 1978. xii, 186 pp. Paper, \$5.95.

The Wild Boy of Burundi. A Study of an Outcast Child. Harlan Lane and Richard Pillard. Random, New York, 1979. xvi, 190 pp. + plates. \$10.

Wind Power and Other Energy Options. David Rittenhouse Inglis. University of Michigan Press, Ann Arbor, 1978. x, 298 pp., illus. Cloth, \$16; paper, \$8.50.

Working with Light-Sensitive Materials. Geoffrey Hindley. Van Nostrand Reinhold, New York, 1978. 96 pp., illus. Paper, \$7.95.

World Change and World Security. Norman C. Dahl and Jerome B. Weisner, Eds. MIT Press, Cambridge, Mass., 1978. xxxiv, 174 pp. \$14.95. MIT Bicentennial Studies.

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3½ weeks before. Advertising is accepted only in writing; no abbreviations. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

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1515 Massachusetts Ave., NW
Washington, D.C. 20005

POSITIONS WANTED

Electron Microscopist, Biological. Ph.D., publications. Versatile in methods, instrumentation, and EM laboratory management. Research, service, teaching, collaboration, and problem-solving, from medical to botanical. Box 195, SCIENCE. X

Electron Microscopist, M.S. 1974. Graduate work in microbiology. Five years of experience supervising departmental EM facility in major medical school. Responsibilities include maintenance, teaching, consulting on TEM, ultramicrotomy, freeze-etching, darkroom procedures. Research involves exocytosis in mammalian glands; co-investigator, publications. Seeks supervisory position with opportunity for independent and/or collaborative research in academic or institutional setting. Prefers Atlanta, Richmond, or Lexington areas. Box 199, SCIENCE. X

Field Ecologist. B.S. Field experience in jungle ecology: Ecuador. Broad experience in terrestrial and freshwater ecology: marine plankton surveys. Seeking position in field research. J. Leeds, P.O. Box 349, Fox Lake, Illinois 60020. X

Immunologist/Immunochemist. Ph.D. Seeks new challenge. Four years plus of postdoctoral training in medical school environment; several years of university teaching experience; and 7 years of industrial research and development experience. Will consider any situation offering opportunity for productive growth. Will relocate. Salary and benefits negotiable. Box 196, SCIENCE. X

Pharmacologist/Physiologist. Ph.D. 1977. Broad background in mechanisms of inflammation and anti-inflammation as well as in chemical carcinogenesis and toxicity. Doctoral work in screening of anti-inflammatory agents. Postdoctoral (at present) in mechanisms of skin tumorigenesis using inflammatory mediators, tumor promoters, and anti-inflammatory agents both in vitro and in vivo. Desires research/management in government, industry, or other health-related places. BOX 185, SCIENCE. X

Pharmacologist. Ph.D., 15 years of industrial research and administration, primarily in psychopharmacology. Box 197, SCIENCE. X

POSITIONS OPEN

ANATOMIST. The Department of Anatomy, University of Alabama in Birmingham, invites applications for a tenure-track appointment as an assistant professor available in the fall or winter 1979. Terminal degree is required. Desired research interests are in either the neurosciences or cell biology; utilizing immunological, cell culture, or biochemical techniques. Candidates should be capable of developing an independent research program. Applicants will be expected to have specific training and experience for teaching in one of the following areas: neuroanatomy, histology, or gross anatomy. Applications are especially invited from candidates who can participate in a graduated cell biology course. Send curriculum vitae and names of three references to: **Dr. E. G. Hamel, Jr., Chairman, Department of Anatomy, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294.** The University of Alabama in Birmingham is an Affirmative Action/Equal Opportunity Employer.

Faculty position—**ANIMAL PHYSIOLOGIST** wanted. Instructor/assistant professor. Temporary 1-year appointment beginning August 1979. Ph.D. preferred. Tenure-track search for same position anticipated during 1979–1980. Primary responsibility: to teach undergraduate and graduate courses in vertebrate physiology. Expertise to teach one or more of the following courses is desirable: anatomy and physiology for nursing students, endocrinology, and radiation biology. Supervise undergraduate and graduate research. Send letter of application, résumé, transcripts, and three letters of reference by 20 July to: **Dr. Julius R. Kroschewsky, Chairman, Search Committee, Department of Biological and Allied Health Sciences, Bloomsburg State College, Bloomsburg, Pa. 17815.** Equal Opportunity/Affirmative Action Employer.

The Department of Radiological Sciences invites applications for the position of **ASSISTANT OR ASSOCIATE PROFESSOR** in the **DIVISION OF NUCLEAR MEDICINE** at the University of California, Irvine, Medical Center.

Applicants should be Board-certified in nuclear medicine. Preference will be given to those individuals who are Board-eligible or Board-certified in diagnostic radiology. A large proportion of time in this position will be devoted to research and teaching of medical students, as well as supervisory and administrative duties.

Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

If you are interested in this position, please write to the person listed below, including curriculum vitae, an autobiographical letter, and copies of any publications.

Harris S. Moyed, Ph.D.
Acting Chairman
Department of Radiological Sciences
University of California, Irvine
Irvine, Calif. 92717

Closing date: 31 July 1979.

ASSISTANT PROFESSOR, tenure-track. This position requires a Ph.D. and evidence of productivity in a basic science area related to ophthalmology. Salary dependent on qualifications.

Interested doctors please send curriculum vitae to the following:

Albert M. Potts, Ph.D., M.D.
Professor and Chairman
Department of Ophthalmology
University of Louisville
301 East Walnut Street
Louisville, Kentucky 40202

The University of Louisville is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOCHEMISTRY

Candidate with on-going research program in developmental biochemistry preferred. Teaching strength should be in areas of intermediary metabolism and metabolic regulation. Instruction will be for medical and graduate students. Send résumé and names of three professional references to:

Dr. Gerhard W. E. Pault
Chairman, Department of Biochemistry
Temple University School of Medicine
Philadelphia, Pa. 19140

Temple University is an Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR

Applications are invited for a position at the rank of assistant professor for research in inhalation toxicology with emphasis on physiology of toxicant transport and removal, pulmonary immunology, and inhalation pathophysiology. Requirements include a doctoral level degree, formal postdoctoral study of pulmonary physiology and pharmacology and/or toxicology, and demonstrated research ability as evidenced by a funded independent research program and meritorious publications. Applicants should submit curriculum vitae, a statement of interests, and names of three references to: **Dr. P. L. La Celle, Department of Radiation Biology and Biophysics, University of Rochester, School of Medicine and Dentistry, Rochester, N.Y. 14642.** Applications must be postmarked by 15 July 1979. *The University of Rochester is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF NEUROLOGICAL SURGERY (BIOCHEMISTRY). Applications are requested for the position of assistant professor in the Division of Neurological Surgery, University of Texas Health Science Center at Dallas. Applicants must have a Ph.D. in biochemistry, at least 3 years of proven research capabilities, largely in the field of immunoassay techniques, plus proven ability to work with clinicians. The position is on a tenure-track. Applications should be submitted to: **Dr. Edward A. Newell, Assistant Professor of Neurological Surgery and Biochemistry, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Texas 75235.**

ASSISTANT RESEARCH BIOCHEMIST (\$19,200) ENDOCRINE RESEARCH DIVISION

Applicants must have a Ph.D. in biochemistry or chemistry and 3 years of postdoctoral experience in cellular endocrinology. Expertise is required in steroid hormone receptors, tissue culture, protein chemistry, and radioimmunoassay. *The University of California is an Affirmative Action Employer and all minorities are welcome to apply.* Submit curriculum vitae, references, and letter describing interests to:

John D. Baxter, M.D.
Director, Endocrine Research Division
671 HSE
University of California
San Francisco, California 94143

BIOCHEMIST-ENDOCRINOLOGIST—Positions available at the assistant professor (tenure-track), research associate, or postdoctoral levels. Preference will be given to applicants with a Ph.D. in biochemistry (or its equivalent in training or experience) and particular interests in the biochemistry of reproduction, mechanism of hormone action, hormone receptor interactions and structure-function relationships of the gonadotropins as well as their receptors. Starting can be 1 September 1979, but this is flexible. Please forward curriculum vitae and three letters of recommendation to:

Dr. Leo E. Reichert, Jr.
Professor and Chairman
Department of Biochemistry
Albany Medical College
Albany, New York 12208

Albany Medical College is an Equal Opportunity Employer.

BIOCHEMIST—Junior faculty/research associate. The Department of Neurology, Medical College of Georgia, is seeking a Ph.D. in biochemistry or cell/molecular biology (or related field) to supervise the Neurology Research Laboratory and to serve as consultant for ongoing research in mammalian folate metabolism. Minimal teaching load, with maximal opportunity to pursue independent research. Two-year initial appointment awarded after 1 July 1979. Salary negotiable. Send curriculum vitae and three references to: **Dennis B. Smith, M.D., Chief of Neurology, (127-F) VA Medical Center, Augusta, Georgia 30904.** Equal Opportunity Employer, M/F.

BIOCHEMIST OR MEDICINAL CHEMIST. Research positions available 1 July. Background in enzymology, amino acids or peptides, some microbiology for studies in sulfur amino acid metabolism. Recent Ph.D. applicants considered. Send résumé and references to: **Dr. C. Ressler, Department of Pharmacology, University of Connecticut Health Center, Farmington, Conn. 06032.** Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT RESEARCH NUTRITIONIST

Position available for Ph.D. in biochemistry. Must have at least 5 years of experience involving some aspect of nutrition. Must have a thorough background in separation techniques such as gel filtration, ion-exchange and affinity chromatography, electrophoresis, and isoelectric focusing. Applicants should have expertise and research publications in the chemistry of human milk with special emphasis on proteins and trace elements. Experience is also desirable in studies with human subjects and with trace element research using animal models. Applicants should submit curriculum vitae, list of publications, and names and addresses of three references, to be sent to:

Dr. Lucille S. Hurley
Department of Nutrition
University of California
Davis, California 95616

Closing date is 23 July 1979. Position available 1 January 1980.

The University of California is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

ASSISTANT RESEARCH PHYSIOLOGIST position available 1 September 1979 for a recent Ph.D. in biophysics or bioengineering. Research projects involve recording with ion-specific and oxygen-sensitive microelectrodes from intact mammalian eyes. Background in biophysics or bioengineering, microelectrode techniques, and mammalian retinal physiology required. Previous postdoctoral experience desirable. Send curriculum vitae to: **Dr. Roy H. Steinberg, Department of Physiology, University of California, San Francisco, Calif. 94143.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT SCIENTIFIC DIRECTOR NATIONAL PANCREATIC CANCER PROJECT

Full-time position, Ph.D. and/or M.D.; background experience in pancreatic cancer research. University title; salary dependent upon qualifications and background. Apply with curriculum vitae to: **Isidore Cohn, Jr., M.D., Louisiana State University Medical Center, 1542 Tulane Avenue, New Orleans, La. 70112.** An Equal Opportunity Employer.

ASSOCIATE DIRECTOR-RESEARCH—Immediate opening for qualified person to assume position in medical research foundation. Duties to include all phases of operation and management—grants management, drug company research, government regulation assurances, fiscal management, and plant operation. Research management desirable but not necessary. Correspondence should be sent to: **Robert Payne, Marshfield Medical Foundation, Inc., 510 North St. Joseph Avenue, Marshfield, Wis. 54449.** An Affirmative Action/Equal Opportunity Employer.

BIOCHEMICAL DETERMINANTS OF ADDICTIVE BEHAVIOR IN MICE AND MEN are under study at Rockefeller University. Recent doctoral graduates (Ph.D. and M.D.) are invited to apply. The position involves no routine responsibilities, but requires initiative and research ability. The stipend is competitive. If interested, send curriculum vitae and other relevant information to: **Vincent Dole, M.D., Rockefeller University Hospital, New York, N.Y. 10021.**

BIOCHEMICAL GENETICIST OR BIOCHEMIST with experience in DNA technology. Research faculty position in Center for Inherited Diseases. Opportunity for independent research and/or collaboration in ongoing programs in mammalian, human, and medical genetics. Please apply to: **Dr. A. G. Motulsky, Center for Inherited Diseases, University of Washington School of Medicine, Seattle, Wash. 98195.** An Equal Opportunity/Affirmative Action Employer.

STATISTICAL HUMAN GENETICIST. Research faculty position at assistant or associate professor level in Center for Inherited Diseases. Independent research experience and publication required. Position involves data analysis and experimental planning, independent research in human statistical or population genetics, and statistical consultations in human genetics. Excellent opportunities for interaction with human and medical genetics, biostatistics, and statistics. Please apply to: **Dr. A. G. Motulsky, Center for Inherited Diseases, University of Washington School of Medicine, Seattle, Wash. 98195.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOCHEMIST

Ph.D. to assume project responsibilities in challenging basic flavor chemistry research program. Strong academic and research experience required in enzymology, fermentation biochemistry, and natural product isolation for research on reaction mechanisms involved in formation of food flavor compounds.

Our facilities are highly instrumented for all phases of basic flavor research including GC/MS, HPLC and FT/NMR, with extensive computer capabilities.

Modern research facility located in north suburban Chicago. Please send confidential résumé to:

Director of Personnel Administration



**Research & Development
801 Waukegan Road
Glenview, Illinois 60025**

An Equal Opportunity Employer, M/F

BIOMEDICAL MASS SPECTROSCOPIST (Ph.D.) wanted immediately. Duties include planning and execution of multiple research programs involving application of gas chromatographic mass spectrometric techniques to biomedical and environmental problems. Salary: \$15,000 per annum. Please send résumés to: **The Oregon Graduate Center, 19600 N.W. Walker Road, Beaverton, Ore. 97005, Attention: Joanne Brink, Personnel Administrator. Affirmative Action/Equal Opportunity Employer.**

BIO-TECHNICAL ASSISTANT

B.A. in biology with some chemistry background; laboratory experiences highly desirable; Possession of sign language skills. Qualified individuals without these skills must attend orientation or sign language program for training in sign language and finger spelling. Salary: \$10,000 to \$12,000.

Please submit curriculum vitae, including transcript, and two letters of reference to:

**Chairman, Biology Department
P.O. Box 138
Gallaudet College
7th Street and Florida Avenue, NE
Washington, D.C. 20002**

Equal Opportunity Employer

CELL BIOLOGY—HISTOLOGY

A position is available in the area of cell biology and histology at the assistant or associate professor level in the Department of Anatomy, University of Virginia. Candidates should have at least 2 years of postdoctoral experience. Teaching responsibilities include histology for first year medical students. The department stresses research and the candidate is expected to maintain an independent program of investigation. Interested persons should send their curriculum vitae and the names of three references to: **Chairman, Department of Anatomy, Box 439, University of Virginia Medical Center, Charlottesville, Virginia 22908.**

An Equal Opportunity/Affirmative Action Employer

WASHINGTON STATE UNIVERSITY

DIRECTOR, ELECTRON MICROSCOPE CENTER. The center provides transmission and scanning electron microscope services to the campus. Candidates must have significant research accomplishments, demonstrated competence in electron microscopy, and a record of success in obtaining research support. Ph.D. degree, preferably in a biological science, is required. Position is available 16 September 1979; consideration of candidates to begin 30 June 1979. Salary open. Detailed position description available upon request.

Applications/nominations, which must include résumé and names of three references, should be addressed to:

**C. J. Nyman, Dean
Graduate School
Washington State University
Pullman, Washington 99164**

Washington State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and handicapped persons are encouraged to apply.

EXECUTIVE POSITION as Associate Chief of Staff for Research at a large VA Medical Center with close affiliation with a new medical school is available to a licensed physician with Board Certification and demonstrated experience in research. Faculty appointment and salary commensurate with qualifications and experience. The School of Medicine and VA Medical Center are E.O.E. and Affirmative Action Employers. Apply with resume to: Chief of staff, VA Medical Center, 4100 West Third St., Dayton, Ohio 45428 or Associate Dean for Academic Affairs, Wright State University School of Medicine, P.O. Box 927, Dayton, Ohio 45435.

EXECUTIVE POSITION as Associate Chief of Staff for Education at a large VA Medical Center with close affiliation with a new medical school. Successful applicants must hold the M.D. degree, be Board Certified and licensed. Preference will be given to individuals experienced in undergraduate and graduate medical education and administrative interests. Nominations and applications to include a curriculum vitae and the names and addresses of three references should be sent to the Chief of Staff, VA Medical Center, 4100 West Third St., Dayton, Ohio 45428 or to the Associate Dean for Academic Affairs, Wright State University School of Medicine, P.O. Box 927, Dayton, Ohio 45435. The School of Medicine and the VA Medical Center are E.O.E. and Affirmative Action Employers.

VETERINARY PATHOLOGIST

Tracor JITCO, prime contractor for the NCI Carcinogenesis program, has a position for a DVM Pathologist to assist in the management of a program of national importance and outstanding professional development. Located in Rockville, Maryland, this person will interact with the Pathologist of NCI, their contractors and Tracor JITCO sub-contractors. Board certification is not required; however, board eligibility is desirable. Experience in rodent, pathology and/or advance degree would be beneficial. The need is immediate with salary commensurate with experience. Relocation paid. Attractive benefits package with a company expanding in the Life Sciences area. Hands on Practice, a heavy part of the position with responsibility for the day to day management of quality control program. Involving the Pathology output of numerous sub-contractor laboratories.

Please forward curriculum vitae to:

**Ronald L. Schueler DVM Ph. D.
TRACOR JITCO, INC.
1776 E. Jefferson Street
Rockville, Maryland 20852
(301) 881-2305**

An Affirmative Action/Equal Opportunity Employer

Director Chemical Research

Ann Arbor, Michigan

The Pharmaceutical Research Division of Warner-Lambert is seeking an outstanding medicinal chemist to head its Department of Chemistry and lead a large team of organic, physical and analytical chemists in the exciting and demanding job of finding new and effective medicines.

Current emphasis is in the areas of Anti-infective, CNS, Cardiovascular, Anti-allergic and Immunoregulatory drugs.

The research facilities located in Ann Arbor, Michigan, are among the finest and best equipped in the world.

The successful applicant will have:

- An outstanding record of achievement in some area of medicinal chemistry, particularly in relation to the discovery of new drugs.
- A broad knowledge of medicinal chemistry as well as the research-related biological and clinical skills.
- Management and leadership skills, with abilities to encourage innovation and motivate the staff to a high level of performance.

and be responsible for:

- Ensuring a high level of scientific skills in the synthesis of potential new medicinal compounds.
- The functioning of related areas of analytical and physical chemistry.
- Some large scale preparations.

The Director of Chemistry will report to the Vice President of Preclinical Research and work closely with the Director of Pharmacology and the Director of Toxicology as well as members of the Clinical Research Group.

Join the exciting Research and Development Team at Warner-Lambert in this very key position and enjoy outstanding compensation, benefits and work environment.

Send your resume and salary history/requirements in confidence to:

**Mr. D. Misner
Personnel Supervisor
WARNER-LAMBERT RESEARCH LABS
2800 Plymouth Road
Ann Arbor, Michigan 48106**

An Equal Opportunity Employer M/F



Warner-Lambert

POSITIONS OPEN

DIRECTOR, Headlands Campus of Yosemite Institute, located in Golden Gate National Recreation Area near San Francisco. Will oversee administration, sales, and operations of facility with 15 staff and 4000 students annually in outdoor environmental education programs. Prefer advanced degree, educational, natural history, and outdoor skills, and sales and management background; \$18,000 to \$20,000. Write: **Executive Director, Yosemite Institute, P.O. Box 487, Yosemite, Calif. 95389.**

Position available for **ELECTRON MICROSCOPIST**. Experienced in nucleic acid spreading techniques to study protein-nucleic acid interactions. Reply to:

B. F. Erlanger, Ph.D.
Columbia University
College of Physicians and Surgeons
Department of Microbiology
701 West 168 Street
New York, New York 10032

POSITIONS OPEN

FACULTY POSITION IN DERMATOLOGY—The Department of Dermatology, University of Michigan Medical School, is searching for a dermatologist to develop a training program in dermatologic surgery. This will involve the teaching of surgery to residents and the integration of surgical material from several hospitals. An interest in prospective clinical research as it pertains to surgery and cutaneous oncology is essential. The candidate must be Board-eligible or Board-certified in dermatology and possess documentable special expertise in dermatologic surgery. Title and salary are negotiable, from instructor through the full professor level. The position is available now and we wish to fill the position prior to July 1981. Address applications, including curriculum vitae, to: **Dr. John J. Voorhees, Department of Dermatology, University of Michigan Medical School, Room C-2064 Outpatient Building, Ann Arbor, Michigan 48109. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF PHYSIOLOGY

The Medical College of Wisconsin is searching for a chairperson for the college's Department of Physiology. Applications are sought from individuals with the highest academic credentials in teaching and research with demonstrated leadership ability and administrative skills. The Medical College is a private, free-standing school of medicine located on the 1000-acre campus of the growing Milwaukee Regional Medical Center. The Physiology Department presents course work for medical students and trains postdoctoral fellows and graduate students. The department is housed in the college's new 427,000 square foot Medical Education Building which is adjacent to two of the college's major teaching facilities: The Milwaukee County General Hospital and the new Froedtert Memorial Lutheran Hospital, a private, tertiary care hospital scheduled to open in the spring of next year. Please submit inquiries and curriculum vitae by 31 August 1979 to: **James M. Fujimoto, Ph.D., Chairman of the Physiology Search Committee, Department of Pharmacology and Toxicology, The Medical College of Wisconsin, P.O. Box 26509, Milwaukee, Wisconsin 53226. The Medical College is an Equal Opportunity/Affirmative Action Employer.**

CURATORIAL ASSOCIATE (INVERTEBRATE TAXONOMIST)

Responsible for maintenance of large invertebrate collections; assists three curators, supervises assistants; arranges loans, aids visitors and students, sorts and accessions new material. M.S. or equivalent. Preference will be given to candidates with knowledge of crustaceans or coelenterates and with museum experience. Curatorial associates are career administrative positions and are not on the academic ladder. Closing date: 15 July 1979. Appointment can take effect immediately. Applicants should send curriculum vitae, statement of relevant experience and interests, and names of three references to: **Invertebrates, Museum of Comparative Zoology, Harvard University, Cambridge, Mass. 02138. Harvard is an Equal Opportunity/Affirmative Action Employer.**

EDITORIAL

Science writer needed for position as assistant editor of monthly science magazine directed toward high school and lay audience. Degree in chemistry or physics required, along with experience in journalism. Please send résumé, clips, and salary history to:

**Personnel Department
AMERICAN CHEMICAL SOCIETY
1155 16th Street, NW
Washington, D.C. 20036
Equal Opportunity Employer**

ENVIRONMENTAL MICROBIOLOGIST. Beginning 14 August 1979. Rank: assistant professor. This position will be filled either on a temporary or on a permanent, tenure-track basis. A completed Ph.D. degree is required. For a tenure-track appointment, applicants should have a proven record of training and research in the environmentally oriented aquatic microbiology, including publications in the area. Postdoctoral experience is preferred. The successful candidate for a tenure-track appointment should expect to participate in an environmental biology program, to secure research funding from outside agencies, to direct the work of graduate students in microbiology, and to teach undergraduate and graduate courses in microbiology. Salary: competitive. Qualified persons should send complete curriculum vitae, copies of relevant publications, and three letters of reference, as well as names and addresses of references, to: **Dr. H. Bailey Ward, Chairman, Microbiology Search Committee, Department of Biology, University of Mississippi, University, Miss. 38677. To insure consideration, complete applications should be submitted before 20 July 1979. Equal Opportunity Employer, M/F/H.**

FACULTY EXTENSION POSITION in dairy science-animal science. Applications are invited for persons with a Ph.D. degree in ruminant-dairy nutrition. Responsibilities include extension teaching, development of educational materials and programs on a state-wide basis as relates to dairy nutrition, and management and continuing education programs for professional animal nutritionists. Apply with résumé to: **Dr. S. A. Ewing, Head, Department of Animal Science, Iowa State University, Ames, Iowa 50011. Affirmative Action/Equal Opportunity Employer.**

ACADEMIC VICE PRESIDENT and PROVOST

Tufts University

Tufts University, founded in 1852, is an independent nonsectarian university offering degrees at both undergraduate and graduate levels in a variety of liberal arts and professional areas. On the campus in Medford, Massachusetts, are 4650 students and 370 faculty members in the College of Liberal Arts, Jackson College for Women, the College of Engineering, and the Fletcher School of Law and Diplomacy. At the Boston campus, the Schools of Medicine and Dental Medicine enroll 1200 students and draw on the services of 2700 faculty members at the schools and at associated New England hospitals. The Graduate School of Arts and Sciences and the College of Special Studies, with 1300 students, function on both campuses. New ventures include a school of Veterinary Medicine, Nutrition Institute, and Nutrition Research Center.

The academic vice president and provost is responsible to the president for the academic administration of the university; for achieving and maintaining the highest standards for faculty, students, and academic programs; and, collaboratively with other university officers, for assessing, planning, and developing such changes as may be desirable in these areas.

The Search Committee seeks candidates with a distinguished career in teaching, scholarship and research/publication, who have demonstrated their imagination and skill in academic administration and professional leadership. Earned doctorate or equivalent required. Substantial experience in obtaining external support and in administering in multiunit institution desirable.

Position available immediately.

Send résumé or nomination no later than 31 July 1979 to: **Academic Vice President, Search Committee, President's Office, Tufts University, Medford, Massachusetts 02155.**

An Equal Opportunity/Affirmative Action Employer

TUFTS
university

POSITIONS OPEN

ELECTRONIC ENGINEER

For the Department of Physiology and Biophysics. Responsibilities include design, construction, and modification of apparatus; maintenance and troubleshooting; limited instruction of graduate students. Reply to:

Dr. William G. Van der Kloot, Chairman
Department of Physiology and Biophysics
Health Sciences Center

State University of New York at Stony Brook
Long Island, N.Y. 11794

Equal Opportunity/Affirmative Action Employer

FACULTY POSITIONS IN IMMUNOLOGY

The Department of Microbiology and Immunology invites application for four openings at the assistant/associate/full professor level in a newly formed Section of Immunology. Applicants must have a doctorate degree (or equivalent) and postdoctoral training in molecular or cellular immunology or immunogenetics. Preference will be given to individuals whose research deals with structure, function, and regulation of lymphocyte genes, lymphocyte cell surface receptors or antigens, structure-function properties of lymphocyte membranes, and regulation of lymphocyte functions. The applicants must have an interest in and be able to teach medical and graduate students and have a desire for career development in a university/medical school setting. Send curriculum vitae, brief summary of present and future research, and names and addresses of three references to: **J. L. Claffin, Department of Microbiology and Immunology, 6643 Medical Science Building II, The University of Michigan Medical School, Ann Arbor, Michigan 48109.** *The University of Michigan is a nondiscriminatory, Affirmative Action Employer. Code 200B0, 300F0, 400F0, 500F0.*

FACULTY POSITIONS—Two postdoctoral-level positions for Ph.D.'s are available in the Division of Clinical Chemistry, Department of Pathology, University of Pittsburgh School of Medicine. Candidates must have a record of scientific achievement, particularly in the field of lipoprotein/cholesterol metabolism and techniques of instrumental analysis. Reply with curriculum vitae to: **Dr. Ajit Sanghvi, Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION—A faculty position is available at the assistant professor level for an M.D. clinical pathologist in a university health center clinical chemistry laboratory. A record of scientific achievement and continuing program of research in biochemistry and/or experimental pathology is a must. Experience in clinical chemistry helpful. Reply with curriculum vitae to: **Dr. Ajit Sanghvi, Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.** *An Equal Opportunity/Affirmative Action Employer.*

LABORATORY DIRECTOR

Director of the Division of Clinical Microbiology and Immunology, Department of Laboratories, Erie County, Buffalo, New York. M.D., Ph.D., or an equivalent degree with at least 6 years of experience, will be employed starting 1 September 1979. Salary will be \$27,000 to \$40,000, dependent on qualifications. The director will be responsible for supervising diagnostic work of selected laboratories in the division, interpretation of more complex results, consultations within the clinical staff, administration of the entire division, training of postdoctoral fellows in clinical microbiology and immunology, and in-service training and continuing education of the laboratory staff. The division is housed in the Erie County Medical Center and has space of approximately 10,000 square feet. It consists of the laboratories of bacteriology, mycology, virology, and immunology. If qualified, the director will receive a geographic full-time academic appointment in the Department of Microbiology, School of Medicine, State University of New York at Buffalo, at the rank of associate or full professor, and will be assigned a research laboratory of 1000 square feet. Applications should be addressed to the chairman of the search committee: **Dr. Felix Milgrom, Department of Microbiology, State University of New York at Buffalo, School of Medicine, 203 Sherman Hall, Buffalo, N.Y. 14214.**

The Department of Laboratories of Erie County is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

POSITIONS OPEN

IMMUNOPATHOLOGIST with demonstrated research accomplishments. Faculty position with clinical laboratory responsibilities. Contact: **J. E. Craighead, Department of Pathology, University of Vermont, Burlington, Vermont 05405.**

An Equal Opportunity Employer

IN-STATE COORDINATORS. The Nature Conservancy has positions with anticipated ecological inventory programs in several states. Duties: establish in-state center, help prepare classification and data management systems, collect data, plan, budget. Training provided. M.S. or Ph.D. in life sciences preferred; administrative ability; \$13,000 to \$17,000 range plus all benefits. *Equal Opportunity Employer.* Send résumé to: **1800 North Kent Street, Number 800, Arlington, Va. 22209.**

POSITIONS OPEN

MARINE BIOLOGY FACULTY POSITION

Assistant professor of fisheries biology. A doctorate in biology is required with strength in fisheries biology/ichthyology and interests in marine ecology, oceanography, and limnology. To teach and direct student research in an undergraduate marine biology program on the southern coast of Maine.

Employment begins 6 September 1979. Salary from \$12,000, depending on qualifications and experience.

Please send letters of application, résumé, and supporting letters by 20 July 1979 to:

Office of Academic Dean
UNIVERSITY OF NEW ENGLAND
Undergraduate College
605 Pool Road
Biddeford, Maine 04005

The University of New England is an Equal Opportunity Employer.

Universiteit van Amsterdam

School of Dentistry

is seeking qualified applicants for the full-time position of

Professor (m/f) in the department of Function of the Masticatory System.

The responsibilities include teaching in the field of Function of the Masticatory System and its clinical application as well as conducting, stimulating, and co-ordinating research in this area. Further responsibilities involve participation in the administrative and organizational activities of the department and the school of dentistry.

Requirements for this position include competency in teaching and ample experience in education; broad experience in conducting scientific research in the field of Function of the Masticatory System as evidenced by a thesis, articles in specialty journals, and further publications; and good organizational ability.

In the event the candidate selected for this professorship is unfamiliar with the Dutch language, it is expected that he/she learns to reasonably master the language within two years.

The salary for this position lies, in principle, between a minimum of 5,957.- and a maximum of 8,510.- Dutch Guilders a month (salary-scale as of 1 August 1978), dependent upon years of experience. In very exceptional circumstances, as determined by the Executive Board of the University, the prospect of reaching a maximum salary of 10,514.- Guilders a month can be offered.

Applicants for this position are requested to send their letter of application, accompanied by their curriculum vitae, list of publications, and references to the

Chairman of the Selection Committee, Dr. L. Coppes,
Gebouw Tandheelkunde,
Louwesweg 1, 1066 EA Amsterdam, The Netherlands.

For those who wish to draw the attention of the Selection Committee to certain possible candidates, this can be done by sending such information to the same address as above.

POSITIONS OPEN

FISH NUTRITION. A research position is now open at East Carolina University for a fish nutritionist. Initially, responsibilities of the position will be: (i) to establish a research program on the nutrition of the American eel, and (ii) to provide technical expertise on nutritional problems of an ongoing eel aquaculture program. Opportunities for nutritional studies of other species will be developed. The initial term of appointment will be 3 years. Submit résumé to: **William H. Queen, Institute for Coastal and Marine Resources, East Carolina University, Greenville, North Carolina 27834.** An Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGIST/VIROLOGIST

Tenure-track position in a Department of Biology available September 1979. Background in medical microbiology also desired. Demonstrated teaching and research ability, publications and/or evidence of other scholarly contributions preferred. Doctorate required. Send résumé to: **Chairman, Search and Selection Committee, Department of Biology, Ball State University, Muncie, Ind. 47306.** Application deadline: 20 July 1979.

Ball State University practices Equal Opportunity in education and employment.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Two positions available immediately for **INSTRUCTOR/ASSISTANT PROFESSOR** in the Department of Pathology. Duties include teaching, research, and service responsibilities in the Department of Pathology. Candidate must have interest and some experience in clinical research. Seeking individual with M.D., Board-certified or -eligible in clinical and anatomic pathology. Reply to: **Box 198, SCIENCE.** Code 100B0, 1500H0. A nondiscriminatory, Affirmative Action Employer.

LIPID CHEMISTRY (FOOD)

General Foods, Limited, in Canada, seeks a person with graduate training in lipid chemistry with a solid undergraduate background in chemistry or biochemistry. Familiarity with membrane (protein-lipid interactions) is considered essential. The level of the position is flexible depending upon background and qualifications.

This position is in a research department of approximately 70 people, located in a community of 12,000 people about 70 miles east of Toronto on Lake Ontario.

Interested candidates should send résumés of education and experience to:



**General Foods, Limited
Research Department
520 William Street
Cobourg, Ontario, Canada
K9A 4L4
Attention: P. Vasos**

MARINE FISHERIES. Faculty position in marine fisheries. Joint appointment between academic programs (75 percent) and extension (25 percent). The academic requirement will be one course per semester with complement of graduate students. Duties will be to coordinate undergraduate cooperative education program and master of agriculture degrees program in wildlife and fisheries sciences, provide leadership in fisheries research and extension program. Requires a Ph.D. degree in a related field. Preference to successful research experience in coastal and/or off-shore fisheries. Salary and rank negotiable. Applications received through 1 July 1979. Submit curriculum vitae, three letters of recommendation, publication list, and statement of research interests to: **Head, Wildlife and Fisheries Sciences Department, Texas A & M University, College Station, Texas 77843.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW. Position available in Immunology Research Unit beginning 1 July 1979 or later. Research in immunologic aspects of occupational lung disease studying involvement of immunopharmacologic, environmental, and host factors. Send curriculum vitae, publications, and names of three references to: **Director of Training Program, Clinical Immunology Unit, Environmental Sciences Building, Tulane University Medical Center, 1700 Perdido Street, New Orleans, La. 70112.** An Equal Opportunity Employer.

POSITIONS OPEN

MARINE STUDIES DIRECTOR. Available August 1979. Requirements: Ph.D. in science, oceanography, or engineering; experience in basic and applied marine research areas; proven grantsmanship history; and administrative experience. Responsibilities include promoting and facilitating internally and externally marine science and oceanography activities on a school-wide basis among several departments and across disciplines. Also responsible through a manager for an Applied Marine Laboratory. Will report to the dean of School of Sciences and Health Professions. Twelve-month appointment with salary open. Send résumé and three letters of reference by 1 August 1979 to: **Dr. Thomas P. Wallace, Dean, School of Sciences and Health Professions, Old Dominion University, Norfolk, Va. 23508.** An Affirmative Action/Equal Opportunity Employer.

NEUROPHYSIOLOGIST

The Department of Animal Physiology at the University of California, Davis, invites applications for a faculty position in neurophysiology. The position is available immediately and must be filled by 30 September 1980. Minimum qualifications include a Ph.D. and a demonstrated ability to conduct high quality research in neurophysiology. The successful applicant will be expected to teach courses in neurophysiology and to maintain an active research program. The appointment will be made on an 11-month basis at the rank of professor, associate professor, or assistant professor, depending on background and experience. Applicants should submit curriculum vitae, bibliography, recent reprints, the names of at least three references; and any other supporting material to: **A. J. Sillman, Chairman, Neurophysiology Search Committee, Department of Animal Physiology, University of California, Davis, California 95616.** Closing date for applications is 15 September 1979.

The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.

FIRST YEAR POSTDOCTORATE ORGANIC RESEARCH

Position available immediately for work on structures formed by pyrolysis of proteins and when they are subsequently activated by microsomes. Opportunity to learn biological assay of genes in isolated DNA. Send letter, curriculum vitae, and three references to:

**Dr. Roger M. Herriott
Department of Biochemistry
The Johns Hopkins University
615 North Wolfe Street
Baltimore, Maryland 21205**

An Equal Opportunity/Affirmative Action Employer

PERINATAL-FETAL PHYSIOLOGIST

A full-time academic position is currently available in the Department of Obstetrics and Gynecology. The position will involve both teaching and research work and the rank and salary are dependent upon prior experience. If interested, please send curriculum vitae and bibliography to:

**William N. Spellacy, M.D.
Professor and Head
Department of Obstetrics and Gynecology
University of Illinois at the Medical Center
840 South Wood Street
Chicago, Illinois 60612**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available for recent Ph.D. in pharmacology or biochemistry with background in cellular pharmacology and familiarity with cell culture techniques. Experience with protein purification, PAGE, or transport studies helpful. Send curriculum vitae, area of interest, and names and phone numbers of three references to: **Chairman, Department of Pharmacology, Uniformed Services University, 4301 Jones Bridge Road, Bethesda, Md. 20014.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study control of gene expression and steroid hormone/chromatin interactions in cultured human and mouse mammary tumor cells. Applicant must have strong biochemical background. Experience with fractionation techniques, nucleic acid hybridization, steroid hormones, antibody production and/or tissue culture desirable. Send résumé, three letters of recommendation, and college transcript to: **Dr. Fred R. Frankel, 249 Johnson Pavilion, University of Pennsylvania, Philadelphia, Pa. 19104.**

POSITIONS OPEN

WEST VIRGINIA UNIVERSITY SCHOOL OF PHARMACY

A **PHARMACOKINETICS** faculty position is available 1 July 1979. A professional education in pharmacy is desirable; a Ph.D. in an area of biopharmacy is essential. Responsibilities include research and teaching at both the undergraduate and graduate levels. This is a 12-month tenure-track position with rank and salary open. *West Virginia University is an Affirmative Action/Equal Opportunity Employer.* Send curriculum vitae and references to: **Carl J. Malanga, Ph.D., West Virginia University School of Pharmacy, Medical Center, Morgantown, W. Va. 26506.** Telephone: 304-293-5101.

PLANT COMMUNITY ECOLOGIST ASSISTANT PROFESSOR

Beginning fall 1979. One-year temporary position with a possibility of renewal of a tenure-track position. Qualifications: Ph.D. in biology, teaching general ecology, earth science, general biology, and an elective in the area of specialization. Submit letter of application and résumé to: **Larry Fitzpatrick, Director of Personnel, Saginaw Valley State College, 2250 Pierce Road, University Center, Michigan 48710.** For full consideration, applications must be received by 15 July 1979. *Saginaw Valley State College is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in recombinant DNA research available immediately for 2 to 3 years. Research projects include: (i) organization and expression of genes for prolactin, growth hormone, and other mammalian pituitary hormones, (ii) structure and function of kinetoplast DNA, and (iii) regulation of several yeast gene systems. Send résumé and three letters of reference to: **Dr. John E. Donelson, Department of Biochemistry, University of Iowa, Iowa City, Iowa 52242.** The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in metal toxicology, supported by NIEHS training grant, available immediately. Candidate should have a Ph.D. in biomedical sciences. Experience with isolated organ perfusion techniques, toxicokinetics, or pulmonary toxicology preferred. Applicant should send a letter describing career goals, curriculum vitae, and names of three references to: **Dr. John M. Frazier, Department of Environmental Health Science, Johns Hopkins University, 615 North Wolfe Street, Baltimore, Md. 21205.**

POSTDOCTORAL. Position available immediately to study myocardial cell injury following ischemia. Applicants should have background in physiology, biochemistry, or electron microscopy. Starting salary: \$11,000 to \$12,500. Send current curriculum vitae and the names of two references to:

**Dr. M. Ashraf
Department of Pathology
University of Cincinnati Medical Center
Cincinnati, Ohio 45267**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION—An individual with a background in medicinal chemistry or organic synthesis is sought for a project involving the synthesis and biological evaluation of α -amino sulfonamides. Salary: \$12,000 per year. The initial appointment is for 1 year but may be extended for up to 3 years. Contact: **Dr. W. F. Gilmore, Department of Medicinal Chemistry, University of Mississippi, University, Mississippi 38677.** Telephone: 601-232-7101. Application deadline: 25 July 1979. *Equal Opportunity Employer, M/F/H.*

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for research in immunopathology of insulin-dependent diabetes. Experiments involve identification and biogenesis of cell-membrane antigens. Strong background in biochemistry desirable. Candidates are welcome to spend 1 to 3 years in our laboratory. Please send application to: **Dr. Åke Lernmark, The Steno Memorial Hospital Research Laboratory, DK-2820 Gentofte, Denmark.**

POSTDOCTORAL RESEARCH ASSOCIATE. Tissue culture studies of neuron target cell interaction and pineal and sympathetic neuron development in vitro. Biochemist or neuropharmacologist. Salary commensurate with qualifications. Possibility of non-tenure-track faculty appointment. **Vernon D. Rowe, M.D., Neurology Department, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, Kan. 66103.** An Equal Opportunity/Affirmative Action Employer.

SOLICITATION OF PROPOSALS

The U. S. Army is soliciting proposals on absorption, distribution, metabolism, excretion and pharmacokinetic studies in animals for investigational new drugs and studies as required to define more completely the fate of the new drugs. The primary purpose of the studies is to define and understand the fate of these investigational new drugs to ensure their safe, effective administration and use in human beings. These studies must be in compliance with the Good Laboratory Practice Regulations. Interested respondents should write for Request for Quotation #DAMD17-79-Q-9015 to the U. S. Army Medical Research and Development Command, Attn: SGRD-RMA (Michael F. Travis), Fort Detrick, Frederick, Maryland 21701.

Pubblicazioni della Stazione Zoologica di Napoli

The Zoological Station of Naples is pleased to announce that its journal *Pubblicazioni della Stazione Zoologica di Napoli* (P.S.Z.N.) will resume publication. The P.S.Z.N. will be divided into two sections: I. Marine Ecology and II. History and Philosophy of the Life Sciences.

Marine Ecology is devoted to promoting, through the recent move marine biologists have made towards its intimate environment, scientific knowledge of the living sea. Contributions are therefore invited from all those disciplines that promote ecological understanding of marine natural systems, particularly by direct observation or by *in situ* experiments, from the single species to the overall system of the ocean. Marine Ecology is published twice yearly, in March and October. The first volume will appear in March, 1980. Editor-in-Chief: R. Riedl, Zoological Institute, Währingerstrasse 17/A, 1090 Vienna, Austria.

If philosophical reflection can and must guide historical investigation, it is not less true that the philosophy of science can and must feed itself upon and allow itself to be modelled by historical research. H.P.L.S. welcomes original contributions on historical development, the social, philosophical and epistemological implications of the life sciences and techniques. The main concern of the journal is modern western scientific thought, but there is no limit regarding chronology, or the scientific nature of the subject or its cultural area. H.P.L.S. is published twice yearly, in June and December. The first volume will appear in June, 1979. Editor-in-Chief: M.D. Grmek, 10, Rue de Savoie, 75006 Paris, France.

Further information concerning editorial policy can be obtained from the Editorial Office: Stazione Zoologica, Villa Comunale, 80121 Naples, Italy. Publisher: Leo S. Olschki, P.O.B. 66, 50100 Florence, Italy, to whom also requests concerning back issues should be addressed.

U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

The National Highway Traffic Safety Administration (NHTSA) is seeking highly qualified candidates for the position of **CHIEF, TECHNOLOGY ASSESSMENT DIVISION**, GS-0801-16, annual salary \$44,756, located in Washington, D.C. (This position will be in the Senior Executive Service after 13 July 1979.)

The successful candidate will be the chief of the division which is assigned the function of providing technical assessment for the planning and development of rulemaking and other actions necessary for the implementation of the administration's programs. Incumbent is responsible for formulation and conduct of research, development, test and evaluation programs in areas of automotive and industrial engineering, the technology of the automotive industry and its suppliers, and related areas of the industry's activities.

The following requirements are mandatory:

- 1) An engineering degree at the bachelor or higher level, and
- 2) A minimum of 3 years of progressively responsible experience that has demonstrated a thorough familiarity with research programs; development of data bases and analytical tools; managing economic and engineering analysis and assessment of policy options and documenting the results.

The following requirements are desirable:

- 1) A degree in mechanical or automotive engineering,
- 2) An advanced degree in economics or business administration, and
- 3) Experience that demonstrates a knowledge of the automotive manufacturing process.

If you can satisfy the above, submit a completed Personal Qualifications Statement, Standard Form 171, to the address listed below.

Standard Form 171 may be obtained from any Federal Job Information Office or by calling our Office of Personnel on 202-426-0988. The candidate selected will be given a career appointment in the Senior Executive Service.

Applications for this position must be postmarked no later than 30 days after publication and sent to:

National Highway Traffic Safety Administration
Office of Personnel, Room 5306
400 Seventh Street, SW, Nassif Building
Washington, D.C. 20590
Attention: Code 800

NHTSA is an Equal Opportunity Employer

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad, India, needs the following personnel to work in West Africa.

PLANT BREEDER (PEARL MILLET). Responsible for planning and conducting research, in cooperation with a team of international scientists, to develop varieties and advanced breeding materials. Qualifications: Ph.D. in plant breeding with excellent academic record; at least 5 years of research experience in plant breeding, preferably of millet, as evidenced by publications/reports, and in organization and coordination of research. Knowledge of modern techniques in crop improvement and experience of semi-arid tropics would be advantageous. Bilingual ability in English and French preferred.

SOIL AND WATER ENGINEER. Responsible for collection, analysis, and interpretation of research information in management of natural resources and for evaluation of representative farming systems existing in the region. Qualifications: doctorate with an excellent academic record in soil and water engineering, soil physics, or agricultural engineering, with substantial formal training in hydrology; proven ability for teamwork with other scientists in interdisciplinary research programs. Experience in agricultural research pertaining to less developed countries of the semi-arid tropics, at least 5 years of postdoctoral research experience, and ability to speak and write French would be advantageous.

AGRONOMIST. Responsible for devising and executing research programs on cropping systems, soil fertility, and soil management for pearl millet, groundnut, and other crops in the region, in consultation with a team of international scientists. The research will be aimed at developing systems of farming which increase and stabilize yields. Qualifications: Ph.D. in agronomy or associated science; 7 years of experience in agronomic research; ability to lead a team of scientists in interdisciplinary research. Experience in agricultural research in less developed countries of the semi-arid tropics, knowledge of ICRISAT's farming systems research, and fluency in French would be desirable.

Salary commensurate with qualifications; excellent fringe benefits.

Send résumé by 15 September 1979 to: Director, ICRISAT, 1-11-256, Begumpet, Hyderabad 500 016, India.

POSITIONS OPEN

PAPANICOLAOU CANCER RESEARCH INSTITUTE Applications are invited for Postdoctoral Research Associates

To work with Dr. F. Ahmad on (i) isolation, characterization, and control properties of enzymes involved in fatty acid metabolism in bacteria, and (ii) to work on a neurochemical project involving identification and eventual characterization of a number of enzymes considered to be present in central nervous system myelin, protein kinase(s), and phosphoprotein phosphatase(s).

Applications, which should include curriculum vitae and the names and addresses of three referees, should be sent by 1 August 1979 to: **Dr. F. Ahmad, P.O. Box 016188, Miami, Florida 33101**, from whom further particulars may be obtained. *We are an Equal Opportunity Employer.*

POSTDOCTORAL (M.D. or Ph.D.) RESEARCH TRAINING IN ENDOCRINOLOGY AND METABOLISM. An NIH-sponsored interdepartmental program at the University of Rochester School of Medicine and Dentistry. Ongoing programs in:

- 1) Fundamental research related to: mechanisms of hormone action (insulin, glucocorticoids, and sex steroids), and secretion of pituitary hormones, and
- 2) Clinically oriented research related to: obesity, diabetes, eating behavior, and neuroendocrinology.

Research preceptors include: Drs. John Amatruda, Robert G. Campbell, Gilbert Forbes, Laurence Jacobs, James N. Livingston, Dean H. Lockwood, Guido Marinetti, Angelo Notides, Paul Woolf, and Donald A. Young.

For information and application contact: **Dr. D. A. Young, University of Rochester Medical Center, Department of Medicine, Box Endo-Metab, Rochester, New York 14642. Telephone: 716-275-2902.**

PRE- and POSTDOCTORAL POSITIONS are available for individuals with microbiology background for studies on the protein synthesizing system with special emphasis on ribosomes—topography, biogenesis, and function. Teaching opportunities available. Reply with résumé to: **Dr. Bruce H. Sells, Professor and Director, Laboratories of Molecular Biology, Faculty of Medicine, Health Sciences Centre, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6.**

The University of California, Irvine, College of Medicine, invites applications for **RADIOLOGISTS**. Board-eligibility in diagnostic radiology and eligibility for appointment at the assistant or associate professor level are required. Preference will be given to those individuals who are Board-certified or equivalent. Additional preference given to individuals with evidence of competence in pediatric, gastrointestinal, skeletal, or chest radiology and in angiography.

Applications from all qualified candidates are welcome; minorities and women are encouraged to apply. Applications, which must include a short biography and copies of any publications, should be sent to:

Harris S. Moyed, Ph.D.
Acting Chair, Department of Radiological Sciences
University of California, Irvine
College of Medicine
Irvine, California 92717

Closing date: 31 August 1979.

RESEARCH FELLOW, recent Ph.D. in biochemistry or pharmacology, for work on the chemical modification of hemoglobin and on large-scale protein isolation methodology. Knowledge of protein chemistry essential, and knowledge of physiology helpful. Salary to \$18,000. Current expansion of our program offers a realistic opportunity for permanent employment following the period of fellowship. Send résumé to: **Dr. Bernard Horowitz, Associate Director, Blood Derivative Program, NEW YORK BLOOD CENTER, 310 East 67 Street, New York, New York 10021. An Equal Opportunity Employer.**

RESEARCH POSITION. M.D. or Ph.D. Immunochimistry experience with lymphocyte function for the development of a cancer-detection system. Teaching hospital in midwest. **Box 194, SCIENCE.**

POSITIONS OPEN

Two positions are available under the Inter-governmental Personnel Act of 1970 for persons now employed in state/local government or in colleges and universities. These positions are within the Environmental Observation Division of the Office of Space and Terrestrial Applications, National Aeronautics and Space Administration (NASA) Headquarters. Both positions are for 1 year with the possibility for renewal for an additional year. Pay will be at a level commensurate with experience, and will be established after a review of qualifications.

Candidates must have been employed by the university in a permanent position for at least 90 days or be a career employee of a state or local government. Candidates must also meet the federal qualification standards for the position. These are as follows: a degree in an appropriate field of science, plus 3 years of progressively responsible experience in duties related to the position.

OCEANOGRAPHER (one position)

This individual will provide scientific guidance to NASA management in the development and implementation of a scientific research program in remote satellite sensing of oceanic processes in coastal regions. A background in coastal oceanography or ocean optics is preferred, with experience in physical, biological, and/or geological oceanography. A Ph.D. or equivalent training and experience is mandatory. Experience in remote sensing is desirable, especially as related to ocean color.

METEOROLOGIST/CLIMATOLOGIST (one position)

This individual will provide technical and scientific expertise to NASA management in the applications program in remote satellite sensing of atmospheric processes. A background in meteorology, climatology, or atmospheric physics is required. A background in remote sensing is desirable. A Ph.D. or the equivalent training and experience is mandatory.

Interested parties should send a current résumé to: **NASA Headquarters, Attention: Sarah Keegan, Code EPM-3, Washington, D.C. 20546.**

RESEARCH ASSOCIATE positions available immediately for work involving detailed analysis of crystal structures in characterization of drug-nucleic acid complexes. Requires Ph.D. in x-ray crystallography, a strong background in molecular biology, and three or more years of postdoctoral work in crystallography, including experience in x-ray diffractometry and computing techniques. Send curriculum vitae and arrange to have three letters of reference forwarded by 31 July 1979 to: **P. L. La Celle, Department of Radiation Biology and Biophysics, University of Rochester, Rochester, N.Y. 14642. The University of Rochester is an Equal Opportunity/Affirmative Action Employer.**

TRAINEESHIPS

Postdoctoral Training Program CELLULAR AND MOLECULAR ENDOCRINOLOGY

Postdoctoral traineeships are available immediately in a new NIH-supported program. Trainees with a Ph.D. or M.D. degree will participate in a research program of 1 of 12 faculty from the Biochemistry Department and the Program in Biomedical Sciences on the campus of the University of California, Riverside. The purpose of the program is to provide for research training at the postdoctoral level in the following four major areas of focus:

- 1) Cell culture model systems for hormone action;
- 2) Intracellular events in control of cell growth and metabolism;
- 3) Endocrinology of vitamin D, calcium, and phosphorus metabolism; and
- 4) Structure and properties of hormones and their receptors.

Participation is restricted to U.S. citizens or to individuals holding a permanent immigrant visa.

For detailed information and application forms write to:

**Dr. Anthony W. Norman, Program Director
Department of Biochemistry
University of California
Riverside, California 92521
Telephone: 714-787-4227**

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FELLOWSHIPS

POSTDOCTORAL POSITION

Available for research on preimplantation mammalian embryos. Studies are on micromanipulation of the embryo as well as on biochemistry of development. Apply with curriculum vitae to: **R. L. Brinster, Laboratory of Reproductive Physiology, University of Pennsylvania, School of Veterinary Medicine, Philadelphia, Pennsylvania 19104.**

POSTDOCTORAL FELLOWSHIPS. The Rutgers Center of Alcohol Studies has two 2-year positions (with the possibility of a third year of support) available for research in psychosocial aspects of alcohol and drug use. Sociologists or psychologists are preferred, but other social scientists may apply. Fellows will work in conjunction with ongoing longitudinal study. Stipends (funded by the National Institute on Alcohol Abuse and Alcoholism) are from \$10,000 to \$12,000 per year. For more information, contact: **Dr. Mark Lender, Center of Alcohol Studies, Busch Campus, Rutgers University, New Brunswick, N.J. 08903.**

COURSES

MICROSCOPY COURSES

The New York Microscopical Society and the Royal Microscopical Society offer two short courses for biological and physical scientists this summer at Cornell University. **The Principles of Modern Light Microscopy** (6 to 10 August) and **Photomicrography** (13 to 17 August), taught by members of the Royal and New York societies, will emphasize laboratory work with state-of-the-art equipment. For details, write: **Director of Continuing Education, College of Engineering, Cornell University, Carpenter Hall, Ithaca, N.Y. 14853.**

PERIODICAL SEARCH

Wanted for Science's archives. Original issues of 1800-1882 *Science* (subtitled "A Weekly Record of Scientific Progress"). The first issue was dated 3 July 1880; the last was dated 4 March 1882. We want to assemble a full set of the 82 published issues of this early journal, the forerunner of the present *Science*. If you have any issues of the 1880-1882 *Science* that you would be willing to part with, please write: **Janet Kegg, Library, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005, or telephone 202-467-4428.**

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Odense University Denmark

A new position as Professor in Photosynthesis has been created in the Institute of Biochemistry, and is available for occupation as soon as possible.

It is desired to appoint a person whose research activities are experimental investigations of the functions of the photosynthetic membrane systems in eukaryotes and/or prokaryotes. A part of the current research in the Institute is concerned with electron transport in respiratory and photosynthetic systems, and the Institute is well equipped with special apparatus for this type of work.

The successful applicant will be expected to participate in the teaching programme of the Institute, which includes elementary courses common to science and medical students, advanced courses for science students and supervision of advanced project work.

Further information is obtainable from Institute of Biochemistry, Odense University, telephone (09) 15 86 00, ext. 2441.

The application should contain information about the candidate's teaching experience. It is expected that the successful applicant will eventually be able to teach in Danish.

The employment field covers the Ministry of Education and the institutions under it. The wage frame is 37, and the salary amounts to Danish Kroner 230.520,24 a year inclusive of bonuses as per 1 October, 1979.

A professional selection committee will discuss the applications and their recommendation will be sent out to all applicants in its complete form.

Application in five copies, marked "Position No. 745" enclosing curriculum vitae and documentation for professional and pedagogical activities must be made to the Queen and sent together with all enclosures also in five copies to: Journal-kontoret, Odense University, Campusvej 55, DK 5230 Odense M, Denmark, so that we will receive it on 1 October 1979 at the latest.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) OFFICE OF RESEARCH AND DEVELOPMENT

The Office of Research and Development is currently recruiting for the following four positions in its Environmental Processes and Effects Research Program:

- 1) **DEPUTY ASSISTANT ADMINISTRATOR** for Environmental Processes and Effects Research, Washington, D.C.,
- 2) **DIRECTOR**, Environmental Research Laboratory, Duluth, Minnesota,
- 3) **DIRECTOR**, Environmental Research Laboratory, Narragansett, Rhode Island, and
- 4) **DIRECTOR**, Environmental Research Laboratory, Gulf Breeze, Florida.

All four positions have been designated for the Senior Executive Service (SES). Individuals selected will be required to join SES.

DEPUTY ASSISTANT ADMINISTRATOR (DAA)

The DAA directs and manages a highly diversified research program in the area of environmental processes and effects of pollutants. Particular research activities include: the development of environmental and ecological effects data required for the establishment of air and water quality standards; the development of laboratory tests and models to predict ecological effects of pollutants; the development of analytical methods for the purposes of identifying and quantifying chemicals in air, water, and soils media; the development of laboratory tests and models to predict the movement and fate of chemicals released to the air, soils, freshwater, and marine environments. The DAA is responsible to the assistant administrator for research and development for the direction, management, and control of the research program that is carried out both in-house and extramurally. The resources under his/her management include headquarters support staffs and seven implementing laboratories.

LABORATORY DIRECTORS

The Duluth, Narragansett, and Gulf Breeze Laboratories carry out in-house and extramural research primarily in the areas of ecological effects and transport and fate of pollutants. The Duluth program concentrates on freshwater systems, while the Narragansett and Gulf Breeze Laboratories carry out a joint program addressing problems in marine and estuarine systems. The director at each of these laboratories manages and implements an in-house program given the general direction and policy guidelines provided by the DAA. The directors are responsible to the DAA for the quality and timeliness of the research program, as well as for the efficient management of the finances, personnel, and facilities which are under his/her supervision or control.

The deputy assistant administrator position requires that candidates have a bachelor's or higher degree in either the biological or physical sciences or engineering or three or more years of general experience which has provided a good basic knowledge of the principles of organization, management, and administration. The laboratory director positions require that candidates have a bachelor's or higher degree in the biological or physical sciences. In addition to the above, candidates for all positions must have three or more years of specialized experience in a type of work directly related to the position to be filled. Undergraduate and graduate education may be substituted for a portion of this experience. One year of the required experience for either category must have been at a level of difficulty comparable to the next lower level in the federal service. Current federal government employees who apply must submit a performance evaluation dated within the last year. Potential applicants may obtain specifics on each position from the contact named below.

The following mandatory criteria must be met for a candidate to be considered minimally qualified for these positions. An applicant who receives an unacceptable rating on one or more of the mandatory criteria is rated ineligible and will receive no further consideration:

The **DEPUTY ASSISTANT ADMINISTRATOR** mandatory criteria requires:

- 1) Experience in managing a large-scale, complex technical organization,
- 2) Demonstrated ability to communicate effectively complex technical and policy matters with both technical and nontechnical persons, and
- 3) Demonstrated ability to carry out programs where success depends upon willing cooperation of managers and organizations not directly under one's own supervision.

The **LABORATORY DIRECTORS** mandatory criteria require:

- 1) In-depth experience as a researcher in the environmental sciences in the university, government, or private sector.
- 2) Demonstrated ability to plan and manage multidisciplinary research efforts,
- 3) Demonstrated ability or clear potential to supervise and manage a complex technical organization, and
- 4) Demonstrated ability to communicate effectively complex technical and policy matters with both technical and nontechnical persons.

Salary range: \$44,756 to \$47,500.

To apply: all candidates should submit a completed Standard Form 171 (résumés cannot be accepted in conjunction with the 171) which is available in Federal Job Information Centers and federal agency personnel offices to: **Edna Morse, Waterside Mall, 401 M Street, SW, Washington, D.C. 20460.**

Nongovernment employees should furnish references. A separate SF-171 must be submitted for each of the jobs for which you apply. The closing date for applications is 15 August 1979. For further information, contact: **Edna Morse by telephone 202-755-0674**, or by mail at the EPA address above.

AgI crystals

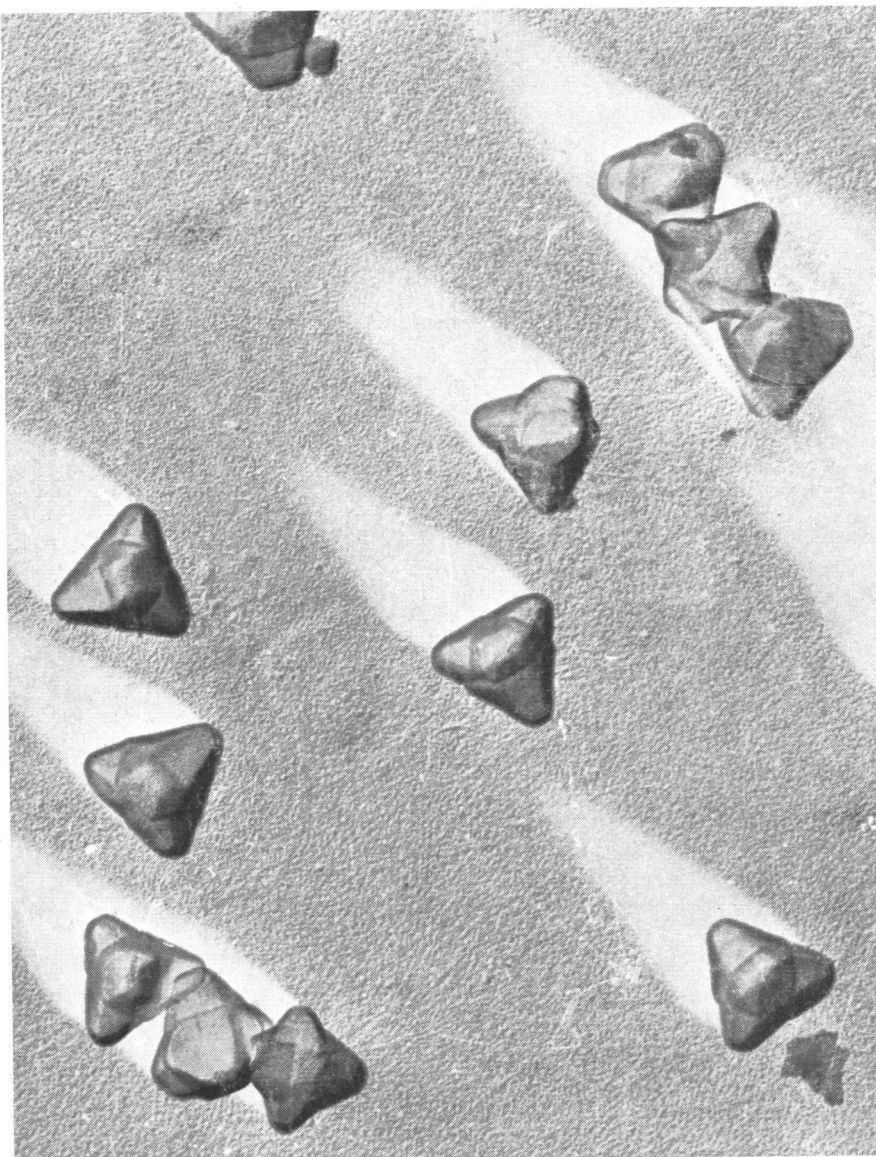
If our studies on them should happen to shed new light on how tooth, bone, and snow form, it would be nice

Our purpose here is not at all devious. It is simply to incline you favorably toward our trademark when buying film.

When you plunk down the money for a cartridge of Kodak film, a very small fraction of one of the pennies goes to pay Richard L. Daubendiek's salary and the expenses of his trip last year to Copenhagen to lecture an international conference on "AgI Precipitations: Effects of pAg on Crystal Growth." The professors and sundry academic types from various countries who attend such a conference couldn't care less about how we make film. Nor could Dr. Daubendiek tell them even if he knew all about it.

What Dick Daubendiek and a few of his associates do know a lot about is the traffic in ions between crystals and the solutions they sit in. Since our business has rested largely on the growing and behavior of small silver halide crystals, we feel we (and you) can afford Dick.

Although pure silver iodide crystals began to fade in importance as the basis of photography after Daguerre settled down with his 6,000 francs a year for life from Louis Philippe, King of the French, they subsequently turned out to be just right for studies of nature's rules for assembling and disassembling crystals of all kinds—biological, meteorological, or merely industrial.



Now suppose you arrange for a jet of silver ions to meet a jet of iodide ions in an aqueous solution of gelatin at 35°C, and suppose you vary their relative concentrations over a broad range. The size of the crystals that precipitate can be measured by electron micrography from carbon replicas shadowed with platinum-palladium, like the ones

shown above that were formed at pAg 6.5 and consist of four hexagonal pyramids each. If you plot their mean size against pAg in a constant ionic environment, as Daubendiek has done here, why do you suppose you get that sharp cusp?



His dashed line fits with earlier work represented by the solid line.

