August. This is nearly three-fifths of the total for the like period of 1957 and slightly less than one-seventh of the annual average for the corresponding period of 1953-56. The only adverse development so far this year is the excess in the number of paralytic over nonparalytic cases, a reversal of the situation in 1957.

\* \*

The Japanese Government proclaimed the national adoption of the metric system a year ago. After a 3-month grace period beginning 1 October, commercial companies and others using the old measures will be liable to fines of up to 50,000 yen (\$138.89).

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The Atomic Energy Commission has invited United States architect-engineering firms to submit proposals for studies on a heavy water moderated power reactor capable of operating on natural uranium fuel. The design studies, to be made on a cost-plus-fixed-fee basis, will supplement developmental work already in progress. Proposals must be received by the commission by 29 September 1958 and may be submitted by an individual organization or by groups of organizations. For information, write to: Director of Reactor Development, U.S. Atomic Energy Commission, Washington 25, D.C.

The centennial of the publication of Rudolph Virchow's Cellular Pathology is being celebrated throughout 1958 by the Armed Forces Institute of Pathology, Washington, D.C. The celebration program, which started in March with the first of a series of public lectures, is being concluded with five more lectures. The first will be delivered on 15 October by R. D. Lillie of the National Institute for Arthritis and Metabolic Diseases, and the last is scheduled for 17 December, when K. M. Brinkhous of the University of North Carolina School of Medicine will speak.

## Grants, Fellowships and Awards

Arctic. The Arctic Institute of North America is offering field research support in 1959 for scientific investigations dealing with the arctic and subarctic regions of North America. Applications are invited by those who have demonstrated their ability to conduct research work of superior quality in some field of science. Proposals will be considered in any field of arctic scientific research, but those in fields in which scientific knowledge is lacking are especially desired. Priority will be given to field investigations.

Facilities of the Arctic Research Laboratory at Barrow, Alaska, are available for a limited number of scientists for both summer and winter investigations. The facilities include both housing and equipment. Arrangements may be made at other places.

Application forms may be obtained from the Arctic Institute of North America, 3485 University St., Montreal 2, P.Q., Canada, or 1530 P St., NW, Washington 5, D.C. Completed applications should be received before 15 October.

Fertility. The Lalor Foundation has announced the program of awards for 1959 which it is offering to college and university faculty members for research in the biological sciences. These awards are to be for support of research on the fundamental biochemical and biophysical mechanisms concerned with fertility and reproduction in various forms of life. The objectives are to work for more complete understanding of the basic phenomena involved and ultimately toward better possibilities for biological regulation and control.

Grants may range up to \$8000 per year and will be scaled in proportion to the scope and duration of the projects approved. Preference will be given to younger members of university and college staffs with an upper age limit of 45 years. The work may be carried out at the applicant's own institution or elsewhere.

The foundation will also grant postdoctoral summer or short-term research awards in the field described on projects which, for example, would be appropriate to the Marine Biological Laboratory at Woods Hole, Mass., or elsewhere. For these awards, the stipends will normally not exceed \$900 for a single man or a woman, \$1100 for a married man working at his home institution, and \$1250 for a married man with principal program at another institution.

Applications and inquiries should be directed to the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del. The deadline date for receipt of applications is 15 January 1959.

General. The deadline for applications for National Science Foundation senior postdoctoral and science faculty fellowships is 15 October. Inasmuch as this is the first year during which these awards will be made annually rather than biannually, applications for awards for 1959 must be submitted by the October closing date. Application materials may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C.

Awards will be made in the mathematical, physical, and engineering sciences; medical and biological sciences, including anthropology and psychology (excluding clinical); and in selected social science fields. Included as well are interdisciplinary fields which overlap two or more scientific disciplines.

Candidates for senior postdoctoral fellowships must be United States citizens who have held the doctoral degree for a minimum of 5 years or have equivalent education and experience. Under arrangements made by the National Academy of Sciences, candidates' qualifications will be evaluated by carefully chosen panels of scientists. Final selection of approximately 100 fellows will be made by the National Science Foundation.

The science faculty fellowships are directed toward college teachers of science who wish to improve their competence as teachers. These fellowships are open to application by any United States citizen who holds a baccalaureate degree or its equivalent, has ability and special aptitude for science teaching and advanced training, and has taught at the collegiate level as a full-time faculty member for a minimum of 3 years and intends to continue teaching. Under arrangements made by the Association of American Colleges, applicants' qualifications will be evaluated by persons especially competent to make judgments about the demonstrated and potential ability of the applicant as a teacher of science. Final selection of approximately 300 fellows will be made by the National Science Foundation.

## Scientists in the News

CARL FRIEDRICH FREIHERR VON WEIZSACKER, German physicist and philosopher, has received the Goethe Prize, high honor bestowed every 3 years by the city of Frankfurt, Germany. In recent years Weizsäcker has come to public attention because of his writings on life in the atomic age. In a series of articles entitled Leben mit der Atombombe he has analyzed basic problems of our day from the viewpoints of both the philosopher and the physicist. As he was awarded the Goethe Prize, Weizsäcker was lauded for helping to bridge the gulf between the natural sciences and the liberal arts.

CHARLES M. SPOFFORD, bridge designer and professor emeritus at Massachusetts Institute of Technology, will receive the Frank P. Brown Medal of the Franklin Institute on 15 October. He is being honored for: "The engineering, aesthetic and educational accomplishments of his life work, exemplified in his prompt recognition, espousal and clarification of valid structural theories; his design of many large and beautiful bridges, and other prominent engineering works; his contributions to en-

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gineering education through teaching and administration of an engineering educational department; and his authorship of widely used textbooks."

JOHN J. LANDER, director of electrochemical research at the Delco-Remy Division of the General Motors Corporation, is the first recipient of the Research Award of the Battery Division of the Electrochemical Society. He is being honored for his pioneering work on the kinetics of the anodic corrosion of lead and specifically for his paper in the June 1951 issue of the society's journal entitled "Anodic Corrosion of Lead in Sulfuric Acid Solutions." The award will be presented at the Battery Division's luncheon to be held during the society meeting in Ottawa, 28 September-2 October.

Major General HARRY G. ARM-STRONG, U.S. Air Force (MC), a pioneer in aviation and space medicine and former Surgeon General of the Air Force, has retired after almost 30 years of military service. In 1949, while he was commandant of the U.S. Air Force School of Aviation Medicine, Armstrong established the department of space medicine, the first laboratory of its kind.

ALBERT ROSE, senior member of the technical staff, RCA Laboratories, Princeton, N.J., has been named recipient of this year's David Sarnoff Gold Medal Award by the Society of Motion Picture and Television Engineers. The award is being given to Rose for "basic contribution to the development of the Orthicon, Image Orthicon and Vidicon television pick-up tubes."

A. E. RHEINECK, research chemist and research supervisor for the Archer – Daniels – Midland Company, Minneapolis, Minn., has been appointed professor of chemistry in the School of Chemical Technology at North Dakota State College, where he will teach and conduct research in the area of protective coatings.

RHODA STASIAK, who formerly was in charge of the infrared spectroscopy laboratory of the American Viscose Corporation, has been appointed research associate in the analytical and physical chemistry division of the Squibb Institute for Medical Research at New Brunswick, N.J.

LOUIS A. TURNER, director of the physics division at Argonne National Laboratory, has been named deputy director of the laboratory. Turner will fill a position which has been vacant since Norman Hilberry, formerly deputy director, became director at Argonne in 1957.

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THOMAS H. BREM has been promoted to the chairmanship of the department of medicine at the University of Southern California School of Medicine. The announcement follows the retirement of PAUL STARR, head of the department from 1948 to 1955 and cohead since then. Brem and Starr have shared the chairmanship for the past 3 years, Brem being in charge of teaching and Starr in charge of research. Henceforth, Brem will be responsible for both fields.

The Foundation for Integrated Education, 246 E. 46 St., New York 17, is sponsoring a tour of this country by C. GATTEGNO, secretary of the International Commission for the Study and Improvement of the Teaching of Mathematics, a growing group drawn from principal European and British universities and teacher's organizations. Gattegno is co-developer of Cuisenaire-Gattegno teaching aids, materials and methods that were introduced on this continent last year-systematically in Canada, and in scattered centers in the United States. They have been in use in Europe and Great Britain and other countries for periods varying from 6 to 25 years and are now employed in some 20 countries.

Gattegno is holding consultations with teachers and school administrators throughout the country. At present he is traveling in the states of Washington and Oregon. He will be in Washington, D.C., on 7 November.

ROGER H. HILDEBRAND, associate professor of physics at the University of Chicago's Enrico Fermi Institute for Nuclear Studies, has been appointed associate laboratory director for high energy physics at Argonne National Laboratory.

## **Recent Deaths**

ASA C. CHANDLER, Houston, Tex.; 67; internationally known specialist in tropical medicine and parasitology; retired in 1956 as chairman of the department of biology at Rice Institute; taught at Oregon State College from 1914 to 1918; headed a research laboratory at the British School of Tropical Medicine in Calcutta from 1923 to 1927; author of textbooks; 23 Aug.

CHARLES E. DECKER, Norman, Okla.; 89; research professor emeritus of paleontology of the University of Oklahoma School of Geology since 1944, had been a member of the faculty of the School of Geology since 1916; 23 Aug.

NATHAN C. FOOT, Bronxville, N.Y.; 77; professor emeritus of surgical pathology of Cornell University Medical College; professor of pathology at the University of Cincinnati College of Medicine from 1928 to 1932; member of the pathology staff at Harvard Medical School from 1912 to 1922; 5 Sept.

MAX GROTEWAHL, Kiel, Germany; 63; Arctic explorer who led several expeditions; founder and director of the Kiel Archive for Polar Research, one of the four major Arctic study centers in the world; member of the Arctic Institute of North America and adviser of the American Polar Society in Washington; 7 Sept.

PASQUALE MARINA, Kearney, N.J.; 72; inventor and self-educated mathematician; invented a special carpenter's rule and a new logarithm table; 4 Sept.

LÔUIS MONTGOMERY, Forest Hills, N.Y.; 62; psychoanalyst who studied with the late Sigmund Freud; former director of the Association of Applied and Clinical Psychoanalysis; 2 Sept. RUDOLPH NORBERG, West Palm

RUDOLPH NORBERG, West Palm Beach, Fla.; 77; retired in 1949 as board chairman of the Electric Storage Battery Company of Philadelphia; co-developer of the Willard storage battery and of new types of batteries for cars, submarines, and airplanes; 6 Sept.

GILBERT J. PALEN, Philadelphia, Pa.; 88; professor emeritus of otology at Hahnemann Medical College; 6 Sept.

EDWARD HOLMAN RAYMOND, Litchfield, Conn.; 79; professor of oral pathology and bacteriology at Columbia University from 1920 to 1924; one of the first to use novocaine for local anesthesia in dentistry; 8 Sept.

GUSTAVE T. REICH, Philadelphia, Pa.; 67; chemical engineer; consulting manager and director of the Federal Yeast Corporation, Baltimore, Md.; specialist in alcohols; holder of 95 patents; 17 Aug.

ADOLPH STERN, New York, N.Y.; 79; psychoanalyst at the Medical Arts Center; president of the New York Psychoanalytic Institute; studied under Sigmund Freud in Vienna, Austria, in 1922; 22 Aug.

MICHAEL J. TAKOS, Miami, Fla.; 39; director of the research and special studies section of the Dade County Health Department; had taught biology at Emory University, Atlanta; 10 Sept.

NORRIS W. VAUX, Philadelphia, Pa.; 76; professor of obstetrics at Jefferson Medical College, 1931–46; former director of obstetrics at Pennsylvania Hospital; Pennsylvania secretary of health, 1947; 19 Aug.

GEORGE C. VEDOVA, Glen Ridge, N.J.; 64; chairman of the mathematics department of the Newark College of Engineering from 1947 to 1958; had taught at St. Johns College (Annapolis, Md.), the Virginia Polytechnic Institute, and Haverford College; 5 Sept.