

Index of Advertisers

7 November 1969

Academic Press	794
Amersham/Searle	668
Barnstead, Div. of Sybron Corp.	802
Bausch & Lomb, Analytical Systems Div.	691, 799, 801
Bausch & Lomb, Scientific Instruments Div.	785, 787
Beckman Instruments, Inc.	662, 676
Bel-Art Products	784
B'omation Corp.	784
Bio-Rad Laboratories	782
Brinkmann Instruments	677, 690, 790
Bronwill Scientific, Inc.	783
Buchler Instruments, Inc.	793
Cambridge Thermionic Corp.	795
Cary Instruments	680
Charles River Breeding Laboratories, Inc.	683
Chemical Rubber Co.	792
Cintra Physics International	791
Coleman Instruments, Div. of Perkin-Elmer Corp.	798
Curtin Scientific Co.	789
E-C Apparatus Corp.	669
Gencom Div., Varian/EMI	786
Gilford Instrument Laboratories Inc.	689
Gilson Medical Electronics	692
Hamilton Co.	667
Harvard Apparatus	781
Heinicke Instruments Co.	793
Instrumentation Associates, Inc.	795
ISCO	690
Jeolco U.S.A. Inc., Electron Optics Div.	672
Klett Manufacturing Co., Inc.	789
Labindustries	670
Lea & Febiger	798
Matheson Gas Products, Div. of Will Ross Inc.	800
Miles Laboratories, Inc.	805
Nalgene Labware Div., Nalge Co., Div. of Sybron Corp.	688
National Appliance Co.	679
New Brunswick Scientific Co., Inc.	797
Nikon Inc., Instrument Div.	666
Norton Plastics & Synthetics Div.	791
Ortec Inc., an EG&G Co.	673
Packard Instrument Co., Inc.	686, 687
Phipps & Bird, Inc.	797
Photovolt Corp.	671
Polaroid Corp., Industrial Marketing	807
Professional Tape Co., Inc.	781
REVCO, Inc.	789
Sage Instruments, Inc.	804
Sargent-Welch Scientific Co.	694
Scientific Products, Div. of American Hospital Supply Corp.	678
Shandon Scientific Co., Inc.	790
Sharp Electronics	682
Sigmamotor Inc.	797
Sobotka, Eric, Co., Inc.	796
Sorvall, Ivan, Inc.	663
Technicon Corp.	675
Tenney Engineering, Inc.	805
Thermolyne, Div. of Sybron Corp.	786
Thomas, Arthur H., Co.	808
Unitron Instrument Co.	681
Varian Techtron	678A
Wang Laboratories, Inc.	684
Wild Heerbrugg Instruments Inc.	803
Wilkens-Anderson Co.	795
Will Scientific, Inc.	781
Yellow Springs Instrument Co.	788
Zeiss, Carl, Inc.	674

7 NOVEMBER 1969

CAN PHOTOMICROGRAPHY BE AS SIMPLE AS 1-2-3?



IT CAN.
WITH THE
WILD PHOTO
AUTOMAT*

DIAL: Your illumination method... brightfield or darkfield.

Desired eyepiece power... 6x, 10x or 15x.

The film speed... 5 to 320 ASA. B/W or color.

Trip the switch and the Wild Photo Automat does the rest.
With 35mm film, you can even have automatic film advance.
Or use #120 roll, 4 x 5", or 6 x 9cm cut film.

*Fits any microscope. This photo shows the Wild M-12 in trinocular arrangement with MKa5 Photo Automat.

WRITE FOR BOOKLET M1-608-12.

WILD
HEERBRUGG

WILD HEERBRUGG INSTRUMENTS, INC.
FARMINGDALE, NEW YORK 11735

WILD OF CANADA, LTD., 881 LADY ELLEN PLACE, DRAWA 3, ONTARIO
WILD DE MEXICO, SA, LONDRES 256, MEXICO 6, D.F.

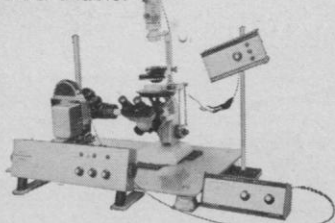
Circle No. 31 on Readers' Service Card

803

SAGE ADDS VERSATILITY TO YOUR MICROSCOPE

Complete Cinemicrography Systems

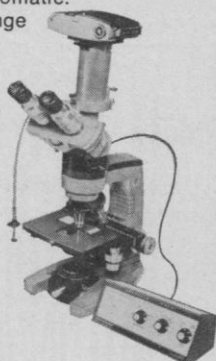
Complete systems for taking time lapse and normal speed 16 mm motion pictures through up-right and inverted microscopes. Assure sharp, clear pictures of living materials at high magnifications. Table-top and console models available.



Series 500 Models (shown) — from \$1,810
For information, circle # 80 on reader service card.

Photomicrography Exposure Meters

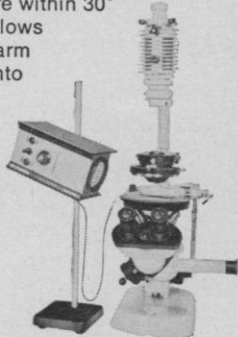
Precalibrated and direct-reading, Sage exposure meters make photomicrography, swift, sure, semi-automatic. Cover film speed range of ASA 20-3000. All camera backs may be used. Models available for A-O, B&L Zeiss microscopes and Leitz Aristophot Stand.



Model 297 (shown)
for A-O Series
10 & 20—Price \$350
For information, circle # 89 on reader service card.

Air Curtain Incubator

The incubator without an enclosure! Holds temperature of biological specimens under the microscope to $\pm 0.3^\circ\text{C}$ anywhere within 30° to 40°C range. Blows soft stream of warm or ambient air onto a specimen as demanded by a thermistor attached to specimen.



Model 279 (shown) — \$395
For information, circle # 90 on reader service card.

SAGE INSTRUMENTS, INC.

Subsidiary of Orion Research Incorporated
230 Ferris Avenue, White Plains, N.Y. 10603
914 949-4121

Personnel Placement

POSITIONS WANTED

Biochemist, female age 28, will receive Ph.D. January 1970. Am seeking short-term employment in Boston area lasting from January to September 1970. Have amiable personality. Research experience includes purification of enzymes by chromatography, fluorescence of protein-dye complexes, radioactive labeling of proteins. Have taught college chemistry. Low salary. Box 386, SCIENCE. X

Biology Chairmanship sought. Ph.D. Appropriate credentials education, research (biochemistry), and administration. Box 392, SCIENCE. X

Botanist, recent Ph.D. Desires academic appointment, teaching and research. Background in plant taxonomy, cytogenetics, and general botany. Available June 1970. Box 384, SCIENCE. X

Cell Biologist, Ph.D. Cell division, gamete development (plant), 2 years P.D.F., EM experience. Six publications. Seeks research/teaching position in United States. Box 391, SCIENCE. X

Cell Biologist-Geneticist, Ph.D.; 2 1/2 years postdoctoral. Seeking teaching-research position. Will teach cell biology, histology, molecular genetics. Research interests in electron microscopy, structure and function of chromosomes. Available August 1970. Box 390, SCIENCE. X

Historian, Science and Technology, Ph.D., seeks university teaching assignment with research opportunities in Russian science and technology. Twelve years of teaching experience; publications. Mid-Atlantic and Florida areas preferred. Box 385, SCIENCE. X

Literature Search, abstract of pertinent literature in monograph form. Ph.D., 2 years postdoctoral, editing experience. Virology, bacteriology, cell biology, biochemistry. Per job basis from home and major university library. Box 387, SCIENCE. X

Physiological-Ecologist, male, 33, Ph.D. 1964. Two years of postdoctoral research; 3 years of teaching, graduate and undergraduate (biology, physiology, insect biochemistry, and entomology). Desires teaching and/or research. Academic or industrial. Box 389, SCIENCE. X

Psychologist, Ph.D., comparative-physiological, 8 years of teaching-research; lesions, animal, retardation, history. Publications. Desires temporary until Fall 1970 or permanent. Available immediately. Box 15, Smithfield, Maine 04978. X

Senior Engineer seeks research and development position. Experience in design of pollution instrumentation for bacteriological and inorganic analysis. Box 388, SCIENCE. 11/14

Teacher. Science literature and science; science doctorate, library science degree, experienced teacher librarianship and science, and librarian; desires collegiate position. Box 383, SCIENCE. 11/14

POSITIONS OPEN

University of the Negev, Beer Sheva, Israel, invites applications for academic appointments in science and technology. Vacancies exist in the following fields:

Mathematics	Mechanical Engineering
Physics	Electrical Engineering
Chemistry	Chemical Engineering
Geology	Production Engineering

Qualified applicants in other fields will also receive serious consideration. Ph.D. required; experience in research and teaching desirable. Salary and rank dependent upon qualification and experience. Applicants should be willing to settle in Beersheba, and to acquire a knowledge of Hebrew.

Preferred starting date is 1 October 1970, or as soon as possible. Application, including a complete résumé and names of three referees, should be sent to:

The Rector
University of the Negev
Beer Sheva, Israel

POSITIONS OPEN

Ph.D. BIOCHEMICAL PHARMACOLOGIST

Recent Ph.D. with postdoctoral experience preferred. Participation in multidisciplinary research with responsibility for drug metabolism and pharmacokinetics. Expect investigator to establish new programs in biochemical mechanism of drug action. Send detailed vitae, references, and salary requirements to: **Dr. Alvin J. Glasky, Newport Pharmaceuticals, Inc., Box 1990, Newport Beach, California 92660.**

BIOMEDICAL INSTRUMENTATION PROJECT MANAGER

Ground-floor growth spot with major ethical pharmaceutical firm. This special staff position has been created in order to facilitate the company's emergence in this growing field through the development of new product lines and acquisition of additional companies. Candidates should have a broad knowledge of the biomedical industry, with strong marketing experience.

In addition to growth, the person selected can expect a good starting salary plus extras, and liberal benefits. All relocation costs will be paid by the company.

Inquiries will be held in strict confidence. Please submit résumé stating present or desired salary, and refer to this publication by name. Address **J. H. Christiansen, Personnel, 3rd floor.**

AYERST LABORATORIES

683 Third Ave., New York, N.Y. 10017
An equal opportunity employer

ASSISTANT DEAN FOR SCIENCE, COLLEGE OF LIBERAL ARTS

We seek a scientist interested in college administration, who should also maintain an active interest in teaching and research. Will be assistant dean for all sciences, as well as engineering. Salary to be approximately \$14,500. Position now open. For further information please write: **Dr. Joseph A. Hearst, Dean, College of Liberal Arts, Box 87, Idaho State University, Pocatello, Idaho 83201.**

ECOLOGIST AND DEVELOPMENTAL BIOLOGIST

These two additions to be made to biology faculty in Fall of 1970 at growing state-supported institution. Ecologist should have strong statistics-computer training with good botanical background. Rank of assistant professor will be granted to qualified individuals with doctorate. Responsibility to teach undergraduate courses with research encouraged. Please send résumé to **Dr. Peter DeJong, Chairman, Department of Biology, Saginaw Valley College, University Center, Mich. 48710.**

X-RAY SCIENTIST

Responsible for development of X-Ray analytical instrumentation in diffraction and spectroscopy. Applicant should be basically an experimentalist with 5-10 years' research experience in the field, having working familiarity with current state-of-art instrumentation.

A crystallographer or diffractionist with an advanced degree in physics is desirable.

Duties include keeping current in the X-Ray field through literature and attendance at technical meetings + maintaining liaison with domestic and overseas laboratories of the corporation.

LIBERAL STARTING SALARY MANY COMPANY BENEFITS

For confidential consideration mail resume indicating current salary to:

DONALD W. CRUGER
NORTH AMERICAN PHILIPS
CORPORATION
100 E. 42 St., NY, NY 10017
Suite 1027

An equal opportunity employer

Physical Sciences

SECTION HEAD

Ph.D. required in physical chemistry, biophysics or bioengineering. Research experience in the physical chemistry of macromolecules and membranes highly desirable.

This person should have proven research and management ability and will be expected to lead a group of scientists active in a multi-disciplinary program.

Located in Northern Indiana, Miles Laboratories, Inc. offers excellent starting salaries commensurate with experience as well as a comprehensive fringe benefits program including profit sharing. Relocation expenses paid by company.

Please send complete resume to:

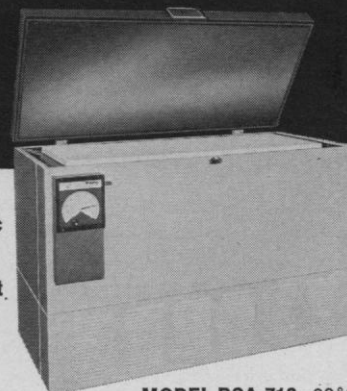
Curtis A. Brown, Placement Representative,
Dept. 474-A



MILES LABORATORIES, INC.
ELKHART, INDIANA 46514

An Equal Opportunity Employer

-90°C biological storage chest for a cool \$1640.



RELIALAB Sub-Arctic Storage Chests give you economy PLUS the dependability that comes with 35 years experience in low temperature control.

MODEL RSA-713 -90°C

AND these features too:

- Control accuracy of $\pm 0.5^\circ\text{C}$
- 7.4 cu. ft. of storage space
- "Hermeticool" fully hermetic, all welded refrigeration system
- Vapor-sealed stainless steel liner
- Options include: temperature and power failure alarm, liquid CO₂ standby system, casters, recorders, accessory ports.

Other models: -112°C -101°C -73°C



Relialab
by **Tenney**
ENGINEERING, INC.

1090 Springfield Rd., Union, N. J. 07083 • (201) 686-7870

573

Circle No. 107 on Readers' Service Card

POSITIONS OPEN

BIOLOGY CHAIRMAN

State University College, Brockport, New York
Brockport, a 4-year Liberal Arts College in the State University of New York system, enrolls about 5000. The Biological Sciences staff numbers 23. Staff, enrollment, and facilities are growing. A new building is being planned for this department. M.S. Degrees in Botany and Zoology are offered. **QUALIFICATIONS:** Ph.D. in some field of Biology; experience in research, teaching, Ph.D. training programs, obtaining grants; publications. Administrative experience desirable but not essential. The Department seeks an individual who will provide leadership in evolving a departmental program which includes liberal studies, graduate education and teacher education in which research must be encouraged and supported. **SALARY:** Open. If interested, please contact:

Dr. Gordon F. Allen
Vice-President for Academic Affairs
State University College
Brockport, New York 14420

EDITOR

Needed by Cambridge University Press New York Office in the **Mathematics** and the **Physical Sciences**. Requirements include a Ph.D. or master's degree in the appropriate field and experience in acquiring and editing scholarly books. Send résumé to **Ronald Mansbridge, Cambridge University Press, 32 East 57 Street, New York 10022.**

Independent research opportunities, basic and applied, in **HEMATOLOGICALLY ORIENTED UNIT**. Academic rank, up to and including professor, dependent on qualifications. Laboratory facilities which can be partially redesigned to suit needs of investigator are available. These are new positions in an expanding academic research institute.

Box 382 SCIENCE

POSITIONS OPEN

Immediate opening for a Ph.D. trained in **LIPOCHEMISTRY**, to join research team investigating aspects of atherogenesis. Background in immunology desired. Salary to \$15,812 plus fringe benefits. Submit curriculum vitae with initial response to **S. C. Spraragen, M.D., Chief, Nuclear Medicine, VA Hospital, 800 Poly Place, Brooklyn, New York 11209.**

POSITIONS OPEN

PHYSIOLOGIST. Recent Ph.D. with experience in the field of vertebrate or comparative physiology to teach undergraduate and graduate courses and to do research and direct graduate students. Position open in January. Apply to **Dr. Alfred V. Liberti, Chairman, Department of Biology, St. John's University, Jamaica, New York 11432.**

PRINCIPAL CHROMATOGRAPHER

An immediate opening exists for an individual to provide technical leadership in the planning and development of analytical instrumentation and to support TRACOR's marketing operations in the sale of analytical instrumentation. He will be responsible for helping to formulate the goals of the Analytical Instruments Department and for planning and directing applications work. Applicants should have a Ph.D. degree and at least five years experience in the field of gas chromatography with emphasis on technique and applications. Specific experience in the analysis of biological materials is highly desirable.

TRACOR, Inc., is headquartered in Austin, Texas, with offices and subsidiaries in 24 states and Puerto Rico, and employs over 4,500. The Analytical Instruments Department, formed from Micro Tek Instruments and the R. L. Stone Company, is located in Austin as part of the TRACOR Instruments Group.

Send your résumé to Mr. Murray Shaw,
Dept. SM 69, TRACOR, Inc.,
6500 Tracor Lane, Austin, Texas 78721



An Equal Opportunity Employer

Research Assistant Pharmacology

Due to expansion, a unique opportunity exists for an individual with a Master's Degree and 4 to 5 years experience in Industrial Drug studies. The successful applicant must have advanced training in pharmacology. He will be responsible for assisting in work direction of research assistants in general pharmacology and help in the evaluation of results. Salary commensurate with background.

Facilities are superlatively modern, complete and attractive. Corporate Headquarters in suburban Westchester are only a half hour from midtown New York. All traditional benefits including a unique vacation plan. Please send a full resume, in confidence, to E. J. Donaldson,

Geigy Chemical Corporation
Saw Mill River Road, Ardsley, New York 10502
An Equal Opportunity Employer

Geigy

SEROLOGIST

TECHNICON, a leading non-defense, international manufacturer of automated analytical instruments, offers an excellent opportunity to join a corporation with a 30 year success story of unusual growth and development.

B.S. required, M.S. desirable; knowledge of all major serological techniques is necessary, with five years of related experience preferred.

Technicon offers generous, completely paid benefits, including a non-contributory profit sharing program.

Send résumé in confidence to Manager of Professional Employment:

TECHNICON CORPORATION

511 Benedict Avenue
Tarrytown, New York 10591
An Equal Opportunity Employer

GRADUATE STUDY

A limited number of **PREDOCTORAL ASSISTANTSHIPS** are available for graduate training in the Anatomical Sciences at the **UNIVERSITY OF MICHIGAN**. Opportunities exist for study in the following areas: **Growth and Development** (experimental embryology, placental function, bone biology, craniofacial growth, regeneration, teratology); **Cell and Tissue Biology** (electron microscopy, endocrinology, histochemistry, tissue and organ culture); **Neurosciences** (neurophysiology, sense organs, mammalian hibernation, neuromuscular system). For detailed information write: **Admissions Committee, Department of Anatomy, 4643 Medical Science II, The University of Michigan, Ann Arbor, Michigan 48104.**

GRADUATE STUDY IN PHARMACOLOGY. A program leading to the Ph.D. degree involving course work and research training which stresses research on fundamental mechanisms of drug action on neural, neuro-humoral, membrane transport, and endocrine systems using electrophysiological, biochemical and computer techniques. Full stipend and tuition available to qualified U.S. citizens. **Early application for September 1970 strongly advised. Department of Pharmacology, Schools of Medicine and Dentistry, State University of New York at Buffalo, 122 Capen Hall, Buffalo, N.Y. 14214.**

GRADUATE STUDY

TRAINEESHIPS IN MOLECULAR BIOLOGY
Applications considered from students in any of the sciences. Stipends and tuition remission available. Active areas of research in the molecular basis of differentiation, cell function, molecular genetics, protein and nucleic acid synthesis and chemistry, and molecular control mechanisms. Inquiries to **Dr. H. L. Segal, Biology Department, State University of New York, Buffalo, New York 14214.**

NATIONAL RESEARCH COUNCIL OF CANADA POSTDOCTORAL FELLOWSHIPS 1970-71

Approximately 130 Fellowships will be awarded for 1970-71 by the National Research Council. They will be tenable in the laboratories of the National Research Council, Department of Agriculture, Department of Fisheries and Forestry, Department of Energy, Mines and Resources, Department of National Health and Welfare, Fisheries Research Board of Canada, Meteorological Service of the Department of Transport, National Museums of Canada, and Atomic Energy of Canada Limited.

An applicant should not have reached his 36th birthday by 31 March of the year in which the fellowship is to be taken up and should possess a Ph.D. degree from a recognized university or expect to obtain such a degree before taking up an award. (Candidates having equivalent research experience may be considered.) There are no restrictions regarding nationality of applicants, but successful applicants must meet all Canadian immigration requirements. The competition closes on 15 January 1970.

The annual stipend, which is free of Canadian income tax, is \$6000 for both single and married Fellows and \$7200 for a married Fellow (male) with a child or children. A grant is provided toward the cost of travel.

Inquiries should be addressed to:

Postdoctorate Fellowships Office,
National Research Council of Canada,
Ottawa 7, Canada.

Postdoctoral Traineeships in Journal Editing. Applications are invited for the third 8-month training program for executive editors of biomedical journals, to begin October 1970. Applicants must have a doctorate (Ph.D. or M.D.) in science and at least 3 years of research experience, including publication in scientific journals. No editorial experience is necessary. All aspects of journal editing and management will be taught through experience with editorial offices of five leading biomedical journals. Trainees will receive a stipend commensurate with their training, experience, and present status. Apply (enclosing a curriculum vitae) by **15 December 1969 to Dr. F. Peter Woodford, The Rockefeller University, New York 10021.**

PREDOCTORAL ASSISTANTSHIPS AND TRAINEESHIPS IN PHYSIOLOGY

Excellent opportunities for graduate students leading to the Ph.D. Ample stipends and free tuition. Training and research in endocrinology, gastrointestinal, water and electrolyte metabolism, cardiovascular, sensory physiology, energy metabolism and bioengineering. Write for details, to,

Head, Department of Physiology
University of Illinois at the Medical Center
P.O. Box 6998
Chicago, Illinois 60680

GRADUATE STUDY

Positions are available in the Graduate Studies Program of the **Department of Physiology and Biophysics at the University of Kentucky**. Graduates with a baccalaureate in Biology, Chemistry, Physics, Psychology, Mathematics, or Engineering may apply. Areas in which training may be obtained include neurobiology; cardiovascular and respiratory physiology; and cellular, endocrine, developmental and comparative physiology. Special programs may also be arranged in bioengineering. Traineeships begin at \$2400 plus tuition and allowances for dependents. Address inquiries to the **Chairman of the Department of Physiology and Biophysics, University of Kentucky Medical Center, Lexington, Kentucky 40506.**

THE HEBREW UNIVERSITY OF JERUSALEM

FACULTY OF SCIENCE

POSTDOCTORAL FELLOWSHIPS

Applications are invited for Postdoctoral Fellowships, tenable in one of the following institutions of the Faculty of Science: Mathematics, Physics, Chemistry, Biology, Earth Sciences.

Preliminary enquiries for the academic year 1970-71 should reach us by the **1st of December 1969**, addressed to Professor S. Ofer, Dean of the Faculty of Science—giving details of the specialized field of interest. Further information will then be supplied.

The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT



Histology Service, Inc.

Servicing Pharmaceutical Industry,
Toxicologists and Research Projects.
Emergency Service for peak load periods.

Serial Sections—Special stains.
Full Range of Histology Studies and
Chemical Analyses.

HISTOLOGY SERVICE, Inc.

6190 Rising Sun Avenue
Phila., Pa. 19111 (215) RA 5-5103