

Calendar of Events

Grant Program

The National Institutes of Health, U.S. Public Health Service, has announced that it is now accepting applications for the **Biomedical Sciences Support Grant Program**. Applications must be postmarked by 19 February 1968. Academic institutions other than health professional schools that have a minimum of \$200,000 in appropriate National Institutes of Health and/or National Institute of Mental Health research grants during the fiscal year are eligible to apply. Application kits are available from the General Research Support Branch, Division of Research Facilities and Resources, National Institutes of Health, Bethesda, Maryland 20014.

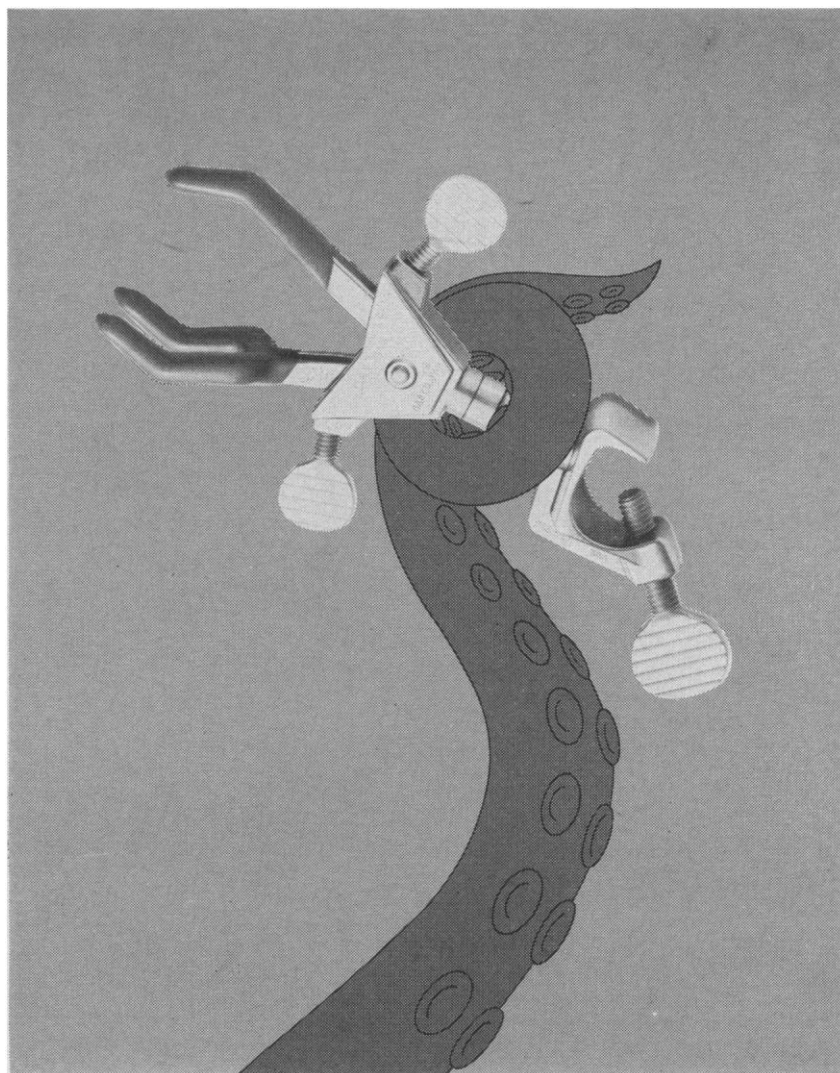
Courses

Teachers of Science in Secondary Schools, University of Delaware, Newark, Fall 1968. Supported by DuPont Company and National Science Foundation. *Admission requirements:* A.B. or B.S. degree; 1 year of general college chemistry; 18 undergraduate credits in one or a combination of chemistry, physics, biology, geology, or mathematics; currently teaching or having taught at a secondary school. Program will include exposure to university-level chemistry courses; association and study with chemists-in-the-making; opportunity to later participate in a summer institute. There will be no tuition charge or laboratory fees for qualified participants. *Applications must be completed by 1 June.* (Professor Seymour Yolles, Coordinator, High School Chemistry Program, Brown Laboratory, University of Delaware, Newark 19711)

Fertilization and Gamete Physiology, Marine Biological Laboratory, Woods Hole, Mass., 11 June–24 August. A pre- and postdoctoral summer research training program. Emphasis will be on immunological, cytological, biochemical and physiological research on marine organisms, both plant and animal available at Woods Hole. *Applications should be completed by 1 March.* (Dr. Charles B. Metz, Institute of Molecular Evolution, University of Miami, 521 Anastasia Ave., Coral Gables, Fla. 33134)

Operations Research for Public Systems, Massachusetts Institute of Technology, 3–7 September. Program will include application of the operational methodology to problems in public systems; presentations will cover applications in urban planning, use of computer simulation, transportation systems, community health, police operations. (Director of the Summer Session, Room E19-356, M.I.T., Cambridge 02139)

Immunology, Lake Forest College, Lake Forest, Ill., 21 July–3 August. Intended for college instructors who require more knowledge of immune mechanisms for teaching and research. Limited to 50 who will be selected on a competitive basis. Letter of application should be accompanied (in quadruplicate) by curriculum vitae, current research and teaching activities, reasons for wanting to enroll in course, and background in immunology. Fee: \$50. *Deadline for applications: 1 April.* (Dr. David L. Talmage, University of Colorado Medical Center, Denver 80220)



As welcome as an octopus on a windy day—Fisher Scientific Castaloy®-R Fisher Scientific Castaloy-R clamps, holders and supports are as helpful as an extra pair of arms. They last almost a lifetime, are strong, versatile, durable, corrosion-resistant and attractive. For extra safety, their jaws have a heavy, nonskid vinyl coating bonded to the metal. Fisher currently offers 42 different kinds of clamps and holders, from three-finger microclamps to chain clamps that will hold a 6½-inch cylinder—every one as handy as an octopus, and twice as pretty. See for yourself. Get our fully illustrated Castaloy-R brochure. Write Fisher Scientific Company, 1393 Fisher Building, Pittsburgh, Pa. 15219.



**INSTRUMENT DIVISION
FISHER SCIENTIFIC CO.**

J-699

This is a Classified Ad

The program is company secure and company funded. Electro-Optical Systems and its parent company, the Xerox Corporation, have already made important strides forward in the development of new systems for medical diagnosis. The need now is for highly-qualified personnel to fill important managerial and leadership positions within this ongoing program... a program which has real meaning for the future of the medical sciences.

Management-Senior Scientist. Manage and direct a product development biochemistry team. Extensive experience required in pharmaceutical or chemical product development. Prefer multidisciplinary strengths in chemistry or biochemistry, chemical engineering, and instrumentation.

Quality Assurance Manager, Biochemist or Chemist. Requires extensive experience in pharmaceutical and chemical product development. Must be familiar with cost effectiveness and predictive reliability models.

Quality Assurance Reliability Chemist. Entails development of analytical procedures. Desire several years industrial analytical laboratory experience.

Project Leaders-Ph.D. Biochemists. Recent doctoral graduates and experienced Ph.D. Biochemists are needed to probe and resolve analytical problems. Experience in preparing and processing labile biochemicals is desirable.

Instrumentation, Electrical Engineers. Desire design background with optical and digital systems. Information processing and control systems experience preferred.

Instrumentation Engineers-Mechanical. Requires highly creative individuals to design high-speed, small mechanisms, and electromechanical machinery; involves advanced concepts analysis and studies. Will also test, evaluate, and improve existing machine designs.

A variety of other positions are currently available in the fields of chemical engineering, biochemistry, microbiology, engineering, electronic, mechanical and radiology, engineering and data processing systems engineering and data processing. Send your resume or request for further information to David C. Phillips. Better yet. Call him personally... collect. 213-351-2987.



Electro-Optical Systems, Inc.
a Xerox Company

302 North Halstead St. Pasadena, Calif. 91107

Personnel Placement

POSITIONS WANTED

Bacteriologist. 1962 Ph.D. Exoenzymes, membranes. Publications. Postdoctoral experience here and abroad. Teaching/research at large state university. Seeks research position. Box 2, SCIENCE. 2/9

Bioengineer. Esp. instrumentation. B.S., M.S., Ph.D., biology-toxicology and B.S.E.E. Experience research, equipment design. Diversified background. Publications. Box 5, SCIENCE. 2/9

Ph.D., Biologist. 25 years' research and research administration. Desires teaching in small college or junior college. South or Southwest preferred. Box 6, SCIENCE. 2/9

Biologist. B.S. biology; M.S. physiology. Available August; experience in pharmaceuticals; seeks position in West. Box 39, SCIENCE. X

Business Administrator. university, hospital, medical institute background. Creative and effective. Box 32, SCIENCE. X

Chemist. M.A., 10 years' experience, proteins, nucleic acids. Seeks responsible position, academic, industrial, administrative. New York City only. No agencies. Box 40, SCIENCE. X

Endocrine Physiologist. Ph.D. (physiology and pharmacology). Presently assistant professor in clinical department. Wishes to change to physiology or pharmacology department next year. Research and teaching experience. Box 31, SCIENCE. X

Experimental Psychologist. Ph.D., seeks teaching-research in graduate or medical school; senior investigator sensory-perceptual functions; statistics and design of experiments. Box 45, SCIENCE. X

Genetics. Ph.D.; virology minor; radiation biology courses; completing postdoctorate; tissue culture, immunology, oncology experience; desires teaching or research appointment. WOODWARD PERSONNEL BUREAU, 185 North Wabash, Chicago 60601. X

Mammalogy, General Zoology. Associate professor state college, 11 years' experience outstanding teacher. Honor societies, publications. Seeks teaching/research/administrative position. Box 44, SCIENCE. X

Ph.D., Pharmacology. young, veteran, medical school experience, publications; teaching/research United States or Canada. Box 26, SCIENCE.

Ph.D., preventive medicine, epidemiology, human genetics. Heavy research experience cancer and other areas, leadership, project design, survey methods. Interaction with medical staff, graduate students. Creative, well published. Earlier business background. Desires academic/research/administrative position at university/institute/industry. Consider transfer to nonmedical applications. Box 27, SCIENCE. 2/9

Research Assistant. B.S. in bacteriology. Three years' diagnostic and research experience. Desires position as research assistant to electron microscopist, preferably in virology. Available in August. Box 28, SCIENCE. 2/9

Zoologist. Ph.D. Extensive teaching experience in parasitology, invertebrate zoology, histology. Successful graduate program. Publications. Desires senior academic position in teaching and research or administration. Box 18, SCIENCE. 2/9

POSITIONS OPEN

INVITATION to Professional Careers

(a) **BIOCHEMIST DIVISION MGR** \$35,000 up; new firm develop & operate centralized hosp services; pilot project; SW. (b) **VET HEMATOLOGIST** head team viral etiology of carcinogenesis studies; \$15,000 up; research lab; SE. (c) **PHYSIOLOGIST** rotational flight simulator aerospace research on humans; \$15,000; research lab; SW. (d) **MICROBIOLOGY ASST/ASSOC PROF** teach; develop grad courses; \$13,000; own research; expg univ; MidW. (e) **SR. BIOCHEMIST** supv, conduct Mental Retardation research; \$14,000; new unit univ med center; MW. Many more opportunities. Write WOODWARD PERSONNEL BUREAU, 185 N. Wabash, Chicago 60601.

**"My life has been
a thrilling adventure,"
wrote Arthur Compton.**

His papers, humanistic and scientific — collected here for the first time, and preceded by a delightful autobiography — show why. Few books disclose as much about the scientific life and the philosophical dilemma of the scientist when grave issues are at stake.

THE COSMOS OF ARTHUR HOLLY COMPTON

Edited by MARJORIE JOHNSTON
Introduction by VANNEVAR BUSH
\$10 • now at better bookstores
ALFRED • A • KNOPF



O¹⁷ O¹⁸
enriched
water and gas
and
labeled compounds
from the prime source

Oxygen-17 Gas, 70 atom %
19 other standard O¹⁷ enrichments
as water or gas.
Oxygen-18 Gas, 99 atom %
21 other standard O¹⁸ enrichments
as water or gas.
**Oxygen-17 and Oxygen-18
Labeled Compounds**
40 different compounds labeled
with either isotope.

Request complete 12-page Heavy Oxygen Enriched Materials catalog including over 100 general and selected references to O¹⁷ and O¹⁸ applications and analysis.



MILES LABORATORIES, INC.
RESEARCH PRODUCTS DEPT.
Elkhart, Indiana 46514 U.S.A.

New AAAS Symposium Volumes

FORMULATION OF RESEARCH POLICIES September 1967

Editors: Lawrence W. Bass and Bruce S. Old
218 pp., tables, illus., 6 x 9, cloth. \$7.75.
AAAS members' cash orders: \$6.75.

A collection of papers, presented at the Gordon Research Conference held in Santa Barbara, California, in 1966, analyzing and describing past and present science policies at national, international, and corporate levels.

MOLECULAR MECHANISMS OF TEMPERATURE ADAPTATION July 1967

Editor: C. Ladd Prosser

398 pp., 41 tables, 127 illus., bibliogr., index, 6 x 9, cloth. \$12.50.
AAAS members' cash orders: \$10.50.

Papers by 24 contributors on the general physiology of genetic and environmentally induced temperature adaptation in cold-blooded animals, plants, and microorganisms.

ESTUARIES January 1967

Editor: George E. Lauff

776 pp., 85 tables, 525 illus., bibliogr., index, 7 3/4 x 10 1/2, cloth. \$27.00.
AAAS members' cash orders: \$24.00.

Definitive volume on estuarine research: physical factors, geomorphology, sedimentation, microbiota, nutrients, biological productivity, ecology, physiology and evolution, fisheries, human influences, and pollution.

AAAS . . . 1515 Mass. Ave., NW . . . Washington, D.C. 20005

HEXOBARBITAL SODIUM

For use in the method of Reinhard and Scudi (*Proc. Exptl. Biol. & Med.* 100:381, 1959) for detecting depressant activity.

NOW AVAILABLE

Boxes of 10 x 1 Gm. Ampuls
at \$25 per lot.

Special Chemicals Department

Winthrop
LABORATORIES

90 Park Ave., New York, N.Y. 10016

EXCEPTIONAL EARNING OPPORTUNITY

for

Science teachers or science graduates to teach and travel in a science lecture program of nuclear education presented in secondary schools throughout the United States.

During each full week of travel, science educators are paid \$63 subsistence, \$25 premium pay and lodging costs plus a minimum base salary of \$600 monthly. Vehicle is provided (with credit card).

Qualifications:

- Degree in science or science education.
- Capable of extensive travel.
- Good health and speaking ability.

Employment to begin either in February or July, 1968.

For application and further information, write: Personnel Office

OAK RIDGE ASSOCIATED UNIVERSITIES

P.O. Box 117

Oak Ridge, Tennessee 37830
An Equal Opportunity Employer

MEDICAL VIROLOGY

An expanding research program has created an opening for a virologist to investigate problems associated with antiviral chemotherapy and vaccine research.

Candidates should have a Ph.D. with training and experience in cell culture and animal work. Industrial research experience helpful, but not required.

Modern laboratories are located in Upper Merion Township, near Valley Forge. Liberal salary commensurate with training and experience. Attendance at scientific meetings and publications encouraged.

Please send resume in confidence to: R. W. Kinney, Ph.D., Director of Scientific Employment—

SMITH KLINE & FRENCH

LABORATORIES

1556 Spring Garden Street
Philadelphia, Pa. 19101

An Equal Opportunity Employer
Member of Plans for Progress



RESEARCH SCIENTISTS

Cell Biology Research Institute

OTTAWA

Salary Range \$9,600 - \$15,500

INTERVIEWS TO BE HELD IN THE UNITED KINGDOM IRELAND AND WESTERN EUROPE

An expanding program of research has created the need for scientists with demonstrated ability to plan and develop fundamental research in:

Biochemistry—Enzymology—fungal enzymology and biochemical mechanisms involved in wilt diseases initiated by fungi

Biochemistry—Genetics—heritable variation, genetic exchange and transformation at the molecular level; mechanisms of antibiotic sensitivity and resistance

Biochemistry—Virology—biochemistry of plant viruses; mechanisms of infection at the molecular level

Cryobiology—cell permeability; cellular control mechanisms involved in the development of frost resistance

Candidates must have minimum of a Ph.D. degree in either biochemistry, biophysics, chemistry, physical chemistry, physics, bacterial genetics or molecular biology. Starting salary will be commensurate with education and relevant experience.

SUBMIT RESUMES AND LISTS OF PUBLICATIONS IMMEDIATELY TO:

**BIO-PHYSICAL SCIENCES PROGRAM
PUBLIC SERVICE COMMISSION**

OTTAWA 4, CANADA

KINDLY QUOTE REFERENCE NUMBER 68-100

GOVERNMENT OF CANADA

RESEARCH OPPORTUNITIES IN GEOSCIENCES

GEOLOGY—GEOPHYSICS—GEOCHEMISTRY

ELECTRONICS—PHYSICS WITH THE

GEOLOGICAL SURVEY OF CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES

The research program of the Geological Survey presents opportunities of interest primarily to recent or new post-graduates. Most positions are located in Ottawa. Initial salaries for new Doctorates range from approximately \$10,200 and for new Masters from approximately \$8,200.

The Geological Survey has modern, well equipped laboratories to support research and those appointed will be encouraged to present their findings by publication and at scientific meetings.

Following is a brief summary of opportunities:

DOCTORATE DEGREE REQUIRED	Applied Geochemist
	Seismologist
	Theoretical Geophysicist
	Tertiary Stratigrapher
	Palaeontologists
DOCTORATE DEGREE PREFERRED	Structural Geologists
	Quaternary Scientists
	Geophysicists (remote sensing and electrical methods)

For details and application forms write to the

PUBLIC SERVICE COMMISSION OF CANADA

Ottawa 4, Ontario

Please refer to file 68-115.

POSITIONS OPEN

COLLEGE TEACHERS WANTED
M.S. OR Ph.D. MANY LOCATIONS
SEPT. POSITIONS

BIOLOGY MATHEMATICS
CHEMISTRY PHYSICS
ENGINEERING PSYCHOLOGY
GEOLOGY RESEARCH COORDINATOR

WRITE NOW FOR FREE APPLICATION
CITY & SUBURBAN TEACHERS AGENCY
500 FIFTH AVENUE, N.Y., N.Y. 10036

Veterinarian required to supervise animal colony at research institute. Duties would entail: animal care and housing; preventive medicine, diagnostic procedures, and the keeping of records. Excellent opportunity for development. Previous experience of laboratory management desirable but not essential. Salary commensurate with experience but not less than \$8,000/year. The Placement Office, Worcester Foundation for Experimental Biology, Shrewsbury, Mass. 01545.

The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

BOOKS AND MAGAZINES

AUTHORS WANTED BY NEW YORK PUBLISHER

Your book can be published, promoted, distributed by a reliable company on a subsidized basis. Fiction, non-fiction, poetry, scholarly, scientific and even controversial manuscripts welcomed. For Free Booklet write Vantage Press, Dept. SC, 120 W. 31 St., New York 10001.

PROFESSIONAL SERVICES

HISTOLOGY SERVICE

RAPID SERVICE Large Orders Quickly Processed! Quickly Shipped! Professional supervision of every order. Free estimates on special problems. Distant points serviced swiftly. Special stains and techniques available. Full protected shipments. HISTOLOGY SERVICE, INC. 4801 N. Broad St., Philadelphia, Pa. Zipcode 19141. (215) Davenport 4-5800.

SUPPLIES AND EQUIPMENT

1919 - 1968

LaMotte Chemical

Chestertown, Maryland, U.S.A.

Specialists in

Colorimetric Techniques

Reagents-Standards-Comparators

Send for illustrated Controls Handbook

Dept. H

• HYPOPHYSECTOMIZED RATS

Shipped to all points via Air Express

For further information write

HORMONE ASSAY LABORATORIES, INC.

8159 South Spaulding Ave., Chicago 29, Ill.

For Sale, Complete Biochemical Laboratory; Equipment: Spectrophotometers (compl); Electrophoresis App. (compl); Microscopes; pH-meter; H₂O bath; Centrifuges, etc. etc. Benches, Glassware, Chemicals etc. etc. Excellent for Private Lab. (R&D or Medical). Sell as a package or in part. Tot. \$25,000. Contact: Prince William Lab., Manassas, Va. (703) 368-9259; Wash., D.C. area.