

Announcements

The radioactivity section of the National Bureau of Standards announces the availability of two new **radioactivity standards**: iodine-125 and cerium-139. Iodine-125 (sample No. 4944) had an activity on 1 Jan. 1963 of about 3×10^4 dps/ml. It is available in a 5-ml solution, for \$24. Cerium-139 (sample No. 4999) had an activity, also on 1 Jan., of about 5×10^4 γ ps, in solid point source. The price is \$32.

Reissues of two previously available standards have also been made: krypton-85 (sample No. 4935-B), activity in October 1962 of about 6×10^7 dps/g mole, in 10 ml of gas, for \$23; and carbon-14 (sample No. 4990-A), in 1 lb of oxalic acid, for \$4. (E. M. Zandonini, Radioactivity Standard Samples, Radioactivity Section, NBS, Washington 25)

A 35-member national committee on status and needs in **hydrological research** has been established by the American Geophysical Union's section on hydrology. The chairman is William C. Ackermann, chief, Illinois State Water Survey, and president of AGU's hydrology section. The committee held its first meeting 13-15 February in Chicago.

The National Committee is part of an international effort being established by the Committee on International Programs in Atmospheric Sciences and Hydrology. This group, formed last November at the request of the White House, is headed by Sverre Pettersen, chairman of the meteorology department, University of Chicago.

The U.S. Public Health Service has formed a 14-member advisory committee on **scientific publications**, headed by Richard R. Willey, former deputy chief, division of research grants, NIH.

The committee operates under the auspices of the National Library of Medicine to evaluate applications made to the USPHS for support of scientific publications. Their first meeting was held 11 February.

The National Institute of **General Medical Sciences** (NIGMS) was established this month at NIH. It was formerly the Division of General Medical Sciences. NIGMS is to be responsible for "administering, fostering, and coordinating" research in the basic medical

sciences, public health, and some clinical and biomedical studies which are not covered by the other institutes. Its establishment, authorized by Congress in October, brings to nine the number of Institutes in NIH.

Director of NIGMS is **Clinton Powell**, who was head of the Division of General Medical Sciences.

Iceland has imposed a half-cent-a-pack tax on **cigarettes** to assist the Icelandic Cancer Society in research and education on the health effects of smoking. The new tax is expected to net about \$50,000 a year.

The National Institutes of Health invites biomedical scientists to participate in evaluating the usefulness of the **laboratory instrument computer** (LINC), a small, stored-program digital computer developed at M.I.T.'s Lincoln Laboratory, with the participation of the Air Force Cambridge Research Laboratories. Participants will assist in assembling a LINC, and will provide an evaluation after using it in their own research for a year. Deadline for receipt of inquiries: *15 March*. (T. T. Sandel, LINC Evaluation Board, 292 Main St., Cambridge 39, Mass.)

Grants, Fellowships, and Awards

The American Museum of Natural History is offering small grants for research in **wildlife conservation**, animal ecology, or related fields of North American natural history. The grants are provided by the Theodore Roosevelt Memorial fund, which was established to aid younger scientists, especially graduate students, interested in wildlife research. Deadline for receipt of applications: *31 March*. (Director, American Museum of Natural History, Central Park W. at 79th St., New York 24)

Travel and subsistence grants are available for graduate students to attend a seminar on problems of **marine organisms-sediment interrelationships**, 22 July to 31 August, in Bermuda. The seminar is sponsored by the Bermuda Biological Station and Lehigh University, and supported by the National Science Foundation. Applicants must be graduate students in geology, biology, or oceanography. (K. E. Chave, Marine Science Center, Lehigh University, Bethlehem, Pa.)

Nominations are being accepted for the 1963 Harvey W. Wiley award for analytical methodology in **agricultural chemistry**. The \$500 prize is offered under the auspices of the Association of Agricultural Chemists in recognition of achievement in food, drugs, cosmetics, feeds, fertilizers, pesticides, and general analytical chemistry. Deadline for receipt of nominations: *1 April*. (W. Horowitz, Box 540, Benjamin Franklin Station, Washington 4)

Fellowships in **forest resources** are available from Harvard University. The 1-year grants carry stipends of up to \$15,000, depending on the professional status and needs of the recipient. Deadline for receipt of applications: *1 April*. (Committee on the Charles Bullard Fund for Forest Research, Littauer Center 123, Harvard University, Cambridge 38, Mass.)

A limited number of travel grants are available for participants in the 7th International Congresses on **Tropical Medicine and Malaria**, scheduled for 1-11 September in Rio de Janeiro, Brazil. Applications should be in the form of a letter, stating the applicant's institution, his relationship to the program, and his reasons for requesting support, including the relationship of the congress to his professional activities. Employees of the U.S. government are not eligible. Deadline: *11 March*. (Dr. C. G. Huff, president, American Society of Tropical Medicine and Hygiene, Naval Medical Research Institute, Bethesda, Md.)

Three internships in **medical librarianship** are available from the Biomedical Library, U.C.L.A. Medical Center. The 1-year program, sponsored by a U.S. Public Health Service grant, includes work in foreign languages, documentation, biological sciences, and history of science. It leads to a level II certification from the American Medical Library Association.

Applicants must be U.S. citizens and hold a master's degree from an AMLA-accredited library school. Deadline for applications: *30 March*. (L. Darling, Librarian, Biomedical Library, U.C.L.A. Medical Center, Los Angeles 24, Calif.)

Travel grants are available from the National Science Foundation for U.S. scientists who wish to attend the Third International Congress of the Interna-

tional Society of Biometerology. The meeting is scheduled for 2-7 September, in Pau, France. Deadline for receipt of applications: *1 March*. (NSF, Washington 5)

Meeting Notes

The first international interdisciplinary symposium on **pulsatile blood flow** is scheduled for 11-13 April, in Philadelphia, Pa. The 17 papers to be presented, along with discussion of them, will be published in book form. Attendance is limited to 40 persons. (Ernst O. Attinger, The Presbyterian Hospital in Philadelphia, 51 N. 39 St., Philadelphia 4)

Papers are being invited for presentation at the sixth midwest symposium on **circuit theory**, scheduled for 6-7 May, in Madison, Wisconsin. The meeting is sponsored by the department of electrical engineering, University of Wisconsin. Deadline for receipt of papers: *15 March*. (T. J. Higgins, Department of Electrical Engineering, University of Wisconsin, Madison 6)

England's **Royal Microscopical Society** will hold its next annual meeting 7-9 April at the National Institutes of Health, Bethesda, Md. This is the first time that the society will conduct a meeting in the U.S. It is an observance of "the tercentenary of the microscope in living biology." Topics covered will include studies of circulation and of living cells, and contributions, uses and new developments in microscope study of the biological sciences (M. C. Brown, American Committee on Arrangements, 4409 Glenridge St., Kensington, Md.)

Courses

The National Science Foundation and the Petroleum Research Fund administered by the American Chemical Society are jointly sponsoring twin conferences on **molecular spectroscopy and structure**. The conferences are scheduled for 11-22 June at Pomona College, Claremont, Calif., and 17-28 June at the University of Vermont, Burlington. They are intended for college chemistry teachers and industrial chemists who are not specialists in molecular spectroscopy. Applicants for the conferences must have had the equivalent

of a 1-year graduate course in physical chemistry, and must be able to use the information provided through the course in their teaching and research. Deadline for receipt of applications: at Pomona College, *1 April*; at the University of Vermont, *8 April*. (C. D. Cook, Department of Chemistry, University of Vermont, Burlington; or J. Quinlan, Pomona College, Claremont, Calif.)

A research training program in fertilization mechanisms and gamete **physiology** is offered at the Marine Biological Laboratory, Woods Hole, Mass., 12 June to 25 August. Open to both pre- and postdoctoral scientists, the course will emphasize current problems in marine invertebrate physiology. Deadline for receipt of Applications: *5 March*. (C. B. Metz, Institute for Space Biosciences, Florida State University, Tallahassee)

The Institute of Acarology, Wooster, Ohio, will offer a course in general, medical-veterinary, and agricultural **acarology**, 17 June to 6 July, at Ohio State University, Columbus. Facilities for individual laboratory work will be provided at the Institute, either prior to or following the course work. NIH grants of \$165 will be available to qualified applicants. (Secretary, Institute of Acarology, Ohio Agricultural Experiment Station, Wooster, Ohio)

Films

New color films available on loan from Argonne National Laboratory:

Introduction to Analog Computers; 3 sections, 40 minutes each. Lecture film, covering familiarization with typical analog computer and components, programming, solution of problems. (ANL-MP-730-25)

Balloon-Borne Radiation Spectrometer; 8 minutes. Tests on developments of a balloon-borne radiation spectrometer, with the cooperation of the U.S. and Canadian weather bureaus, to learn more about atmospheric movement of radioactive debris and upper air circulation. (ANL-MP-730-21)

XeF₄, 5½ minutes. Creation of xenon tetrafluoride by Argonne chemists. (ANL-MP-730-24). (Film Center, Technical Publications Department, Argonne National Laboratory, 9700 S. Cass Ave., Argonne, Ill.)

The following color films in the Biological Techniques Series of the AIBS Biological Sciences Curriculum Study are now available:

Bacteriological Techniques, 5 minutes; preparation of cotton plugs, flaming wire loop, transferring culture, pipetting, preparing agar plates, spotting, streaking, picking up cover slip, and forming a microculture chamber.

Culturing Slime Mold Plasmodium, 6½ minutes; culturing of slime mold from sclerotium, plus transfer and growth of plasmodium on non-nutrient agar.

Histological Techniques, 9 minutes; preparation of microscope slides, cutting of sections on a microtome, mounting and staining procedures.

Measuring Techniques, 14 minutes; techniques and principles of handling basic laboratory equipment for measuring lengths and volumes and for determining concentrations; ocular and stage micrometers, hemocytometer, and volumetric glassware.

Neurospora Techniques, 8 minutes; methods used in culturing and handling *Neurospora* for use in demonstrating genetic principles.

Paper Chromatography, 14 minutes; principles and techniques of paper chromatographic separations for analyzing dissolved mixtures.

Smear and Squash Techniques, 5½ minutes; rapid preparation of slides in the classroom, using onion root tip and *Tradescantia* bud.

Weighing Techniques, 8 minutes; techniques and principles of handling basic weighing equipment for laboratories. (For further information write Thorne Films, 1229 University Ave., Boulder, Colo.)

The following films are available from Norwood Films:

Capacitance; 31 minutes; \$64.50. Demonstrates electron flow, charging and discharging of condensers, variations of a charge on a condenser as related to time, and capacitance behavior with alternating current. (Order No. MN 1540-a)

Current and Electromotive Force; 11 minutes; \$24. Explains electron theory, molecule arrangement, current, conductors, electromotive force, resistance, and chemical and mechanical sources of electromotive force. (Order No. MN 1540-t)

Rotating Magnetic Fields; 13 min-

(Continued on page 785)

NEWS AND COMMENT

(Continued from page 744)

utes; \$34. Discusses rotating magnetic field pattern, factors that cause rotation of the magnetic field, and polyphase motor construction. (Order No. OE 384) (Norwood Films, 926 New Jersey Ave., NW., Washington 1)

Scientists in the News

Five scientists were recipients of the 1963 Arthur S. Flemming Awards, presented this month. The awards are for "outstanding contributions to the federal government." Those who received them included:

George M. Low, director of space craft and flight missions, NASA.

Edgar M. Cortright, Jr., deputy director of the Office of Space Sciences, NASA.

Joseph F. Saunders, head of the Medicine and Dentistry Branch, Naval Research Office.

Norman J. Doctor, supervisory physicist at the U.S. Army's Diamond Ordnance Laboratories.

Charles M. Herzfeld, director of Ballistic Missile Defense, Defense Department.

Paul E. Klopsteg, professor emeritus, Northwestern University, has been named treasurer of AAAS, replacing **Paul A. Scherer**, who has resigned the post.

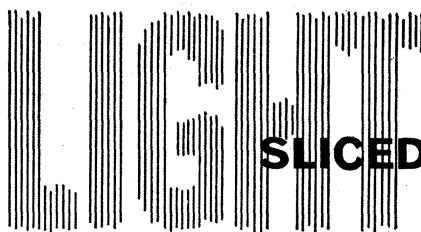
At Pennsylvania State University, **William R. Bitler**, formerly at Carnegie Institute of Technology, has become associate professor of metallurgy.

Gerhard R. Barsch, experimental physicist from Germany, has been named senior research associate in applied physics, college of mineral industries.

Morton J. Stoller, head of NASA's Office of Applications, has been awarded the NASA leadership medal. He was cited for "outstanding and dynamic leadership in planning, developing and directing a complex scientific organization" for the research, development, and application of space technology.

Roy C. Weidler, formerly with the Advanced Research Projects Agency, U.S. Department of Defense, has been named head of electro-optical research projects at the Martin Company's Orlando (Florida) division.

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Far Vacuum Ultraviolet 500A to 1000A	Concave gratings used near normal incidence; usually in first order.	600-3600/mm	1° to 10°	Special coating.
Vacuum Ultraviolet 1000A to 2000A	Large variety of concave and plane gratings. Used in first or higher orders.	600-3600/mm	2° to 22°	MgF ₂ coating for work below 1600A enhances efficiency.
Ultraviolet and Visible 2000A to 7000A	Over 500 sizes of plane or concave gratings used in first or higher orders. Also a selection of plane transmission gratings.	300-2160/mm	3° to 64°	Plane for photoelectric spectrometers; concave for photographic recording of spectra.
Infrared 0.7 to 75 microns	Complete range of sizes and types of plane gratings. First order.	20-600/mm	5° to 30°	Plane gratings with aluminum coating.
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Richard C. Greulich, professor of anatomy and oral biology in UCLA's health center, will receive the International Association for Dental Research award for basic research in oral science. The \$1000 award honors his research in "the development and application of modern histophysical and histochemical techniques to the study of growth differentiation and mineralization of dental and osseous tissues."

The University of Maryland's department of physics and astronomy has announced the following appointments:

William C. Erickson, formerly at Convair Astronautics, San Diego, Calif.; associate professor of astronomy.

Charles A. Misner, formerly at Princeton; associate professor of physics.

H. L. Woltjer, on leave from the University of Leiden, Holland; visiting professor of astronomy.

Frank B. McDonald, of Goddard Space Flight Center, part-time visiting professor of physics.

A. A. Jaffe, formerly at the University of Manchester, England; visiting associate professor of physics.

The new executive director at the University of Oklahoma Research Institute is **Archie M. Kahan**, formerly executive director of the research foundation, Texas A&M College.

The American Physical Society last month presented its Oliver E. Buckley prize in solid-state physics to **William M. Fairbank**, physics professor at Stanford University. The medal and \$1000 honorarium were presented to Fairbank "for his part in the experimental discovery of flux quantization in superconductors."

Samuel C. Bukantz, medical and research director of the Jewish National Home for Asthmatic Children and the Children's Asthma Research Institute and Hospital, Denver, has been named senior clinical investigator at the Schering Corporation, Bloomfield, N.J.

Alfred C. Redfield, emeritus senior oceanographer at Woods Hole Oceanographic Institute, has been elected president of the Bermuda Biological Station for Research.

Bernard Keisch, formerly with the Phillips Petroleum Company atomic energy division, has been named senior scientist at Nuclear Science and Engineering Corp., Pittsburgh.

Anders S. Lunde, former head of Gallaudet College's department of sociology, has become chief, Natality Statistics Branch, in the U.S. Public Health Service's National Vital Statistics Division.

George W. Hinman, associate professor of physics and mechanical engineering, Carnegie Institute of Technology, has been named chairman, department of experimental physics, General Atomic Division of General Dynamics Corp., San Diego, Calif.

David Minard, chief of the stress physiology division, National Naval Medical Center, Bethesda, Md., has been appointed professor and head of the department of occupational health in the University of Pittsburgh's graduate school of public health.

Recent Deaths

Barnum Brown, 89; curator emeritus of fossil reptiles, American Museum of Natural History, New York; 5 Feb.

Melvin DeGroot, 67; retired vice president of research, developments, and patents, in the Petrolite Corp., St. Louis, Mo.; 3 Feb.

Edgar H. Dix, Jr.; retired assistant research director, Aluminum Company of America; 29 Jan.

Jackson B. Hester, 58; owner, Hester Agricultural Research Laboratory, Elkton, Md.; 28 Nov.

John H. Keating, Sr.; past president, New York Heart Association; 21 Jan.

Harold P. Knauss, 62; former head, physics department, University of Connecticut; 1 Jan.

Robert H. Leach, 84; metallurgist, retired vice president, Handy and Harmon Company, Bridgeport, Conn.; 26 Jan.

Ralph A. Liddle, 66; petroleum geologist; 16 Jan.

Herbert E. Merwin, 84; retired Carnegie Institution geologist; 28 Jan.

Paul Rosbaud, 66; scientific adviser to Wiley, North-Holland, Oliver & Boyd, Allen and Unwin, and Viewig publishing houses; 28 Jan.

Roscoe L. Sensenich, 80; former president, American Medical Association; 18 Jan.

Winfrey Wynn, 54; associate research professor of physiology, Emory University; 26 Jan.

William P. Yant, 69; research activities director, Mine Safety Appliances Co., Pittsburgh, Pa.; 29 Jan.