

New York, 1966. 394 pp. Illus. \$15.50. Four papers.

**Radiation Heat Transfer.** E. M. Sparrow and R. D. Cess. Brooks/Cole (Wadsworth), Belmont, Calif., 1966. 336 pp. Illus. \$8.50.

**Radioisotopes for Aerospace.** pt. 1, *Advances and Techniques*. Proceedings of a symposium (Dayton, Ohio), February 1966. Sponsored by the U.S. Air Force, the U.S. Atomic Energy Commission, and Instrument Society of America. John C. Dempsey and Paul Polishuk, Eds. Plenum Press, New York, 1966. 469 pp. Illus. \$20. There are 26 papers.

**Stress-Strain Behavior of Elastic Materials.** Selected problems of large deformations. O. H. Varga. Interscience (Wiley), New York, 1966. 200 pp. Illus. \$11.

**Structural Diagrams.** Andrew B. Vistelius. Translated from the Russian edition by R. Baker. N. L. Johnson and F. C. Phillips, Translation Eds. Pergamon, New York, 1966. 190 pp. Illus. \$8.

**Structure, Form, Movement.** Heinrich Hertel. Reinhold, New York, 1966. 263 pp. Illus. \$17.50.

**The Structure of Glass.** vol. 7, *Methods of Studying the Structure of Glass*. E. A. Porai-Koshits, Ed. Translated from the Russian by E. Boris Uvarov. Consultants Bureau, New York, 1966. 255 pp. Illus. \$25.

**A Survey of Binary Systems.** Richard Hubert Bruck. Springer-Verlag, New York, 1966. 193 pp. Illus. \$9. *Ergebnisse der Mathematik und ihrer Grenzgebiete*, vol. 20.

**Theory of Probability.** Bernard Harris. Addison-Wesley, Reading, Mass., 1966. 304 pp. Illus. \$9.75.

**Thermal Soil Mechanics.** Alfreds R. Jumikis. Rutgers Univ. Press, New Brunswick, N.J., 1966. 283 pp. Illus. \$12.50.

**Topological Vector Spaces and Distributions.** vol. 1. John Horváth. Addison-Wesley, Reading, Mass., 1966. 461 pp. Illus. \$12.75.

**Traité de Glaciologie.** vols. 1 and 2. vol. 1, *Glace, Neige, Hydrologie nivale* (1964. 433 pp. 140 F.); vol. 2, *Glaciers Variations du Climat sous Gelés* (1965 1040 pp. 190 F.). Louis Lliboutry. Masson, Paris. Illus.

**Transition Metal Chemistry: A Series of Advances.** vol. 3, Richard L. Carlin, Ed. Dekker, New York, 1966. 371 pp. Illus. \$15.75. Five papers.

**Transactions of the Society of Rheology.** vol. 10, pt. 1. Raymond R. Myers, Ed. Interscience (Wiley), New York, 1966. 451 pp. Illus. Paper, \$14. There are 25 papers.

**Treatise on Analytical Chemistry.** pt. 2, *Analytical Chemistry of Inorganic and Organic Compounds*. vol. 13, *Functional Groups*. I. M. Kolthoff and Philip J. Elving, Eds. Interscience (Wiley), New York, 1966. 550 pp. Illus. \$20.

**Trends in Elementary School Mathematics.** Lloyd Scott. Rand McNally, Chicago, 1966. 225 pp. Illus. Paper, \$3.50. New Trends in Curriculum and Instruction Series.

**Vacuum Microbalance Techniques.** vol. 5. Proceedings of the Fifth Conference (Princeton, N.J.), September 1965. Klaus H. Behrndt, Ed. Plenum Press, New York, 1966. 284 pp. Illus. \$13.50. There are 16 papers.



## SPEED UP YOUR RESEARCH

Just drop L/I Automatic REPIPETS\* and Automatic Dilutors into your reagent bottles. They'll dispense, transfer, mix, aspirate and dilute with a guaranteed accuracy of 1% and 0.1% reproducibility. Because these two automatic L/I instruments complete any operation in only a few seconds, you cut your analysis time 50-95%, speeding up your research considerably.

L/I's versatile instruments handle any liquid—acids, alkalis, solvents and volatiles included—with viscosities as high as 45 centipoises. Because there's no drainage error, you'll get 1% accuracy and 0.1% reproducibility even with viscous liquids.

L/I instruments give you complete freedom from contamination, require no change in your methods, and never need cleaning. Integral air filters keep reagents pure. Volume? From microliters to deciliters.

Dilutors \$89.50, including complete set of tips for highest precision in all ranges. REPIPETS \$47.50. Immediate delivery in 1, 10, 20, and 50 ml sizes. Please write for details.

\*Trademark—(REpetitive PIPETS)

# LABINDUSTRIES

1802-M Second Street, Berkeley, California 94710

TH 3-0220, Cable LABIND

# SINGLE CRYSTALS

**Titanium**  
**Chromium**  
**Niobium**  
**Cobalt**  
**Gold**  
**Nickel**  
**Tantalum**  
**Zirconium**  
**Iron**  
**Silver**  
**Aluminum**  
**Copper**  
**Bismuth**  
**Rhenium**  
**Zinc**  
**Indium**  
**Lead**  
**Tin**  
**Tungsten**  
**Molybdenum**

these and more,  
available in ultra-  
high purity . . .  
random and preferred  
orientations

For information contact:



**MATERIALS RESEARCH  
CORPORATION**

Orangeburg, New York 10962  
(914) Elmwood 9-4200

## INDEX TO ADVERTISERS

2 December 1966

Academic Press . . . . . 1074, 1075  
Ace Glass Inc. . . . . 1098  
Acton Laboratories Inc. . . . . 1241  
Aloe Scientific, Health and Science  
Div., Brunswick Corp. . . . . 1083  
American Optical Co. . . . . 1268  
Applied Science Laboratories Inc. . . 1258  
Atomic Energy of Canada Ltd. . . . 1112

B & A Fine Chemicals, Allied  
Chemical Corp. . . . . 1097  
Baird-Atomic . . . . . 1096  
Bausch & Lomb . . . . . 1103, 1251  
Beckman Instruments, Inc. . . . . 1124  
Bel Art Products . . . . . 1238  
Brinkmann Instruments . . . . . 1078, 1253  
Buchler Instruments, Inc. . . . . 1240

Cary Instruments . . . . . 1113  
Chemical Rubber Co. . . . . 1258  
Clay-Adams, Inc. . . . . 1187  
Corning Glass Works . . . . . 1077

Dimco-Gray Co. . . . . 1256  
Douglas Missile & Space Systems  
Div. . . . . 1261  
Du Pont . . . . . 1255

Economics Laboratory, Inc. . . . . 1095  
Electro-Mechanical Development Co. 1242  
E&M Instrument Co., Inc. . . . . 1256

Fish-Schurman Corp. . . . . 1169  
Fisher Scientific Co. . . . . 1111

General Motors Research  
Laboratories . . . . . 1093  
Gilford Instrument Laboratories  
Inc. . . . . 1092  
Glas-Col Apparatus Co. . . . . 1089

Hacker, William J., & Co., Inc. . . . 1237  
Hamilton Co. . . . . 1250  
Harford Metal Products, Inc. . . . . 1240  
Harvard Apparatus Co., Inc. . . . . 1244  
Holt, Rinehart and Winston, Inc. . . 1090  
Honeywell . . . . . 1084  
Houghton Mifflin Co. . . . . 1249

Instrumentation Specialties Co.,  
Inc. . . . . 1245  
International Equipment Co. . . . . 1094

JEOLCO (U.S.A.), Inc. . . . . 1081

Kirschner Manufacturing Co. . . . . 1256

Labindustries . . . . . 1259  
Lea & Febiger . . . . . 1080  
Leeds & Northrup . . . . . 1104  
Leitz, E., Inc. . . . . 1122  
Linde Div., Union Carbide Corp. . . 1121  
LKB Instruments, Inc. . . . . 1086  
Lourdes . . . . . 1099

# 9524-B

Another superb  
photomultiplier from



Dark current at  
200 Amps/Lumen typically  
 $2 \times 10^{-9}$  Amps



A rugged versatile tube utilizing the special EMI CsSb box and grid design. Typical gain of  $3 \times 10^6$  at 1100 volts makes it an excellent tube for portable instruments. Variants are available with "S", S-10, and S-20 cathodes as well as with quartz windows for U.V. work.

The characteristics of the 9524-B exemplify the type of performance to be expected from the more than sixty different photomultipliers made by EMI in sizes from 1 to 12" in diameter. Most types are available from stock in the U.S.

Write for our latest catalog and the name of your local representative.

**W**hittaker  
CORPORATION  
**GENCOM** DIVISION

80 Express St.  
Plainview, L. I., N. Y.  
516-433-5900 TWX 516-433-8790  
\* EMI ELECTRONICS, LTD., ENGLAND

Mallinckrodt Chemical Works .....	1107
Materials Research Corp. ....	1260
Mathatronics .....	1243
Mettler Instrument Corp. ....	1071
Miles Laboratories, Inc. ....	1241
Millipore Filter Corp. ....	1240
Mistaire Laboratories .....	1248

New Brunswick Scientific Co., Inc.	1102
Nuclear-Chicago Corp. ....	1118

Ohaus Scale Corp. ....	1070
Orion Research Inc. ....	1120
Owens-Illinois .....	1109
Oxford University Press ....	1242, 1252

Pace Engineering Co. ....	1244
Perkin-Elmer Corp. ....	1085
Pharmacia Fine Chemicals Inc. ....	1237
Philbrick Researches, Inc. ....	1114
Phipps & Bird, Inc. ....	1241
Photometric Research Corp. ....	1244
Photovolt Corp. ....	1236
Picker Nuclear .....	1076
Plenum Press .....	1106
Polaroid Corp. ....	1115
Precision Scientific Co. ....	1246
Professional Tape Co., Inc. ....	1248

REVCO Inc. ....	1253
-----------------	------

Sargent, E. H., & Co. ....	1091
Science Research Associates .....	1267
Scientific Products .....	1236
Sherer-Gillett, Environmental Div. ....	1249
Siemens America Inc. ....	1247
Sigma Chemical Co. ....	1245
Sigmamotor Inc. ....	1262
Sobotka, Eric, Co., Inc. ....	1255
Southern Precision Instrument Co. ....	1253

Technicon Instruments Corp. ....	1105
Tektronix, Inc. ....	1088
Texas Instruments Inc. ....	1119
Thermolyne Corp. ....	1250
Tracerlab .....	1170
TRG, a division of Control Data Corp. ....	1257
Tri-R Instrument Co. ....	1262

Unitron Instrument Co. ....	1079
U.S. Navy .....	1110

Varian, Analytical Instrument Div.	1108
Vickers Instruments, Inc. ....	1239
Victoreen Instrument Co. ....	1262, 1263

Wang Laboratories, Inc. ....	1254
Whittaker Corp., Gencom Div. ....	1260
Wiley, John, & Sons, Inc. ....	1100, 1101
Wilkens-Anderson Co. ....	1254
Williams & Wilkins Co. ....	1238
Worthington Biochemical Corp. ....	1263

Zeiss, Carl, Inc. ....	1116
------------------------	------

# Senior and visiting scientist appointments in Fundamental Research

The Space Sciences Department, Douglas Missile & Space Systems Division, Santa Monica, has openings for full-time and visiting Senior Scientists in the following areas:

- ☀ *Solar Astrophysics*
- ☀ *Plasma Geophysics*
- ☀ *Theoretical Physics*
- ☀ *Planetary Interiors, Atmospheres, & Surfaces*
- ☀ *Ocean Sciences*
- ☀ *Space Radiation Experiments*
- ☀ *Planetary Meteorology*
- ☀ *Atmospheric Physics*

If you are interested in working with a dynamic research group and have a Ph.D. or equivalent, submit your resume to I.R. MacDonald, Douglas Missile & Space Systems Division, 5300 Bolsa Ave., Huntington Beach, California.

An equal opportunity employer



# TUBING PUMP

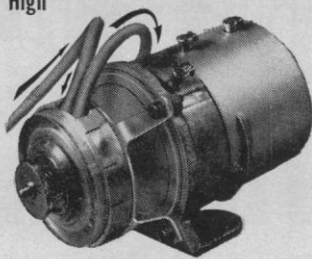
for Feeding, Metering or Sampling

Only 6 1/8" Long, 3 3/8" High

## PUMPS

- LIQUIDS
- GASES
- SLURRIES

SELF-PRIMING



## No Corrosion • No Contamination

This new model AL Kinetic Clamp Pump will handle flow rates from .01 to 400 cc per minute. Practically any liquid, gas or slurry can be handled by selecting the right tubing. A loop of the tubing is held between two plates, one is stationary and the other operates eccentrically, forcing material along the flexible tubing. Two models and a choice of 50 different gear motors provide almost any flow rate required within the capacity. Write for catalog.

**SIGMAMOTOR, Inc.**

68 North Main Street • Middleport, New York

## TRI-R Electronic THERMOMETER

### THERMISTOR TYPE

- **RAPID...**  
Read temperature in seconds
  - **ACCURATE...**  
 $\pm 1/2\%$  of scale range
  - **RANGES...**  
From  $-35$  to  $+150^{\circ}\text{C}$ .
  - **DIRECT READING...**  
In  $^{\circ}\text{C}$ . and  $^{\circ}\text{F}$ .
  - **REMOTE READING...**  
Leads to 1000 feet
  - **LOW COST...**  
Priced under \$100
  - **STABLE...**  
Mercury cell battery models, regulated line operated models
  - **PROBES...**  
Interchangeable and special for human, animal, laboratory use
- For Thermometer bulletin write Dept. S612



## TRI-R INSTRUMENTS

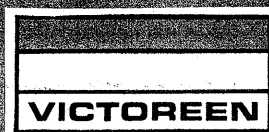
Developers of Electronic and Mechanical Instruments for Scientific Research

144-13 JAMAICA AVENUE, JAMAICA 35, N. Y.

## UNEQUALLED STABILITY

Exclusive vibrating reed electrometer, standard in Victoreen Series 4000 Gas Chromatographs, gives the first and only "straight" base line (1% per month drift) plus sensitivity to  $3 \times 10^{-13}$  • Lowest noise level • Proven solid state design • No troublesome tubes or batteries • Shock and vibration proof operation. Eliminate your electrometer stability problems • Look into Series 4000 Gas Chromatographs with vibrating reed electrometer — an industry first. *Your application deserves vibrating reed stability — and it makes GC life easier.*

Analytical Instrumentation Division  
**THE VICTOREEN INSTRUMENT COMPANY**  
10101 WOODLAND AVENUE • CLEVELAND, OHIO 44104  
EUROPEAN SALES OFFICE: GROVE HOUSE, LONDON RD., ISLEWORTH, MIDDLESEX, ENGLAND





ESSENTIALLY HOMOGENEOUS  
Chromatographically . . . Electrophoretically

Worthington offers a

## PURIFIED NUCLEASE

from *Staphylococcus aureus* prepared by a modification of the procedure described by Anfinsen, et. al., (1963) and having a minimum activity of 4500 units/mg.

### REFERENCES:

Anfinsen, C. B., Rumley, M. K., and Taniuchi, H.: *Acta Chem. Scand.*, 17, S270 (1963).

Heins, J. H., Taniuchi, H., and Anfinsen, C. B.: in *Procedures in Nucleic Acid Research* (Cantoni, J., and Davies, D., eds.) Harper and Row, New York (In Press, 1966).

Taniuchi, H., Anfinsen, C. B., Heins, J., and Carroll, W. R.: *Fed. Proc.*, 24, 288 (1965).

Also of interest, a new offering **NEURAMINIDASE**, chromatographically purified from *Clostridium perfringens*.

**A REMINDER:** Worthington Carbonic Anhydrase, partially purified from beef blood by the method of Keilin, D., and Mann, T.: *Biochem. J.*, 34, 1163 (1940). A soluble powder with a minimum activity of 2000 units/mg.

Worthington Uricase, a highly purified preparation from hog liver.

For more information, write for Bulletin 66-5A

**WORTHINGTON BIOCHEMICAL CORPORATION**

FREEHOLD, NEW JERSEY 07728

## PHARMACEUTICAL RESEARCH POSITIONS

The Sterling-Winthrop Research Institute, located in Rensselaer, New York (near Albany), has openings for the following positions.

### METABOLIC BIOCHEMIST

Ph.D. with strong background in radiochemical and chromatographic techniques to direct a research group in the studies of absorption and excretion of drugs, as part of the metabolic research program.

### PHARMACOLOGIST

Ph.D. with an interest in CNS research involving antiobesity (CNS and peripheral approaches) with opportunities to develop in areas of electrophysiology and neurochemistry.

The Sterling-Winthrop Research Institute is the research division of Sterling Drug Inc., one of the world's largest producers of medicinal agents. Sterling Drug manufactures professional, consumer and industrial products identified by more than a thousand brand names. The Institute employs over 600 people and is engaged in a very active pharmaceutical research program.

Salary Open. Excellent company benefits.

Publication encouraged. Travel and moving expenses paid.

Send complete resume to Mr. C. E. Alford, Director of Personnel

### STERLING-WINTHROP RESEARCH INSTITUTE

Rensselaer, New York 12144

An equal opportunity employer

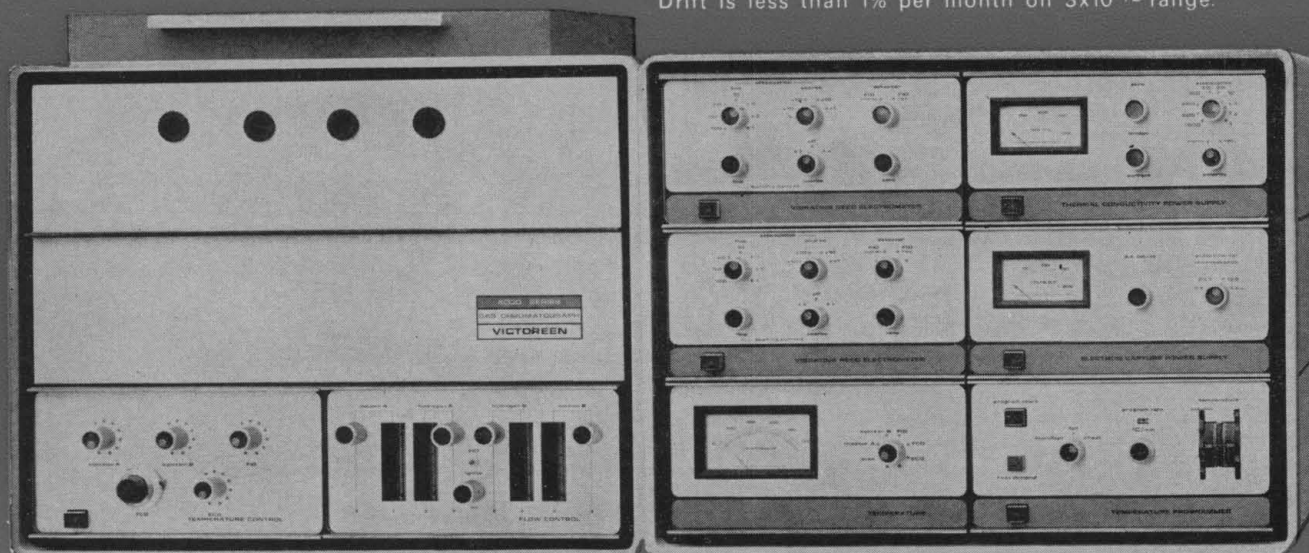
3 weeks

1 month ▼10% f.s.

▼5% f.s.

▲0% f.s.

Chart shows typical vibrating reed electrometer stability. Drift is less than 1% per month on  $3 \times 10^{-12}$  range.



**Chemical, Biomedical and Pesticide Analysis.** Research Series 4000 instrument shown is one of many possible combinations. Consists of standard 4-column oven with 4 separate injection ports, 3 individually controlled detector ovens, dual flame ionization, dual thermal conductivity, electron capture detectors. Capable of simultaneous operation of all 3 detectors.

# Personnel Placement

## POSITIONS WANTED

**Biochemist Associate Prof.** NIH Career Development Awardee grants \$70,000 p.a.; publications 50, desires Med. School location East or West Coast. Box 228, SCIENCE.

**Clinical Chemist M.S.** experienced in supervising large hospital laboratories, well acquainted with newest instrumentation, seeks position in the New York area. Box 247, SCIENCE.

**Immunopathologist, D.V.M., M.S., Ph.D.** Research and administrative experience. Desires position after February 1967. Box 249, SCIENCE. X

**Mammalian Physiological Ecologist, Ph.D.** 1967. Desires teaching position with research opportunities at a northeastern university. Box 250, SCIENCE.

**Medical Writer, Editor.** Information retrieval specialist. Free-lance assignments. If permanent, in New York City. Box 251, SCIENCE. X

(a) **Physiology Ph.D.;** chemistry minor; aerospace, cardiovascular, neurophysiology research; medical school teaching experience; prefers research administrative appointment. (b) **Microbiology Ph.D.;** immunology minor; foreign M.D.; serology-hematology research experience; desires research opportunity. Write **Woodward Medical Personnel Bureau**, 185 North Wabash, Chicago 60601. X

## POSITIONS OPEN

**BIOLOGIST** to work in animal experimentation for physiology project. M.S. in physiology, biology, or related field preferred. A minimum of three years related experience required. Histological and photographic experience advantageous. Salary—\$7500. Please write **S. H. Olitzky, Personnel Division, University of Pittsburgh**, Fifth Avenue at Bigelow Blvd., Pittsburgh, Pa. 15213.

### CELLULAR & MOLECULAR BIOLOGY

Predoctoral stipends including payment of tuition are available in the Graduate School of the University of Florida for study toward the Ph.D. degree in Cellular and Molecular Biology under a University-wide program involving the colleges of Arts and Sciences, Agriculture, and Medicine. Minimum requirements: B average last two undergraduate years and GRE average of 600 or better. For information write to: **Co-ordinating Chairman for Cellular and Molecular Biology, c/o Department of Anatomy, College of Medicine, University of Florida, Gainesville, Florida 32601.**

(a) **Chief Toxicologist** safety evaluations drugs, chemicals, cosmetics, supv; \$20,000 up; research labs; E. (b) **Clinical Biochemist** head dept 500-bed hosp; to \$18,000; SE. (c) **Project Mgr** various projects; \$16,000; leading research inst; MidW. (d) **Asst Director R&D** soaps; detergents; will groom to be Dept Director; open; leading mfr; SW. (e) **Anatomy Asst/Assoc Prof** teach med students & research; \$12,000–\$14,000; Univ Med Sch; S. (f) **Microbiologist** clinical w research; large hosp research unit; \$15,000–\$20,000; E. Write **WOODWARD MEDICAL PERSONNEL BUREAU**, 185 North Wabash, Chicago 60601. X

**GRADUATE SCHOOL, MEDICAL COLLEGE OF GEORGIA.** Postdoctoral position open for Research Associate in Enzymology or Bacterial Physiology. Write or call: **F. J. Behal, Ph.D., Director of the Graduate School, Medical College of Georgia, 1459 Gwinnett Street, Augusta, Georgia 30902.**

## POSITIONS OPEN

**BIOCHEMIST**—Experienced Biochemist for 400 bed general hospital on Chicago's north side. Salary commensurate with ability and qualifications. To direct modern automated chemistry laboratory, including an active Radioisotope Unit. Write: **Lucito G. Gamboa, M.D., Director of Laboratories, Edgewater Hospital, 5700 N. Ashland Avenue, Chicago, Illinois 60626.**

## POSITIONS OPEN

**Biochemist:** Ph.D. or equivalent to head hospital clinical laboratory and in addition to head a commercial laboratory that manufactures stains and reagents. Write or call collect to **W. H. Tucker, M. D., 1507 Springhill Avenue, Mobile, Alabama. Tel. No. 205-433-6532.**

## Clinical Pharmacologist M.D. or M.D. Ph.D.

With internal medicine and cardiology background

Chief duties are to conduct clinical and hemodynamic studies on new cardiovascular agents. Our noted research facilities recently further expanded in the above area, include a 24 bed clinical pharmacology unit and associated out-patient clinic. Studies designed to evaluate efficacy, safety, biochemical effects and mechanisms of action are involved, to be conducted in a university affiliated hospital. Background should include training and experience in internal medicine and cardiology as well as the evaluation of cardiovascular drugs.

Hoffmann-La Roche and the associated hospitals maintain a continuous training program in pharmacology, clinical pharmacology and medicine. Our company is located in a suburban area, close to New York City.

We offer ample opportunity to conduct and publish personal research and attend scientific meetings.

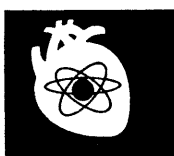
Please submit a complete resume of your qualifications to:  
R. M. Callan, Employment Manager



**HOFFMANN-LA ROCHE INC.**

**Nutley, New Jersey 07110**

An equal opportunity employer



RESEARCH



## PHARMACOLOGIST OR PHYSIOLOGIST

An expanding research program has created a doctorate-level position within our Research and Development Department. Excellent research opportunities for Ph.D. physiologists or pharmacologists interested in CNS pharmacology.

These challenging positions are located in a modern and well-equipped suburban Chicago research laboratory. Company has progressive salary and fringe benefit program including relocation allowances.

Please send curriculum vitae to:

**Dr. R. M. Gesler, Director  
Pharmacologic Research**



**BAXTER LABORATORIES, INC.**

Morton Grove, Illinois 60053

AN EQUAL OPPORTUNITY EMPLOYER

## POSITIONS OPEN

### BACTERIOLOGIST

Johnson Wax has an immediate opening for a B.S.-M.S. microbiologist qualified for laboratory studies involving preservation of leather, plastics, cloth, polymer emulsions, etc. to coordinate basic and applied research projects in Microbiology.

Send resume to:

**R. L. Inslee, S. C. Johnson & Son, Inc., Racine, Wisconsin**

**JOHNSON WAX**

*An equal opportunity employer*

### MARINE BIOLOGIST

1. Lecture to undergraduate students in
  - (a) Introduction to oceanography.
  - (b) Biological oceanography.
2. Carry out research in an aquatic science.

#### EXPERIENCE.

1. A proven history in research.
2. Past experience in lecturing an asset.

#### RANK & SALARY.

It is expected that the appointment will be made at the full professor level. Salary \$13,500 and up.

#### DATE OF APPOINTMENT.

As soon as a suitable candidate can be appointed, but it is expected that the position will be filled by December, 1966.

#### INQUIRIES TO.

Professor K. Ronald, Head, Department of Zoology, University of Guelph, Guelph, Ontario, Canada.

### CHEMISTRY DEPARTMENT HEAD.

An established senior colleague to further the development of a department which has a long history of excellence in undergraduate training and is now embarking on Masters and Doctoral programmes. Duties to commence July 1, 1967. Applications should be received before January 15, 1967 by: **The Dean, Faculty of Arts and Science, University of Victoria, Victoria, B.C., Canada.**

LAB . . .

### CHIEF MICROBIOLOGIST

400 Bed Bronx Teaching Hospital offers an excellent opportunity for a Microbiologist experienced in clinical procedures to direct and supervise a staff of 7 Technicians in Microbiology, Serology and Parasitology.

Ph.D. preferred, Masters considered. Full range of benefits including liberal tuition refund. Salary commensurate with education and experience. Send resume to: **Box S 841, 125 W. 41 St., NYC 10036.** *An Equal Opportunity Employer*

## POSITIONS OPEN

# BIOLOGICAL SCIENTIST

A new position for a Biological Scientist exists in the Toxicology-Pathology Section located in the recently completed Biological Research Building of the Squibb Institute for Medical Research.

Ph.D. or equivalent in Pharmacology, Physiology or Biochemistry with approximately five years industrial experience in research and technical writing preferred, to:

- 1) Collate, review and evaluate biological data for inclusion in IND and NDA submissions to Federal Regulatory Agencies.
- 2) Assist in outlining necessary experimental investigations that would be required for drug safety evaluation.

### SALARY OPEN FULL COMPANY BENEFITS

To arrange an interview, send full resume including salary requirements:

**M. J. ZAJAC**

EMPLOYMENT MANAGER

**SQUIBB**

**INSTITUTE FOR MEDICAL RESEARCH**

New Brunswick, New Jersey 08903

*An Equal Opportunity Employer*

### LABORATORY TECHNICIAN

B.S. or M.S., with major in biochemistry or physiology, to assist in development of drugs for regulation of reproductive functions in humans. Must be willing to work with laboratory animals and assume responsibilities for conducting and analyzing the required experimental programs.

Send complete resume to:

Technical Employment Coordinator  
**THE UPJOHN COMPANY**  
Kalamazoo, Michigan  
*An Equal Opportunity Employer*

### 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, biophysics and bioengineering. Write for details to:

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

## POSITIONS OPEN

**ELECTRONMICROSCOPIST, Ph.D.** or equivalent, with experience in Histochemistry, to participate in neuropathology research program in modern research institute in New York area. Some knowledge in neuroanatomy desirable.

**Box 252, SCIENCE**

**GRADUATE RESEARCH ASSISTANTSHIPS** leading to the master's and doctoral degrees in materials science, beginning June and September 1967. Annual stipends: \$4050 to \$4600. Research interests: defects in solids, surface chemistry and physics, polymer science, mechanical behavior of solids, dental and medical materials, molecular structure determination. A departmental 500KV electron microscope will be operational by the summer of 1967. The department is a participant in the new Center for Advanced Studies in the Sciences sponsored by NSF. Address inquiries to: **Chairman, Department of Materials Science, Thornton Hall, University of Virginia, Charlottesville, Va. 22903.**

**RESEARCH TECHNICIAN**—Full time position available for college graduate with biology degree to work in Renal Research laboratory: study of kidney hormones. 532-bed general hospital maintaining progressive program of patient care, education and research. For information call collect or write **Mrs. Gale Tunnell, Personnel Department, Mt. Sinai Hospital, University Circle, Cleveland, Ohio 44106, 795-6000, ext. 255.**

Medical School of Pahlavi University, Shiraz, Iran is accepting applications for the positions of Associate Professor and Assistant Professor of Physiology. Appointments starting from January, 1967 or thereafter. Applicants are requested to send a résumé of their educational background and work experience to the **Dean of Medical School (Pahlavi University, Shiraz, Iran).**

## FELLOWSHIPS

**FELLOWSHIPS FOR RESEARCH TRAINING** in the basic sciences related to oncology. Citizens or permanent residents of the U.S. with an M.D. or a graduate degree may write for details on terms and stipends to **Dr. A. E. Colas, Department of Obstetrics and Gynecology, University of Oregon Medical School, Portland, Oregon 97201.**

**Postdoctoral Fellowships** at Western Reserve University, Cleveland, Ohio, for physical biochemical investigations of mammalian cell membranes in health and disease. Candidates should have a strong background in chemistry or biochemistry. Write to:

**Dr. Seymour Bakerman**  
Department of Pathology  
University of Kansas Medical Center  
Kansas City, Kansas 66103

### NATIONAL RESEARCH COUNCIL OF CANADA POSTDOCTORATE FELLOWSHIPS 1967-68

Approximately 150 Fellowships will be awarded for 1967-68 by the National Research Council. They will be tenable in the laboratories of the National Research Council, Department of Agriculture, Department of Forestry, Department of Mines and Technical Surveys, Department of National Health and Welfare, Fisheries Research Board of Canada, Meteorological Service of the Department of Transport, National Museum of Canada, and Atomic Energy of Canada Limited.

Applicants should not be more than 35 years of age 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 candidates must meet all Canadian immigration requirements. A good knowledge of written and spoken English or French is required. The competition closes on 16 January, 1967.

The annual stipend, which is free of income tax, is \$6000. A grant is provided towards the cost of travel.

Inquiries should be addressed to:

**Awards Officer,  
National Research Council,  
Ottawa 7, Canada**

## DEPARTMENT HEAD DRUG METABOLISM

Ethical pharmaceutical company seeking Ph.D. in chemical or biological sciences to head research department in planning, organizing, and executing experiments designed to define the biological disposition of therapeutic agents and new dosage formulations.

New research facility in suburban location.

Please send resume to:

**Dr. William L. Kuhn**

**THE WM. S. MERRELL COMPANY  
DIVISION OF RICHARDSON-MERRELL INC.**

**Cincinnati, Ohio 45215** / *An Equal Opportunity Employer*

## POSITIONS OPEN

Position Open: Electron Microscope Technologist with minimum of two years experience in fixation, embedding and sectioning of animal and/or human tissue. Position is in a newly created electron microscope laboratory in southwestern Federal hospital. Salary range \$5331 to \$7696 depending on education background (minimum of B. Sc. Degree) and practical electron microscopic experience. Write or telephone: Major George D. Lundberg, M. D., Chief, Pathology Service, William Beaumont General Hospital, El Paso, Texas (Area Code 915-568-6690).

POSTDOCTORAL TRAINEESHIPS IN CLINICAL CHEMISTRY are available, July 1, 1967 at the Biochemistry Department, University of Washington School of Medicine, and the University Hospital. The program is primarily for those with a Ph.D. degree in Biochemistry who wish to become clinical chemists in a research-oriented hospital. The appointments are for two years with a stipend of \$5,000 to \$6,000 per annum (depending upon postdoctoral experience), plus an allowance of \$500 per dependent. The stipends are partially tax-exempt in most cases. Please apply to: Dr. Alex Kaplan, Associate Professor, Department of Biochemistry and Director, Clinical Chemistry Laboratory, University Hospital, Seattle, Wash. 98105.

### BIOCHEMIST for SALES

Visit universities and research institutes and deal directly with researchers. We make specialized research equipment for use in the fields of protein and enzyme chemistry. Salary + bonuses + car + expenses + company paid benefits.

### TECHNICON INSTRUMENTS CORPORATION

ARDSLEY, NEW YORK  
(Just outside of N.Y.C.)

An equal opportunity employer

## POSITIONS OPEN

**Position Open**—Plant biochemist or plant physiologist, post doctorate research associate, salary approx. \$8,000 annually renewable up to 3 years, to work on biochemistry and physiology of seed dormancy, germination and other related processes with emphasis on molecular biology. Please send resume to **Dr. A. A. Khan, N.Y.S. Agr. Exp. Station, Cornell University, Geneva, N.Y. 14456.**

### MATHEMATICAL BIOLOGIST, BIOMATHEMATICIAN, or BIOMETRICIAN

Two openings, beginning Sept. 1, 1967, on the staff of the Division of Mathematical Biology and Biomathematics Laboratory of the Department of Medicine of the Harvard Medical School, at the Peter Bent Brigham Hospital. Excellent opportunities for research on biological problems of major medical importance and for a small amount of teaching in academic and training programs of Division. Digital and A/D computer available in the laboratory exclusively for use by members of the staff. Ph.D. degree in an appropriate discipline and minimum of two years experience required. Write: Dr. Anthony F. Bartholomay, Director, Biomathematics Laboratory, Peter Bent Brigham Hospital, 721 Huntington Avenue, Boston, Mass.

"Temporal bone histology technician. Competitive salary. Challenging position. Must be thoroughly experienced. Send a resume to: **Dr. Ernest Peterson, University of Miami, School of Medicine, 1475 N. W. 12th Avenue, Miami, Florida.**"

An Equal Opportunity Employer

## CONGRESS

The **FIRST INTERNATIONAL CONGRESS OF THE TRANSPLANTATION SOCIETY** (open) will be held in PARIS from June 27 to 30, 1967. Programme: Mechanisms of graft rejection; methods of immuno-depression; genetics of transplantation; transplantation antigens; organ transplantation; bone marrow transplantation; cancer as homograft. Co-chairmen: Prof. Ag. J. Dausset, Prof. J. Hamburger, Prof. G. Mathé. Secrétariat: J. Dausset, Hôpital Saint Louis, Place du Dr. Fournier, PARIS X<sup>e</sup>—FRANCE. This Congress will be preceded on June 26 by a **COLLOQUIUM ON ORGAN TRANSPLANTATION** (Prof. J. Hamburger, Hôpital Necker, PARIS 15<sup>e</sup>—FRANCE).

# The Market Place

## SUPPLIES AND EQUIPMENT

### • HYPOPHYSECTOMIZED RATS

Shipped to all points via Air Express  
For further information write

**HORMONE ASSAY LABORATORIES, Inc.**  
8159 South Spaulding Ave., Chicago 29, Ill.

Now Contracting

### MINIATURE PIGS

These Animals Have Never Been on the Ground  
Available in Lots Up to 50 of One Age  
Will Contract for 500 in One Year

**VITA VET LABS**  
Box 108, Marion, Ind. 46952 317-664-0013

## 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.

## N.Y. PUBLISHER WANTS MANUSCRIPTS

### \$1600 BEST BOOK CONTEST

Want your book beautifully published, promoted, distributed by a New York leader in the field? Over 1,000 authors on our list. Attractive subsidy basis for fiction, non-fiction, poetry, scholarly, scientific or controversial books. Send manuscript for free editorial report, free Brochure SX and rules of \$1600 Best Book Contest open to Pageant authors.

### PAGEANT PRESS

Dept. SX  
101 Fifth Ave., N.Y., N.Y. 10003

## 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. Fully protected shipments. **HISTOLOGY SERVICE, INC.** 4801 N. Broad St., Philadelphia, Pa. Zipcode 19141, (215) Davenport 4-5800

# PHARMACOLOGISTS

Several senior positions now open for scientists at the Ph.D. level to help expand the facility for the evaluation of the safety and efficacy of our products. Opportunities exist to design and implement basic biological research programs in our fields of interest.

Modern laboratory building, now under construction for occupancy in 1967, will provide excellent facilities and the challenge of an interdisciplinary approach to proprietary pharmaceuticals and toiletries product development. Candidates will be considered at all levels of experience.

All responses will be held in confidence.

Send resume and salary history in confidence directly to:  
**Dr. Leonard Chavkin, Director of Research and Development Laboratories**

### BRISTOL-MYERS PRODUCTS

225 Long Avenue

Hillside, New Jersey

An equal opportunity employer

## Ph.D. MICROBIOLOGIST MANAGER-MEDICAL QUALITY

Needed to support our growing manufacturing volume and product development programs in the field of high volume, disposable medical devices. Competence in sterility assay, sterilization processes, FDA requirements, toxicity and implant testing, the interaction of body fluid and medication with plastic materials required.

Please reply directly to: **MR. THOMAS E. LEE, VICE PRESIDENT, PRODUCT RESEARCH & DEVELOPMENT**

## HEALTH & SCIENCE DIVISION BRUNSWICK CORPORATION

1831 Olive Street

An Equal Opportunity Employer

St. Louis, Mo.



# Do you qualify for any of these growth positions with SRA?

Science Research Associates, Inc.—a leading developer and publisher of educational materials—has excellent editorial opportunities immediately available. Check the openings listed below and plan to contact us today if you feel you qualify.

## **Science Editor**

Bachelors and Masters degree with a major in one of the sciences required. Applicants should also have a minimum of 3 years' teaching experience, and 2-3 years' editorial and/or writing experience. This job requires a thorough knowledge of at least one scientific discipline, and an awareness of curriculum and curriculum trends in science. Experience in supervising the work of others is essential.

## **Staff Editor (Physics and Chemistry)**

BA or BS required; MA or MS in physics or chemistry is preferred. Applicants should have a minimum of 2-3 years' editorial experience, preferably in the development of chemistry or physics materials. Teaching experience in physics or chemistry is highly desirable. A thorough knowledge of chemistry and physics subject matter is essential.

## **Assistant Editor (Junior High Science Materials)**

BA or BS with a major in one of the sciences required. MA or MS preferred. One to two years of editorial experience are mandatory. Junior or senior high school teaching experience is highly desirable. Writing ability a must.

## **Assistant Editor (Elementary Science Materials)**

There are a number of openings in this

area. A college degree with a major in one of the sciences is required. Editorial writing, and production experience would be extremely helpful, as well as teaching and laboratory or library research experience.

## **Assistant Editor (Grade 3-4, Elementary Science Program)**

A college degree with a major in one of the sciences, psychology, or education is required. Editorial and elementary school teaching experience would be useful. Writing ability and knowledge of science learning theory or psychology are required.

## **Editorial Assistant (Elementary School Program)**

Applicants should have a college degree, with a major in one of the sciences, or in education. Experience in Elementary teaching, editorial or production work, and writing of any kind would be helpful. Knowledge of one scientific discipline or of psychology is required.

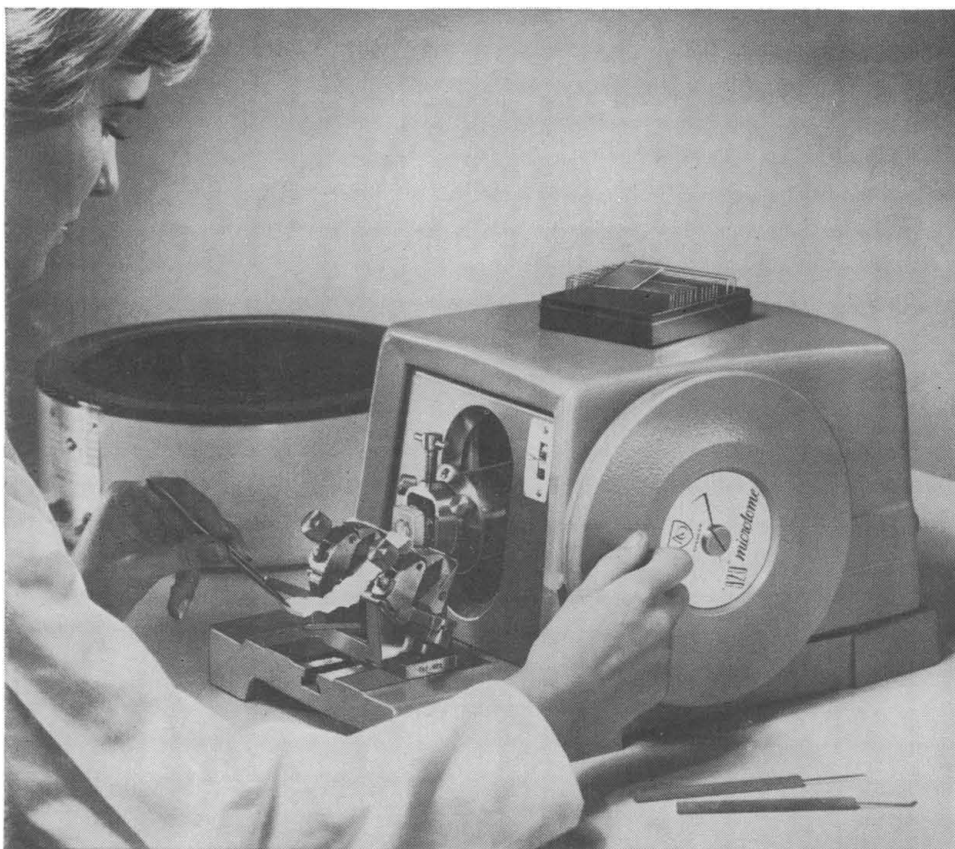
## **Editorial Assistant (Elementary Health Program)**

A college degree with a major in biology, health related science, health education or journalism is required. Any elementary school teaching, or other work with children, would be useful. Writing, editorial and production experience are valuable.

If you feel qualified for one or more of these editorial opportunities, send an outline of your background and interests to: Mr. R. Pochowicz, Science Research Associates, 259 East Erie Street, Chicago, Illinois.



An equal opportunity employer a subsidiary of IBM



## Why is the granddaddy of microtomes still best for sectioning tissue?

AO's "820" Rotary Microtome is the *standard* instrument today because it accurately sections tissue from 1 micron to 50 microns thin, day after day. Sure, it now has the feed indicator in the front, a lever to lock the counter-balanced drive wheel, automatic feed release, and other refinements making it easy to use, easy to maintain, safe and attractive. That's nice, but the "820" is the best microtome you can

buy because it has a precision mechanism that smoothly feeds the specimen to a keen, rigidly mounted blade. That's what sectioning is all about. That's why you'll see rows of "820s" in large laboratories around the world. Ask the pathologist who has one. The "820" costs \$895—still the best buy. Call your AO Sales Representative today for a no-obligation demonstration, or write for more information.



**AMERICAN OPTICAL COMPANY**  
INSTRUMENT DIVISION • BUFFALO, NEW YORK 14215