

1-3. Instrumental Methods of Analysis, annual symp., Montreal, Quebec, Canada. (W. H. Kushnick, Instrument Soc. of America, 313 Sixth Ave., Pittsburgh 22, Pa.)

1-5. Irrigation and Drainage, 4th intern. cong., Madrid, Spain. (D. Diaz-Ambrona, Comité Nacional Espanol de la Comision Internacional de Riegos y Drenajes, Ministerio De Obras Publicas, Agustin De Bethencourt 4, Madrid)

2-4. American Assoc. of Bioanalysts and California Assoc. of Clinical Laboratories, annual, San Francisco, Calif. (Mrs. M. K. Higgins, 75 Buena Vista Ave., San Francisco 17, Calif.)

2-4. Drugs Affecting Lipid Metabolism, intern. symp., Milan, Italy. (S. Garattini, c/o Institute of Pharmacology, Via del Sarto 21, Milan, Italy)

3-8. Pan American Medical Women's Alliance, 7th cong., San Juan, Puerto Rico. (Mrs. S. D. Rosekrans, 504 Newett St., Nullsville, Wis.)

5-8. Special Libraries Assoc., 51st annual, Cleveland, Ohio. (B. M. Woods, SLA, 31 E. 10 St., New York 3)

5-9. American Soc. of Mechanical Engineers, summer annual and aviation conf., Dallas, Tex. (L. S. Dennegar, ASME, 29 W. 39 St., New York 18)

5-9. World Power Conf., Madrid, Spain. (D. J. Pérez, Pozualo, Spanish National Committee, General Pardinás, 55, Madrid, Spain)

5-10. National Conf. on Social Welfare,

annual, Atlantic City, N.J. (Natl. Conf. on Social Welfare, 22 West Gay St., Columbus 15, Ohio)

5-14. XXV Cold Spring Harbor Symp. on Quantitative Biology, Cold Spring Harbor, N.Y. (A. Chovnick, Biological Laboratory, Long Island Biological Assoc., Cold Spring Harbor)

6-10. International Conf. on Live Poliovirus Vaccines, Washington, D.C. (Secretariat, Pan American Health Organization/World Health Organization, 1501 New Hampshire Ave., NW, Washington 6, D.C.)

7-11. Microwave Tubes, intern. cong., Munich, Germany. (Nachrichtentechnische Gesellschaft im VDE (NTG), Frankfurt-am-Main, Osthafenplatz 6, Germany)

7-13. Dosimetry in Health Physics, symp., Vienna, Austria. (International Atomic Energy Agency, 11 Kärntner Ring, Vienna 1, Austria)

7-15. Partial Differential Equations and Continuum Mechanics, intern. conf., Madison, Wis. (R. E. Langer, Mathematics Research Center, U.S. Army, Univ. of Wisconsin, Madison 6)

8-9. Selenium in Nutrition, conf., Ithaca, N.Y. (K. C. Beeson, U.S. Plant, Soil, and Nutrition Laboratory, Ithaca, N.Y.)

8-10. Canadian Federation of Biological Societies (Canadian Physiological Soc., Pharmacological Soc. of Canada, Canadian Assoc. of Anatomists, Canadian Biochemical Soc.), 3rd annual, Winnipeg, Manitoba. (E. H. Bensley, Montreal General Hospital, 1650 Cedar Ave., Montreal 25, P.Q.)

8-11. National Soc. of Professional En-

gineers, annual, Boston, Mass. (P. H. Robbins, NSPE, 2029 K St., NW, Washington 6)

8-12. American College of Chest Physicians, Miami Beach, Fla. (M. Kornfeld, 112 E. Chestnut St., Chicago 11, Ill.)

9-10. American Geriatrics Soc., Miami Beach, Fla. (R. J. Kraemer, 2907 Post Rd., Warwick, R.I.)

9-11. Acoustical Soc. of America, Providence, R.I. (W. Waterfall, ASA, 335 E. 45 St., New York 17)

9-11. Endocrine Soc., Miami Beach, Fla. (H. H. Turner, 1200 N. Walker, Oklahoma City 3, Okla.)

9-11. National Speleological Soc., annual, Carlsbad, N.M. (G. W. Moore, U.S. Geological Survey, Menlo Park, Calif.)

9-12. American Medical Women's Assoc., Miami Beach, Fla. (Mrs. L. T. Majally, 1790 Broadway, New York 19, N.Y.)

9-12. American Rheumatism Assoc., annual, Hollywood-by-the-Sea, Fla. (F. E. Demartini, Presbyterian Hospital, 622 W. 168 St., New York 32)

9-12. American Therapeutic Soc., Miami Beach, Fla. (O. B. Hunter, Jr., 915 19 St., NW, Washington 6)

10-12. American College of Angiology, Miami Beach, Fla. (A. Halpern, 11 Hampton Court, Great Neck, N.Y.)

10-12. American Electroencephalographic Soc., Boston, Mass. (G. A. Ulett, 1420 Gratten St., St. Louis 4, Mo.)

10-12. Society for Biological Psychiatry, Miami Beach, Fla. (G. N. Thompson, 2010 Wilshire Blvd., Los Angeles 57, Calif.)



GILLINGS-BRONWILL THIN SECTIONING MACHINE

FOR
RESEARCH
AND
PRODUCTION

STONE • BONE • TEETH • CRYSTALS

Cut sections of teeth and bone as thin as 35 microns, stone and crystal to .005" thinness. Specimens require little or no polishing. High speed 6500 RPM diamond wheel, automatic table feed. Immediate delivery.



Write for
Specifications

BRONWILL SCIENTIFIC
Division of Will Corporation

3903 Russell St., Box 3927, Rochester 10, N. Y.


★ ★ ★ ★ ★ Have you
applied for Your share of
FEDERAL NDEA MONEY?

Have you enriched your science courses?
As you are aware, Federal support is available to you under Title III NDEA. Now you can equip your science department in the way you have always wanted.

Cenco representatives have made a study of the Title III program and are qualified to give details in your area—how you may apply for your share. Write us today—no obligation.

To assist you further, the Cenco conversion list provides numbers which correspond to items in the "Purchase Guide"*. Send for PG-1 and for our suggestive list of apparatus. Specify elementary science, earth science, physics, chemistry or biology.

*Prepared by the Council of Chief State School Officers



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation
1718-M Irving Park Road • Chicago 13, Ill.
Branches and Warehouses—Mountainside, N. J.
Boston • Birmingham • Santa Clara • Los Angeles • Tulsa
Houston • Toronto • Montreal • Vancouver • Ottawa

Serving education since 1889.

ZOOGEOGRAPHY

Editor **CARL L. HUBBS**

To the Memory of Charles Darwin
and Alfred Russel Wallace

AAAS Symposium Volume No. 51
510+x pp., 115 illus., 13 tables, 6x9, author index
of scientific names, references, cloth

AAAS members' cash orders \$10.50, Retail \$12.00

August 1957 Stanford Symposium:

The Origins and Affinities of the
Land and Freshwater Fauna
of Western North America

December 1957 Indianapolis Symposium:
Some Unsolved Problems in Biology, 1957:

Geographic Distribution of
Contemporary Organisms

- ... a vast storehouse of information,
- ... a kinetic approach, concerned with processes
and explanations
- ... great diversity in: groups of organisms—areas
covered—topics stressed—angle of approach

English Agents: Bailey Bros. & Swinfen, Ltd.
Hyde House, West Central Street, London W.C.1

**American Association for the Advancement
of Science**

1515 Massachusetts Avenue, NW, Washington 5, D.C.

PHOTOVOLT

LINE-OPERATED MULTIPLIER FLUORESCENCE METER

model
540



- High sensitivity ... full scale for 0.001 microgram quinine sulphate
- Micro-fluorimetry ... liquid volumes down to 1 ml
- Low blank readings ... linear instrument response
- High sensitivity nephelometry ... minute turbidities
- Fluorescence evaluation of powders, pastes, and solids; also for spot-tests on filter paper without elution
- Selection of filters, interference filters, and sample holders

Write for Bulletin No. 392 to:

PHOTOVOLT CORP.
95 Madison Avenue • New York 16, N. Y.

Also: pH Meters, Colorimeters, Densitometers

PERSONNEL PLACEMENT

CLASSIFIED: Positions Wanted, 25¢ per word, minimum charge \$4. Use of Box Number counts as 10 additional words. Payment in advance is required. Positions Open, \$40 per inch or fraction thereof. No charge for box number.

COPY for classified ads must reach **SCIENCE** 2 weeks before date of issue (Friday of every week).

DISPLAY: Rates listed below—no charge for Box Number. Monthly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single insertion	\$40.00 per inch
4 times in 1 year	38.00 per inch
7 times in 1 year	36.00 per inch
13 times in 1 year	34.00 per inch
26 times in 1 year	34.00 per inch
52 times in 1 year	32.00 per inch

For **PROOFS** on display ads, copy must reach **SCIENCE** 4 weeks before date of issue (Friday of every week).

Replies to blind ads should be addressed as follows:

Box (give number)
Science
1515 Massachusetts Ave., NW
Washington 5, D.C.

POSITIONS WANTED

Anatomist, M.D., Ph.D., 10 years' experience in teaching and research, available September 1960. Box 86, **SCIENCE**. X

(a) **Pharmacology, Ph.D.,** neurophysiology training; 3 years of college teaching, 6 years of physiology-pharmacology drug research experience; prefers pharmacology, neurophysiology drug development or research appointment. (b) **Agricultural Biochemist, M.S. major;** bacteriology minor; research on animal nutrition and trace analysis; desires research position. S4-3 Medical Bureau, Inc., Science Division, Burnice Larson, President, 900 North Michigan Avenue, Chicago. X

POSITIONS WANTED

Endocrinologist, M.S., 4 years' experience endocrine assays, pharmacology, experimental surgery; publications; desires position with minimal animal contact. Box 85, **SCIENCE**. 4/22

Geneticist-Cytologist-Electron Microscopist, Ph.D. Specialized research, teaching experience. Microbiology, botany background. Publications. Box 83, **SCIENCE**. 4/22, 29

Immunopharmacologist, Ph.D., desires to conduct research on purification and therapeutic uses of antibodies and enzymes. P.O. 333, Davis, California. 4/15, 22, 29

Plant Physiology-Ecology, Ph.D.; 10 years' experience teaching-research. Interested academic or research. Box 84, **SCIENCE**. X

Vertebrate Zoologists. Special interest environmental physiology and endocrinology. Male, 36, Ph.D.; 8 years of teaching and research. Desires to relocate. Box 87, **SCIENCE**. 4/22

Woman Biologist, Ph.D., 38, desires college teaching position in a senior college beginning June or September. Broad background in the biological sciences with botany major and zoology and biochemistry minors; 8 years of full-time college teaching experience. Box 47, **SCIENCE**. 3/25; 4/15

POSITIONS OPEN

Biochemist—M.S. or Ph.D. Principal scientist for radioisotope research laboratory, 377 GM&S bed VA Hospital affiliated with Johns Hopkins and University of Maryland Medical Schools. Opportunity for basic as well as clinical investigation and medical application of isotopes. Starting salary \$7510, \$8810, or \$10,130, depending on qualifications; Career Civil Service. Write for particulars to Personnel Officer, VA Hospital, Baltimore 18, Md. X

POSITIONS OPEN

(a) **Associate Director, Clinical Research.** Excellent opportunity for young (under 40) research-minded M.D. to establish, coordinate clinical testing program; evaluate results; represent company on experimental products, liaison with other departments; requires practice and/or research experience, emphasis cancer, arthritis, pulmonary diseases and ability to present ideas effectively; to \$16,000, management-incentive bonus, stock option plan; prominent company; Midwest. (b) **Biochemist, Ph.D.** with hospital experience, supervise department in 300-bed fully approved general facility; \$10,000; California. (c) **Microbiologist-Immunologist.** To participate in teaching microbiology, research, and (d) **Virologist, Ph.D.** preferred, for research, some diagnosis; outstanding eastern university medical school. (e) **Biochemist, M.S.,** to head section, 300-bed voluntary hospital; to \$8000; midwestern college city 75,000. (Please write for an analysis form. Our 64th year: Founders of the counselling service to the medical profession; serving medicine with distinction over half a century.) Science Division, Woodward Medical Bureau, Ann Woodward, Director, 185 North Wabash, Chicago. X

Biostatistician, Ph.D.; research in child growth studies; opportunities for varied consultation and teaching at dental school located in large medical center; modern computing facilities available. Salary, from \$9000, and academic rank dependent upon qualifications. Write to Dr. Bhim Savara, Head of Department, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Drive, Portland 1. X

Chemist-Biochemist, M.S. level or above. Medical research program. Particular emphasis on cellular physiology, enzymes, and electrolytes. Position in Career Civil Service. Reply to Manager, Veteran Administration Hospital, East Orange, N.J. 4/15

Medical Technologist, blood banking background desirable. Interest in research required. Excellent opportunity to participate in blood group research. Salary open. Mail replies to R. F. Ambelang, Milwaukee Blood Center, Inc., Milwaukee, Wis. ew

POSITIONS OPEN

(a) **Bacteriologist**, Ph.D. for expanding hospital; around \$8000 year; Florida. (b) **Tissue Culture Laboratory Director**, Ph.D. in biology or biochemistry for leading medical school; \$8000-\$10,000 year; Midwest. (c) **Consultant Pharmacologist** to supervise new therapeutic studies for leading drug firm; East. (d) **Senior Parasitologist** with schistosomiasis experience for research unit in West Africa. (e) **Clinical Biochemist** to supervise laboratory in expanding hospital; \$7000-\$10,000 year; resort town; East. (f) **Head of Toxicology Laboratory**, pathologist or veterinarian for surgical and animal health studies; \$9000-\$12,000 up; pharmaceutical firm; East. (g) **Biology Teacher**, advanced courses in zoology or microbiology and research; liberal arts university; rank and salary open; \$7200 up; East. (h) **Pharmacologist** for aerospace and environmental physiology studies; Midwest. (i) **Biochemist/Biologist**, Ph.D. for cancer research; \$7000-\$9000 year; Southwest. (Please write for details; also many other positions available through our nationwide service.) S4-3 Medical Bureau, Inc., Science Division, Burneice Larson, President, 900 North Michigan Avenue, Chicago. X

ENDOCRINOLOGIST

Specializing in the endocrinology of reproduction, to be responsible for a biological research program dealing with fertility. Five years postdoctorate experience desired. Large pharmaceutical company in the East. Please send résumé of education and experience to

Box 78, SCIENCE

Microbiology Graduate Assistantships toward master's degree; \$1800, free tuition. Excellent facilities. Phone inquiry collect. Orton Stark, Miami University, Oxford, Ohio. 4/22, 29

Pharmacologist, Physiologist, or Biochemist. Academic career position open in pharmacology department for Ph.D. in one of the above disciplines. Good opportunity for constructive teaching and research at excellent starting salary for academic rank of **Instructor to Associate Professor**. Excellent laboratory facilities and assisting personnel for research in renal physiology, renal biochemistry, neurophysiology, and pharmacology, or other areas of interest to appointee. Send résumé to Box 71, SCIENCE. 4/8, 15

PHARMACEUTICAL RESEARCH

Expansion of our facilities has created several responsible opportunities in the research and development of ethical pharmaceuticals.

SENIOR PHARMACOLOGIST—For the pharmacologic study of CNS acting agents. Background should include a Ph.D. in pharmacology with some industrial experience.

PHARMACEUTICAL CHEMIST—Pharmaceutical research and product development. Background should include a Ph.D. in pharmaceutical chemistry or pharmacy with 1-3 years industrial experience.

Laboratory facilities and employee benefit programs are excellent. Location is in a pleasant suburb northwest of Chicago.

Please reply in confidence stating personal data, education, experience and salary history.

BAXTER LABORATORIES, INC.
Morton Grove, Illinois

POSITIONS OPEN

M.D. To Do Medical Writing

Excellent position available for physician who has writing and editorial experience to head up Medical Writing Division of a midwest pharmaceutical firm. Should have administrative ability to supervise Technical Scientific writers and clerical personnel. Clinical or laboratory experience desirable. Write

Box 82, SCIENCE

Physiologist, Position at associate professor level in eastern medical school. Research and teaching experience essential. Box 81, SCIENCE.

Science Teachers, Librarians, Administrators urgently needed for positions in many states and foreign lands. Monthly non-fee placement journal since 1952 gives complete job data, salaries. Members' qualifications and vacancies listed free. 1 issue, \$1. Yearly (11 issues) membership, \$5 individual; \$10 institutional. **CRUSADE, SCI.**, Box 99, Station G, Brooklyn 22, N.Y. eow

Senior Technician. Research projects in virology, tissue culture, and cancer. New laboratory in southern Florida. Connected with university and children's hospital. Send complete résumé. Box 75, SCIENCE. 4/8, 15

TWO TECHNICIANS

for key positions in commercial laboratory devoted entirely to the preparation of microscope slides. Applicants must be thoroughly experienced in the preparation of slides in large quantities and familiar with paraffin and celloidin sectioning and modern staining techniques. Preference will be given to technicians who have had two or more years of experience in a commercial laboratory or in the biology department of a university. These positions offer top starting salaries and the opportunity for substantial advancement. Benefits include hospital and surgical insurance, life insurance, generous sick leave, retirement pension, and paid vacations. New and modern laboratories provide pleasant working conditions. In first letter outline academic background, technique experience, and salary expected. Write to

Mr. B. Coursen
GENERAL BIOLOGICAL SUPPLY HOUSE (Turtex Products)
8200 South Hoyne Avenue
Chicago 20, Ill.

SCIENTIFIC TRANSLATION

Excellent opportunity with well-known pharmaceutical manufacturer located in Philadelphia for competent translator who seeks an interesting and challenging position in research division. Opportunities to work with a wide variety of scientific subjects. Applicants must be fluent in French, plus one other modern language and have a good command of idiomatic English. Prefer academic degree or equivalent (foreign or U.S.) in chemistry or biological sciences. Liberal benefit program including educational assistance. Send complete resume.

BOX 88, SCIENCE

FELLOWSHIPS

Two postdoctoral traineeships in **Sensory Physiology** (auditory and/or prenatal). For the M.D. interested in otological research and/or the Ph.D. in physiology, anatomy, biophysics, or experimental psychology. Stipends, largely tax free, \$6000 per year, up to 3 years. Write to The Deafness Research Laboratory, Children's Hospital, 4614 Sunset Blvd., Los Angeles 27, Calif. 4/15, 22, 29

The Market Place

BOOKS AND MAGAZINES

Your sets and files of scientific journals

are needed by our library and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A38, CANNER'S, Inc., Boston 20, Massachusetts

PROFESSIONAL SERVICES



LABORATORY SERVICES
for the
FOOD and DRUG INDUSTRIES
Drug Evaluation, Food Additive Studies
Chemical and Biological Assays,
Clinical Studies, Research

LAWALL & HARRISON

Div. S, 1921 Walnut St., Philadelphia 3, Pa. LO 3 4322

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.

WABASH HYDRAULIC LABORATORY PRESSES

Most complete line, 3 to 50-ton capacity. Heated Platens. Manual & motorized models. Ask for catalog.

Wabash Metal Products Co.
1614 Morris St., Wabash, Indiana



Laboratory Animals

Mice
Rats
Hamsters
Guinea Pigs
Rabbits
Information sent on request
H. S. HURLBURT
Animal Research Center, Bainbridge, N.Y.
WOrth 7-5415

YOU NEED THIS FREE CATALOG FOR YOUR FILES

Serums, antiserums and bloods of all kinds for technicians and tissue culture laboratories. No salesman will call.

COLORADO SERUM CO.
4950 York St. • MAIN 3-5373 • Denver 16, Colo.

"From the hand of the veterinarian to research."®



albino rats

CHARLES RIVER CD
(Caesarean derived)
CHARLES RIVER SD
(Sprague-Dawley descendants)
CHARLES RIVER W
(Wistar descendants)

HYPOPHYSECTOMIZED RATS

- Only Charles River CD animals used
- Rigidly controlled environment (same bldg.) birth to surgery.
- High speed surgery by graduate biologists.
- 10 years experience animal surgery.
- Overnight air service from Boston

THE CHARLES RIVER BREEDING LABS

Dept. B, 1093 Beacon Street, Brookline 46, Mass.
Henry L. Foster, D.V.M., President

The Applied
Physics Laboratory
The Johns Hopkins
University

announces

Appointments for Senior Scientists in
WEAPON SYSTEMS
EVALUATION

The Assessment Division of The Applied Physics Laboratory has undertaken new responsibilities and is expanding its Senior Analytical Staff. Senior Scientists and Engineers in such fields as Mathematics, Physics, Physical Chemistry and Engineering have in the past proven very effective in solving the types of problems involved, which include the evaluation of weapon systems in tactical environments, the employment of future weapon systems, and the application of the most recent advances in science and technology to these systems. More specifically, we are concerned with broad concepts of weapon systems as related to fleet air defense, naval attack, anti-submarine warfare, as well as all aspects of limited war.

The performance of these assignments requires Scientists and Engineers with mature minds capable of making original contributions. Though the primary tool used in the studies is war gaming played on digital computers, previous experience in operations research is not required. You will maintain close association with high-level scientists of other laboratories.

The results of these studies will provide the guide lines for a significant portion of the nation's hardware research of future years.

The Laboratory provides an atmosphere of scientific freedom conducive to original and creative work. For information and arrangements for interview write in confidence to:

Dr. Charles F. Meyer
Assessment Division Supervisor
The Applied Physics Laboratory
The Johns Hopkins University
8615 Georgia Avenue, Silver Spring, Maryland

THREE IN A ROW...



The image displays three Pyrex trophies arranged horizontally. Each trophy is engraved with the text "SALES ACHIEVEMENT", "PYREX", and a specific year followed by "AWARD". The trophies are made of clear glass and feature various designs, including a pointed lid, a bowl with handles, and a flared cup.

- 1951 Award:** A tall, slender trophy with a pointed lid and a flared base. The engraving reads "SALES ACHIEVEMENT", "PYREX", and "1951 AWARD".
- 1958 Award:** A trophy with a bowl and two handles, a lid, and a pedestal base. The engraving reads "SALES ACHIEVEMENT", "PYREX", and "1958 AWARD".
- 1959 Award:** A trophy with a flared cup and a pedestal base. The engraving reads "SALES ACHIEVEMENT", "PYREX", and "1959 AWARD".

Again this year we are recipients of the Annual Pyrex Sales Achievement Award presented by the Corning Glass Works in recognition of outstanding sales of their Pyrex brand laboratory glassware. We have won the Steuben crystal trophy *each year* since establishment of the award three years ago.

We are therefore prepared to make immediate shipment of orders specifying either large quantities or varied assortments.

Because of this initial order, Corning kindly permitted us to make the first advertising announcement. This appeared in the *Journal of Industrial and Engineering Chemistry*, Oct., 1915—see reproduction at right.

QUALITY AND SERVICE
A.H.T.CO.
PHILA., U.S.A.
LABORATORY APPARATUS

More and more laboratories rely on Thomas **Laboratory Apparatus and Reagents**
VINE ST. AT 3RD • PHILADELPHIA 5, PA.