and has sponsored the publication of a compendium of state engineering laws for all 48 states, the territories of Alaska, Hawaii, Puerto Rico, and the District of Columbia.

The national society publishes a monthly newsletter, a legislative bulletin, and a magazine, the *American Engineer*. In addition, a number of booklets and other printed materials related to society policy statements and engineering information are developed from time to time. The affiliated state societies and local chapters also issue various publications containing items of engineering interest in their areas of activity.

The society has recently built its own headquarters building at 2029 K St., NW, in Washington, financed by the purchase of interest-bearing building bonds by the membership.

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News Briefs

■ The Atomic Energy Commission announced on 12 Jan. that preparations are underway for a series of nuclear tests to begin in the spring at the Eniwetok Proving Grounds. One of the purposes of this series will be the further development of methods of defense against nuclear attack.

Air and sea traffic will be notified through normal channels of the details of the control area well in advance of the commencement of operations. Operations will be conducted by Joint Task Force 7, commanded by Rear Admiral B. Hall Hanlon, USN. Alvin C. Graves, Los Alamos Scientific Laboratory, is deputy commander for scientific matters.

The forthcoming series of tests will involve weapons generally smaller in yield than those tested during the 1954 test series. It is anticipated that the energy release of the largest test will be substantially below that of the maximum 1954 test.

■ In a release on 9 Dec. from the United States Mission to the United Nations, it was announced that the U.S. had appointed Shields Warren, director of the Cancer Research Institute at New England Deaconess Hospital in Boston as its representative on the new scientific committee on radiation effects. Ambassador Lodge at the same time notified Secretary General Hammarskjold that the alternate U.S. representatives on the committee would be Austin M. Brues, director of the biology and medical research division of Argonne National Laboratory, and Merril Eisenbud, director of the Health and Safety Laboratory and manager of the New York Operations office of the U.S. Atomic Energy Commission. The new committee was authorized by the U.N. General Assembly on 3 Dec. when it unanimously approved a resolution setting up a Scientific Committee on the Effects of Atomic Radiation.

Warren was the first director of the AEC Division of Biology and Medicine and is now president of the American Board of Pathology. Brues was a member in 1946 of the Brues-Henshaw Investigating Team sent to study casualties at Hiroshima and Nagasaki; he is president of the Radiation Research Society and past president of the American Association for Cancer Research. Eisenbud, who has been associated with the AEC since 1947, has done work on fallout evaluation, radiological hygiene hazards, and beryllium and uranium poisoning. The laboratory he directs is the headquarters for the AEC's National Monitoring System for analysis and evaluation of fallout resulting from nuclear detonations, and he has also undertaken studies of radiological hazards in the civilian atomic energy industry. Both Brues and Eisenbud were listed among the 183 U.S. technical advisers for the Geneva "atoms-for-peace" conference last August.

The U.N. Scientific Committee will be composed of one scientific representative from each of 15 nations, and it is understood that the first meeting will take place in March of this year. The scientific appointees from other nations are not known at this time.

Scientists in the News

JOHANNES IVERSEN, distinguished Danish ecologist, arrived in the United States in December and will remain until June under a grant from the Rockefeller Foundation to encourage the development of pollen analysis here. He is working at the pollen laboratories in the new Willard Gibbs Research Center at Yale University, and is available there for conferences with visitors.

In addition to his profound knowledge of the European Pleistocene, his skill in the critical identification of pollen with modern optical equipment is generously at the service of American palynologists. He is particularly interested in the long Wisconsin and interglacial cores now under study at Yale and at Oberlin, and he expects to attend the pollen conference that is tentatively set for May at the latter institution.

Iversen's plans include an excursion in mid-March to Florida and Texas, and a field trip to the San Augustin Plains in western New Mexico. He has with him films of unusual interest to anthropologists and archeologists that deal with his research on forest clearance by stone axes and fire for Neolithic agriculture. His mailing address during his visit will be in care of the Yale Conservation Program, New Haven, Conn.—P.B.S.

LEON J. KAMIN, at present a research psychologist at Queen's University, Kingston, Ontario, has been acquitted of a contempt of Congress charge by Federal Judge Bailey Aldrich in proceedings that took place in Boston, Mass. Kamin, who had testified freely about his former affiliation with the Communist Party, was a research assistant at Harvard University until 1 June 1954. His indictment resulted from his refusal to tell a subcommittee of the Senate Committee on Government Operations about former Communist associates "on grounds of conscience."

Judge Aldrich's 24-page decision emphasized that the court failed to accept any of the defendant's contentions that the subcommittee's questioning violated his constitutional rights. The acquittal decision was based on the technicality that the Senate committee had exceeded its authority in its line of investigation.

The judge found that a 1946 legislative reorganization act gave the committee the duty of "studying the operation of Government activities at all levels with a view to determining its economy and efficiency." Aldrich emphasized that Government operation means "the operation of Government departments, not private industry, even though under Government contract." He pointed out that, as established by the Government's own witnesses, the Boston investigation was of "subversion and espionage affecting privately operated defense plants, and this was not within the authority Congress had given the committee."

This decision will undoubtedly have some influence upon the course of the Government's similar contempt proceedings against Wendell H. Furry, associate professor of physics at Harvard University [*Science* **121**, 232 (18 Feb. 1955)].

RAYMUND L. ZWEMER, former chief of the Science Division at the Library of Congress, has been appointed head of UNESCO's Division of International Cooperation for Scientific Research, Natural Sciences Department, Paris. He will be responsible for UNESCO's relations with international scientific unions and other organizations concerned with scientific research on an international scale. The appointment was effective on 30 Dec. 1955.

DAVID A. KEYS, one of the two vice presidents of the National Research Council of Canada (scientific) and the scientific adviser to the president of Atomic Energy of Canada Limited, re-

tired on 3 Jan. Keys obtained his B.A. and M.A. degrees from the University of Toronto, and he received Ph.D. degrees from Cambridge and Harvard universities.

During World War I, he was engaged in antisubmarine research for the Admiralty. During World War II, he was director of the McGill University course that provided more than 2000 radio technicians with their initial training before they went overseas. Later he headed the McGill University Army Course; after the war he was in charge of courses for veterans at McGill.

A member of the physics department at McGill for 25 years from 1922 onward, he did pioneer work in the development of the cathode-ray oscillograph. Later he became known as an expert in geophysics, especially in connection with the use of geophysics in prospecting. A book written by Keys and A. S. Eve on this subject is regarded as a standard text.

In 1945 Keys was named Macdonald professor of physics and chairman of the Physical Science Group, McGill University. In the same year he was also named a member of the National Research Council. In 1947, when NRC was made responsible for Canada's atomic energy work, Keys became vice president (scientific) of NRC and manager of the Atomic Energy Project.

I. S. BOWEN, director of the Palomar and Mount Wilson Observatories, and Nobel laureate HAROLD C. UREY of the Fermi Institute for Nuclear Studies, University of Chicago, were elected honorary fellows of the Indian Academy of Sciences when it met recently in Hyderabad.

ESTELLA F. WARNER has retired as chief of the program development branch of the Division of International Health of the U.S. Public Health Service. Commissioned in 1932, she was the first woman ever commissioned in the PHS.

Her first international assignment was in 1951 when she went to Lebanon to help establish a school of public health at the American University of Beirut. In recognition of her work, the President of Lebanon awarded her the highest decoration that can be given to a civilian. She was the first American and the first woman to receive this award.

Between 1952 and 1955, Warner was stationed in New Delhi, India, where she assisted the Government of India in planning public health technical assistance programs, particularly for rural areas.

Other assignments held by Warner during her 24 years in the Public Health Service include: chief of the Division of State Relations; medical director of the Kansas City regional office; medical consultant of the Chicago regional office; and regional medical director assigned to the U.S. Bureau of Indian Affairs.

Before entering the Public Health Service, Warner served in state and local health departments in Oregon and was in private practice in Portland. She received her M.D. degree at the University of Oregon School of Medicine in 1918. Warner is leaving Washington to reside in Albuquerque, N.M.

Membership of the technical panel for the earth satellite program has been announced by the U.S. National Committee for the International Geophysical Year. The panel will advise on the development, coordination, and direction of the over-all scientific aspects of the satellite effort.

The members are as follows: R. W. PORTER (chairman), consultant, Communication and Control Equipment, Engineering Services Division, General Electric Company; HUGH ODISHAW (secretary), executive secretary, U.S. National Committee–IGY, National Academy of Sciences; JOSEPH KAPLAN, professor of physics, University of California, Los Angeles, and chairman, U.S. National Committee–IGY, National Academy of Sciences; H. E. NEWELL, JR., acting superintendent, Atmosphere and Astrophysics Division, Naval Research Laboratory; W. H. PICKERING, director, Jet Propulsion Laboratory, California Institute of Technology; A. F. SPILHAUS, dean, Institute of Technology, University of Minnesota; LYMAN SPITZER, JR., professor of astronomy, Princeton University; J. A. VAN ALLEN, head of the department of physics, State University of Iowa; F. L. WHIPPLE, director, Smithsonian Astrophysical Observatory, and chairman of the department of astronomy, Harvard University.

HARRY EAGLE, chief of experimental therapeutics at the National Microbiological Institute, has accepted an invitation from the Stanford University School of Medicine, San Francisco, to deliver the Morris Herzstein course of medical lectures on 12, 14, and 16 Mar. The first two lectures will be on "Specific growth requirements, metabolic activities, and nutritional deficiencies of normal and malignant cells in tissue culture," and the final one will deal with "Nutritional requirements for the propagation of poliomyelitis virus; and observations on the use of tissue culture for the screening of carcinolytic agents."

CARL S. MARVEL, research professor at the Noyes Chemical Laboratory of the University of Illinois and an expert on synthetic polymers, has won the American Chemical Society's Priestley medal for 1956. The gold medal will be presented to Marvel for "distinguished services to chemistry" during the 129th national meeting of the ACS in Dallas, Tex., in April.

Marvel, president of the society in 1945, directed part of the World War II research on synthetic rubber and also served from 1944 to 1946 as chairman of the National Research Council's Panel on Synthesis of Antimalarial Drugs and as a member of the Board for Coordination of Malaria Studies. He has contributed to the development of plastics of the vinyl polymer type, particularly those used in the production of transparent aircraft pieces, as rubber substitutes, and as thickening and blending agents in the chemical manufacturing industry.

Other research conducted by Marvel was concerned with the development of practical methods for preparing amino acids; synthetic diets employed in intravenous feeding; and the relationship between hydrogen bonding and solubility factors, particularly with respect to improved methods of electrical refrigeration.

LINUS PAULING, chairman of the division of chemistry and chemical engineering, California Institute of Technology, will deliver the second annual Margaret Beattie lecture on 4 Feb. in the St. Francis Hotel in San Francisco. He will discuss "Abnormal hemoglobin molecules in relation to hereditary hemolytic anemia" at a dinner meeting that is an annual event sponsored by the California Association of Clinical Laboratories and the western section of the Council of American Bioanalysts.

MALCOLM GOODRIDGE, a past president of the New York Academy of Medicine and a fellow for 50 years, received the Academy plaque on 7 Jan. in recognition of outstanding service to the academy.

EUGENE F. DUBOIS, formerly professor of physiology and biophysics at Cornell University Medical College, was presented with the Academy medal "In recognition of his fundamental contributions to the science of metabolism and the understanding of disease; of his influence upon the thought and activities of other leaders of medicine; [and] of his accomplishments in the development of clinical science and medical education. . . ."

FELIX E. WORMSER, Assistant Secretary of the Interior, has been named 1956 recipient of the Egleston medal, Columbia University's highest award for "distinguished engineering achievement." The medal will be presented to Wormser on 14 Mar. during a dinner at the Waldorf-Astoria Hotel, New York.

GILBEART H. COLLINGS, professor of soils at Clemson College, has been appointed head of the department of agronomy.

Recent Deaths

P. B. CANDELA, Wofford Heights, Calif.; 49; surgeon who developed a method to determine the blood types of ancient peoples; 5 Jan.

RALPH S. DAMON, Garden City, N.Y.; 58; aeronautical expert; president of Trans World Airlines, New York, N.Y.; member of the National Advisory Committee for Aeronautics; 4 Jan.

EDGAR S. McFADDEN, College Station, Tex; 64; agronomist at A. and M. College of Texas; recipient of the John Scott award at the 1955 AAAS annual meeting in Atlanta, Ga.; 5 Jan.

W. ALLEN MESSLER, Rutherford, N.J.; 83; professor of psychology at Fairleigh Dickinson College; 8 Jan.

ZENO P. METCALF, Raleigh, N.C.; 70; professor of zoology at North Carolina State College, Raleigh, from 1912–50; since 1950 resident professor of zoology and entomology; 1950 representative of the Ecological Society of America on the AAAS Council; 7 Jan.

GREENLEAF W. PACKARD, Newton, Mass.; 78; inventor and radio engineer; 8 Jan.

CHARLES PRATT, New York, N.Y.; 63; president emeritus of Pratt Institute, Brooklyn, N.Y.; 7 Jan.

EPHRAIM SHORR, New York, N.Y.; 58; associate professor of medicine at Cornell University Medical School, New York, N.Y.; authority on treatment of shock; 1951–53 representative of the Gerontological Society on the AAAS Council; 6 Jan.

ASA O. WEESE, Norman, Okla.; 70; professor of zoology at the University of Oklahoma; internationally known bioecologist; for many years representative of the Oklahoma Academy of Science on the AAAS Council; 20 Nov.

Grants, Fellowships, and Awards

■ Ten new grants, totaling $65,807, to American universities and medical centers will augment the program of clinical and laboratory research on vitamins and nutrition of the National Vitamin Foundation, Inc. The foundation gives grants-in-aid for research semiannually throughout the United States and abroad. The new grants became effective on 1 Jan.

■ The Dexter Chemical Corporation has established an award in the history of chemistry amounting initially to $250. The sum will be accompanied by a scroll. The division of history of chemistry of the American Chemical Society will administer the new annual award; nominations should be sent to the secretary of the division *not later than 10 Mar.*

The award is to be made on the basis of services that have advanced the history of chemistry in any of the following ways: by publication of an important book or article; by the furtherance of the teaching of the history of chemistry; by contributions to the bibliography of the history of chemistry; or by services over a long period of time that result in the advancement of the history of chemistry.

■ The National Foundation for Infantile Paralysis will continue to offer a limited number of fellowships to provide educational opportunities for health educators who are employed in state departments of education or of health. Applicants must have obtained their bachelor's or higher degree from an accredited institution and have had substantial training in biological science and education or other social sciences. Only those who have had a minimum of 2 years of experience as educators in the field of health will be eligible. United States citizenship and sound health are prerequisites for application.

Work may be undertaken at any school of public health in the United States that offers a graduate program in health education and is approved by the American Public Health Association. It is the responsibility of the candidate to make his own arrangements with the institution for a program of study and field training to supplement his previous background and to prepare him more adequately for the responsibilities of a health educator.

The foundation has also instituted a new fellowship program for surgeons interested in advanced study to prepare themselves for teaching or research in orthopedics. Applicants must have completed requirements for certification by the American Board of Orthopedic Surgery or have had equivalent training. Only United States citizens licensed to practice medicine in this country, in sound health, and under 36 years of age are eligible.

Each candidate must arrange his own program for full-time study and investigation at a center which has been approved by the Council on Medical Education and Hospitals of the American Medical Association for residency training in orthopedic surgery and which is associated with an approved medical school.

In both fellowship programs, appointments will be made for 1 year. Financial benefits will be determined on the basis of individual need as related to marital status and number of dependents. Selection of candidates to be appointed as fellows will be made on a competitive basis by the National Foundation's Clinical Fellowship Committee.

For consideration in May, applications must be filed *by 1 Mar.*; for review in November, applications must be received by 1 Sept.; and for action in February, by 1 Dec. For further information and application forms, address: Division of Professional Education, National Foundation for Infantile Paralysis, 120 Broadway, New York 5.

■ The John A. Hartford Foundation, Inc., has announced the establishment of the John A. Hartford Memorial Fund in the School of Public Health of Harvard University to support a long-range research program in atherosclerosis and other diseases of the blood vessels and heart. The foundation has agreed to provide $200,000 annually for a period of several years to "institute, maintain and carry out a program of basic scientific and medical research to determine the causes and the medical or other treatment which will prevent or cure or alleviate human suffering from atherosclerosis and related diseases of the human heart and blood vessels," and for graduate education in this field. The new program of research and graduate education will be carried out primarily in the school's department of nutrition, which is headed by Frederick J. Stare.

■ The Nature Conservancy offers an award of $500 as an aid to graduate study during the next school year. To be eligible to apply, a student must plan to center his thesis on some aspect of the interrelationship between conservation of nature and the increasing pressure of human population.

Applications must be submitted *by 1 Apr.* Interested persons should consult the detailed announcement that may be obtained by writing to the Nature Conservancy, 4200 22 St. NE, Washington 18, D.C.

■ The Damon Runyon Memorial Fund for Cancer Research ended 1955 with grants totaling $92,205. The awards for December brought money distributed to date to $9,540,279. The allocations have been made in 609 grants and 327 fellowships in 205 institutions in 48 states, the District of Columbia, and 16 foreign countries.

In the Laboratories

■ The Atomic Energy Commission has announced that it is planning to ask private industry to submit proposals to supply reactor-grade beryllium metal. These requirements are now met from the pro-