

gram may be obtained from the Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C. The closing dates for receipt of applications are 23 December 1957 for postdoctoral applicants, and 3 January 1958 for graduate students working towards advanced degrees in science.

Applications for the senior postdoctoral and the science faculty fellowships may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Completed material must be received not later than 13 January 1958.

## Teaching Films

A sound-track teaching film, "Respiratory Gases and the Determination of the Respiratory Quotient," may be purchased or rented from the Bureau of Audio-Visual Instruction, State University of Iowa. The reel, which was produced by the department of physiology, provides demonstrations of several instruments, including the Haldane gas analyzer, and shows a sample calculation that might be required of students. Two additional teaching films are being planned.

## Protein Molecule That Contains Cadmium

A protein of low molecular weight that contains 2.2 percent cadmium has been isolated from the cortex of the horse kidney by Marvin Margoshes and Bert L. Vellee of the department of medicine at Harvard Medical School. The exact physiological function of the cadmium has not yet been determined. However, isolation of the cadmium-containing protein bears out an earlier hypothesis that cadmium, like zinc, could be part of protein molecules that occur naturally. The work was reported in a recent issue of the *Journal of the American Chemical Society*.

## New Biology Quarterly

A new quarterly journal, *Perspectives in Biology and Medicine*, has been announced by the Division of Biological Sciences at the University of Chicago. The journal, which is dedicated to a multidisciplinary approach to the problems of biology and medicine, will present new hypotheses and concepts as well as interpretive essays dealing with recent and current research.

Dwight J. Ingle and S. O. Waife are the editors for the publication. They will be assisted by an 11-member editorial

board and by a 12-man advisory board that includes Sir Henry Dale of London, B. A. Houssay of Buenos Aires, and U. S. von Euler of Stockholm. Subscriptions for the journal (\$6) are now being accepted by the University of Chicago Press, 5750 Ellis Ave., Chicago, Ill.

## Graduate Education

The Carnegie Corporation of New York has announced that it will sponsor a 2-year, \$100,000 study of graduate education in the United States. The project will be conducted by Bernard Berelson, who returned to the University of Chicago on 1 October as professor of the behavioral sciences. Since 1951, Berelson has been director of the Ford Foundation's behavioral sciences program.

The survey will be concerned with the objectives, standards, and functions of the graduate school in the American system of higher education. Berelson will make a broad review of the history of graduate education and its institutions in order to locate and interpret major trends and active issues.

Among the specific topics he will examine are the recruitment of students and placement of graduates; relations between graduate education and professional education, and between graduate education and undergraduate programs; the development of postdoctoral programs; and problems of financial support. The final report will discuss the important issues and problems facing graduate education, current policies and alternatives, and make recommendations about the formation of graduate school policies in the coming decades.

## News Briefs

A 36-circuit submarine telephone cable system, probably the world's longest and deepest, has recently been completed. The two cables in the system cross the Pacific between Point Arena, Calif., and Hanauma Bay near Honolulu, Hawaii. The lines were laid by the American Telephone and Telegraph and the Hawaiian Telephone Company at a cost of \$37 million. American and Canadian operators can now dial any number on the island of Oahu, and conversely, Honolulu operators can dial 6900 American and Canadian towns.

A new twin-tailed comet has been discovered. It was first sighted by Howard S. Gates of the Mount Palomar Observatory.

New York University plans a \$1,750,000 expansion of its College of Dentistry. A ten-story building has been purchased

that will complete the development of a Dental Center. The new quarters will at least double the area for teaching the clinical sciences in dentistry.

A survey of New York City's high school seniors was conducted recently in an effort to determine the percentage of students who were considering science as a career. The survey was carried out by Samuel Schenberg, Science Supervisor of the New York City Board of Education, and is reported in the 30 September issue of *Chemical and Engineering News*.

Fifteen scientists from five continents recently participated in a 5-day conference in Washington, D.C., to study the classification of atherosclerotic lesions. The meeting, which was called by the World Health Organization, was conducted by the Pan American Sanitary Bureau with collaboration of the National Heart Institute.

An educational TV series entitled *International Geophysical Year* has been arranged by National Broadcasting Company and the Educational Television and Radio Center. The 10-week program begins on 28 October. Six well-known scientists are participating: Joseph Kaplan, Roger R. Revelle, Laurence M. Gould, the Rev. J. Joseph Lynch, Lloyd V. Berkner, and Walter O. Roberts.

Exercises in commemoration of John Clayton, a botanist of the American colonial period, were held on 11 October in Williamsburg, Va., under the sponsorship of the College of William and Mary and the Garden Club of Virginia.

A safe, portable container for radioisotopes used to x-ray ship structures has been developed at the U.S. Naval Ordnance Laboratory. In addition to its primary purpose, the exposure fixture, which was built by John C. Friedrichs of the X-Ray Laboratory, also provides a means of temporary storage.

## Soviet Scientific Literature

An article on the "Publication of Scientific Literature in USSR During 1957" appeared in a recent issue of *Current Science*, a journal that is published in India for the Current Science Association, Bangalore. The article said:

"The USSR Academy of Sciences will put out close to 1,500 titles and issue Journals [containing a total of] . . . 32,000 signatures in 1957. The range of subjects will cover all spheres of the humanitarian, natural and technical sciences.

"In the scientific and technical part of the programme of publications envisaged by the Academy, mention may be made

of books on mathematics, physics and chemistry, including works by the mathematicians A. M. Lyapunov and N. N. Luzin, Geophysicist P. P. Lazarev, Physicist Y. I. Frenkel, Organic Chemist A. N. Butlerov, and Radiochemist V. G. Khlopin.

"The computation mathematics series, recently organized by the Computation Centre of the Academy, will contain articles on methods of solving mathematical problems, estimates of errors of different methods and the solution of concrete mathematical problems.

"The biography of the great mathematician N. I. Lobachevsky, including 360 documents of archive materials unpublished previously, has been prepared by the Institute of History of Natural and Technical Sciences.

"Revised and supplemented editions of Academician A. F. Joffe's *Physics of Semi-Conductors* first issued in 1955, will be put out, as also L. I. Brekhovakikh's monograph of 'Waves in Layered Media.'

"To commemorate the Fiftieth Death Anniversary of I. D. Mendeleev, the great Russian chemist, the Academy has collected articles from Soviet scientists [to issue] . . . as 'Classics of Science,' and also has arranged publication of a book entitled *The Periodic Law*, describing Mendeleev's classical works on the subject.

"A volume of previously unpublished manuscripts of Charles Darwin and a monograph by Academician N. I. Vavilov on 'World Resources of Local and Selected Varieties of Cereals, Grains, Legumes and Flax and Their Use in Plant Breeding' will also be published.

"In addition, the publication of important books on the different branches of engineering, biochemistry, microbiology, soil sciences, zoology, physiology, botany, genetics and forestry is in the programme."

## Scientists in the News

FARRINGTON DANIELS, chairman of the department of chemistry at the University of Wisconsin, has won the annual \$1000 James Flack Norris Award of the American Chemical Society's Northeastern Section for "excellence in the teaching of chemistry." He will receive the prize at a meeting of the Northeastern Section on 15 Nov.

JOSHUA R. C. BROWN, associate professor of zoology at the University of Maryland, has joined the staff of AAAS for the academic year 1957-58 as assistant director of the Science Teaching Improvement Program. Brown will give four-fifths of his time to the AAAS and one-fifth to Maryland, where he will continue his research in cytology and direct

the work of graduate students. During the summer he served as assistant director of the university's summer institute for science teachers that was sponsored by the National Science Foundation. Brown replaces I. E. WALLEN, who has joined the staff of the educational division of the Atomic Energy Commission.

I. MELVILLE STEIN, president of Leeds and Northrup Company, Philadelphia, Pa., has received an honorary degree of doctor of science from Rensselaer Polytechnic Institute.

HAROLD P. STEPHENSON, formerly professor of physics at Illinois Wesleyan University in Bloomington, has recently joined the staff of the Duke University College of Engineering as associate professor of mechanical engineering.

AKSEL A. BOTHNER-BY, a member of the chemistry faculty at Harvard University, has been appointed a staff fellow in fundamental research at the Mellon Institute, Pittsburgh, Pa.

ARTHUR A. FROST, a member of the Northwestern University chemistry faculty since 1936, has been named chairman of the chemistry department for the 1957-58 academic year. He succeeds ROBERT L. BURWELL, JR., who is retiring as chairman to devote more time to teaching and research.

MALCOLM C. MCGREGOR, an officer of the Australian National Standards Laboratory, is at present in Washington, D.C., as a consultant to assist the National Bureau of Standards in setting up a new type of capacitance bridge that he recently developed in Australia in collaboration with A. M. THOMPSON. The bridge is of the induction ratio arm type, and its use makes measurement of capacitance to the order of 1 micropicofarad possible. Details have not yet been published. McGregor expects to remain in the United States for about 6 months. He will be working in the Section of Electricity and Electronics at NBS.

R. W. BROWN, former director of the George Washington Carver Foundation, has been appointed to the newly created position of dean of research at Tuskegee Institute. He will have general responsibility for the organized research programs of both the Carver Foundation and the institute's department of social science research.

CLARENCE T. MASON, former director of research at the Carver Foundation, has been appointed director of the foundation and chairman of the Tuskegee Division of Natural Sciences. The division has been organized under the Col-

lege of Arts and Sciences to include the departments of chemistry, biology, physics, and mathematics.

CHARLES D. MARPLE, medical director of the American Heart Association since 1952, has been appointed medical director of the American Foundation for Allergic Diseases, New York. He will administer the research and scientific program of the foundation, as developed by its Scientific and Educational Council, and will be responsible for developing an educational program for both physicians and laymen concerned with the causes, treatment, and prevention of allergic diseases, and with related basic sciences.

CARROLL E. PALMER, research worker for the U.S. Public Health Service, has won the Weber-Parkes Prize of the Royal College of Physicians, London. He is to receive the award, a silver medal and \$441 in cash, for his work in tuberculosis immunization with BCG.

D. J. STRUIK, professor of mathematics at Massachusetts Institute of Technology, has been nominated to an Extraordinary Professorship at the National University of Mexico, Mexico, D.F. He also has been elected an honorary member of the Mexican Mathematical Society.

HAROLD L. STEWART, chief of the Pathological Anatomy Branch, Clinical Center, National Institutes of Health, Washington, D.C., and chief of pathology for the National Cancer Institute, has received the Ward Burdick Award, which is given annually for outstanding service in the field of pathology. The presentation was made during the joint annual meeting of the American Society of Clinical Pathologists and the College of American Pathologists that took place recently in New Orleans, La.

WILLIAM F. MARLOW, formerly a radiochemist for the U.S. Army Engineers Research and Development Laboratories, Fort Belvoir, Va., has joined the radioactivity section of the National Bureau of Standards. He will investigate the chemical principles involved in the preparation of radioactivity standards; these are used for calibration of equipment for radiation measurement in scientific, medical, and industrial laboratories throughout the country.

MARY E. RAWLES has joined the staff of the department of embryology of the Carnegie Institution of Washington, Baltimore, Md., where she will not only continue her studies of development in birds and mammals, but will also assume new responsibilities as the curator of the Carnegie Embryological Collection.