NEWS *and Notes*

President Truman on December 31 signed an executive order transferring control of the U. S. atomic energy program from military to civilian hands. The action followed immediately after appointment of Carroll L. Wilson, formerly executive assistant to Vannevar Bush, director of OSRD, as general manager of the Atomic Energy Commission, upon unanimous recommendation to the President by Commission members.

Two other events occurred when the Commission and its General Advisory Committee of Scientists met in Washington during the first week of the new year: 1) J. Robert Oppenheimer, professor of physics, University of California, and wartime director of the Los Alamos, New Mexico, laboratory, was elected chairman of the General Advisory Committee; 2) three labor consultants were appointed by the Commission as part of a program "to insure the soundest possible labor-management relationships."

The labor group included George H. Taylor, professor of industrial relations, Wharton School of Finance and Commerce, University of Pennsylvania, and former chairman of the War Labor Board; Lloyd K. Garrison, New York attorney, former general counsel and chairman of the War Labor Board and until recently dean of the School of Law, University of Wisconsin; and David A. Morse, Assistant Secretary of Labor and former general counsel of the National Labor Relations Board.

The Commission is making plans to assume control of the Manhattan Engineer District, an operation involving about 43,000 employees, and its consultants have already made a preliminary study of industrial relations at the major atomic energy installations.

Mr. Wilson has served as a consultant for the Atomic Energy Commission since its appointment in October. Prior to this and since the end of the war Mr. Wilson was secretary of the State Department Board of Consultants on International Control of Atomic Energy under the chairmanship of David E. Lilienthal, who is also chairman of the Atomic Energy Commission. Other members of the Board with whom he worked were Chester I. Barnard, president, New Jersey Bell Telephone Company; J. Robert Oppenheimer; Charles Allen Thomas, vice-president, Monsanto Chemical Company; and Harry A. Winne, vice-president, General Electric Company.

Mr. Wilson became executive assistant to Dr. Bush as director of OSRD at the time of its organization after similar work with the National Defense Research Committee and served until the end of the war. He was active in setting up the entire organization, was responsible for coordinating the various branches of OSRD, and directly supervised the Office of Scientific Personnel.

On December 12 President Truman appointed a nine-man General Advisory Committee made up of James Bryant Conant, president of Harvard University and president of AAAS; Lee A. DuBridge, president, California Institute of Technology; Enrico Fermi, professor of physics, University of Chicago; I. I. Rabi, professor of physics, Columbia University; J. R. Oppenheimer, professor of theoretical physics, University of California; Glenn T. Seaborg, professor of chemistry, University of California; C. S. Smith, director, Institute of Metals, University of Chicago; Hartlev Rowe, vice-president, United Fruit Company; and Hood Worthington, chemical engineer, E. I. du Pont de Nemours & Co. (*Science*, December 13 and 20).

The $1,000 prize awarded by AAAS each year for an outstanding contribution to science presented at the annual winter meeting was divided this year between two research teams.

One-half went to T. M. Sonneborn, Winifred Jacobson, and Ruth V. Dippell, of Indiana University, for their studies on the mechanism of heredity of paramecium.

The other half was awarded to Quentin M. Geiman and Ralph W. McKee, Harvard University, for their method of growing malaria *in vitro*. The latter study began in July 1943, and continued until December 1945, under the direction of Eric G. Ball, of Harvard, and was later continued by the prizewinners under a grant-in-aid from the U. S. Public Health Service. By December 1946, a method was developed for keeping the malaria parasite alive in test tubes for as long as seven days. Dr. Geiman acknowledged his debt to predecessors on whose work his own was based, particularly that of William Trager, Rockefeller Institute of Medical Research, who in 1941 succeeded in culturing avian malaria.

The Indiana geneticists brought the second recognition to that institution within the past few weeks. H. J. Muller received the Nobel Prize on December 10 for his studies on the influence of X-rays on genes and chromosomes. In 1927, when he was at the University of Texas, this work was awarded the $1,000 AAAS prize. Dr. Muller, who had flown to Stockholm to receive the prize from King Gustav, returned to the United States on December 22 and attended the meetings in Boston.

In 1936 W. M. Stanley, who shared the Nobel Prize in chemistry this year, won the AAAS award for his biochemical investigation of tobacco mosaic virus proteins.

In 1939, I. I. Rabi, Department of Physics, Columbia University, presented the winning paper on "Radio Frequency Spectra of Atoms and Molecules."

In 1941, the last time at which an annual prize was given at an Association meeting, the award was also divided between three people: Dugald E. S. Brown and Douglas A. Marsland, of New York University, for their paper on "The Reversible Denaturation of Enzymes as a Determining Factor in the Reactions of Biological Systems to Temperature and Pressure" and Frank H. Johnson, of Princeton University, for his closely related paper on "The Mechanism of Temperature and Hydrostatic Pressure Reversal of Narcosis in Luminous Bacteria."

The Association now grants three $1,000 prizes. Announcement was made in Boston (*Science*, December 27) of a new $1,000 prize for magazine writers of popular scientific articles; and, as announced previously (*Science*, December 13), the $1,000 AAAS-George Westinghouse Science Writing Award for newspaper reporting in 1946 was won by James Graham Chesnutt, of the San Francisco *Call-Bulletin*.

About People

Glenn T. Seaborg, professor of chemistry, University of California, and co-discover of plutonium, americium, and curium, was recently selected "Chemist

of the Year" in a national poll of chemists and chemical engineers conducted by the American Chemical Society. Prof. Seaborg, a member of the nine-man advisory committee to assist the United States Atomic Energy Commission, during the war directed research on plutonium and other transuranium elements at the University of Chicago Metallurgical Laboratory (*Science*, October 25).

Charles H. Swift, associate professor and secretary of the Department of Anatomy at the University of Chicago, has retired with emeritus status. Dr. Swift has been associated with the University for the past 47 years.

Robert F. Rinehart has been promoted to professor of mathematics at Case School of Applied Science. Dr. Rinehart has been a member of the Case faculty since 1937. On May 31 he was awarded the Medal for Merit in recognition of his wartime activities with the Operations Research Group of the Navy.

Bascom A. Belcher, formerly a major in the U. S. Army, has been appointed associate agronomist in the Division of Sugar Plant Investigations, U. S. Department of Agriculture, and will be locally in charge of the U. S. Sugar Plant Field Station located at Canal Point, Florida. Mr. Belcher served 11 months as an agricultural economist with Natural Resources Section, GHQ, SCAP, in Tokyo, Japan. At the Canal Point Station, he will carry forward research work associated with sugarcane breeding and sugarcane agronomy.

Joseph E. Greaves, head of the Department of Bacteriology and Biochemistry and on the faculty of the Utah State Agricultural College since 1907, retired from administrative duties on June 30. He continues on the teaching faculty.

C. O. Miller, since 1938 vice-president and scientific director, Lakeside Laboratories, Milwaukee, Wisconsin, has been named president of the Kremers-Urban Company, Milwaukee.

P. H. Waring Webb, formerly at the University of North Carolina, has been appointed associate professor of biology at Coker College, Hartsville, South Carolina.

Edgar Compere, formerly of the Standard Oil Company of New Jersey, Louisiana Division, has been appointed assistant professor in the Department of Chemistry, Louisiana State University.

Edward J. Van Loon was appointed to the staff of the Department of Biochemistry, School of Medicine, University of Louisville, Kentucky, September 1. Since January 1946 he had been an instructor in biochemistry at Michigan State College.

Merrill F. Roff, formerly director of the Aviation Psychology Program, Office of the Air Surgeon, AAF, has joined the staff of the Research Division, Air University School of Aviation Medicine, Randolph Field, Texas, as chief of the Department of Psychology.

Donald P. Costello, professor of zoology, University of North Carolina, has become a member of the Editorial Board of the Biological Bulletin, Marine Biological Laboratory, Woods Hole, Massachusetts.

William T. Winne, formerly at Cornell University, has been appointed assistant professor of botany, Union College, Schenectady.

Stephen F. Roach has been appointed instructor in physics at the Jersey City Junior College.

Grants and Awards

Vannevar Bush, president of the Carnegie Institution of Washington, and director OSRD, has been named 1946 winner of the Hoover Medal, awarded jointly by the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers, and the American Institute of Electrical Engineers. Dr. Bush will receive the award January 30 in New York City at the winter meeting of the latter society.

The citation refers to Dr. Bush as an "engineer, educator, and administrator, who, in critical time of need, was in a most special sense an organizer, guiding spirit, and driving force of the nation's achievements in physical and medical science."

The first medal was conferred in 1930 upon Herbert Hoover, for whom the award is named. Dr. Bush is the ninth recipient.

In addition to this award, Dr. Bush holds the Holley Medal of the American Society of Mechanical Engineers and the Edison Medal of the American Institute of Electrical Engineers.

Certificates of Exceptional Service for their "personal contribution" in producing the binocular developed by Bausch & Lomb at the request of the Navy Department have been presented to three employees—J. Donald Dutcher, Henry F. Kurtz, and Willard T. Perkins—who are principally responsible for designing an accurate gunfire control instrument, the submarine telescope, Mark 91.

The American Academy of Arts and Sciences, under terms of a gift of the late Francis Amory, Beverly, Massachusetts, will offer a substantial prize for outstanding work on alleviation or cure of diseases affecting human reproductive organs. The gift provided a fund, the income of which may be awarded at seven-year intervals as a prize and medal to any individual or individuals for work of exceptional merit in this field. If work warranting it has appeared, the next award will be made in 1947 for the most outstanding contribution, as based on published work and recognized accomplishment, in the past seven years. Suggestions aiding the Committee in making a selection may be addressed to Secretary Amory Fund Committee, American Academy of Arts and Sciences, 28 Newbury Street, Boston, Mass.

A Lasker Group Award was presented to the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, "in recognition of distinguished service in the solution of problems involving the health and comfort of the armed forces, with particular reference to insect-borne diseases," by the American Public Health Association, at the 1946 convention of public health workers November 12 in Cleveland, Ohio. F. C Bishop, assistant chief in charge of research at the Bureau, and over-all director of research conducted for benefit of the armed forces, received the award for the Bureau.

Colleges and Universities

Lehigh University has received a grant of $60,000 from the War Depart-

ment to make an engineering analysis of bomb damage reports and studies made in World War II.

The United States Naval Academy will hold examinations for positions in the civilian faculty April 4 and 5. Starting salary for science instructors is $4149.60, for assistant professors $4400.40, and for associate professors $4902.00. Application forms and notice of requirements may be obtained from the Superintendent, United States Naval Academy, Annapolis, Maryland. Applications must be submitted before March 15, 1947.

A War Memorial Scholarship of $1,000 in Mechanical Engineering has been established at Ohio State University by Dr. and Mrs. William Lloyd Evans in memory of their son, William Arthur, a graduate of Ohio State's Department of Mechanical Engineering, lost in action in enemy waters while serving as radar and communications officer aboard the submarine *U.S.S. Tullibee.* Dr. Evans was for many years chairman of the University's Department of Chemistry

St. Louis University School of Medicine has announced the following recent faculty changes: Percy J. Carroll, Brig. Gen. U. S. Army (ret.), assistant dean and professor of public health; Mark C. Wheelock, University of Alabama, assistant professor of pathology; Paul Murphy, Washington University, assistant professor of clinical medicine; and Benjamin DeBoer, University of Missouri, assistant professor of pharmacology.

The Department of Pharmacology, University of Chicago, is continuing work on the cinchona alkaloids under the direction of E. M. K. Geiling and F. E. Kelsey, under a grant made by Cinchona Products Institute of New York.

The University of Rochester is preparing for a nationwide competition among high school students for five science scholarships valued at $1,500 each. Fourth annual competition of its type, the contest was inaugurated by the Bausch & Lomb Optical Company, and is open to students in the more than 4,500 high schools and preparatory schools participating in the Bausch & Lomb Honorary Science Awards. Under the latter program, established in 1932 to encourage young people to engage in scientific careers, medals are presented each year to graduating seniors having highest standings in scientific subjects.

Winners of the fourth annual science scholarship contest will be chosen by the University Scholarship Committee next spring from students who received medals during their four years of high school.

Fifteen boys and girls have won $1,500 scholarships in the past three years. Eleven others stood so high that they were given other university scholarships for nearly equivalent amounts.

Wayne University College of Medicine has been awarded a grant of $10,000 by the U. S. Public Health Service in support of research on the pharmacology of synaptic function. The project will be carried on in the Department of Pharmacology and Therapeutics under the direction of Amedeo S. Marrazzi, head of the department.

Bowdoin College has recently received three gifts from psychologists: a set of lithoprints of great philosophers and psychologists, donated by Linus W. Kline; and the libraries of the late Charles T. Burnett (formerly professor of psychology at the College) and of the late Edwin B. Holt.

A national survey of the requirement and availability of botanists, prepared at the request of President N. E. Stevens, of the Botanical Society of America, has been completed. The study shows that by 1950, on a conservative estimate, there will be a shortage of 277 botanists with the Ph.D. and 177 with the Master's degree. This is 32 per cent and 46 per cent short of the 1950 anticipated requirements. Copies of the survey, furnished without charge to any who may be interested, may be obtained by writing to: Dr. K. Starr Chester, Department of Botany and Plant Pathology, Oklahoma A. & M. College, Stillwater.

Elections

Charles A. Thomas became president-elect of the American Chemical Society for 1947, according to an announcement from the Council. Dr. Thomas is vice-president and technical director of the Monsanto Chemical Company, St. Louis, and project director of the Clinton Laboratories at Oak Ridge, Tennessee. He was one of the co-authors of the Acheson-Lilienthal report on international control of nuclear power. (See *Science* April 12, 1946.)

The Council also announced the election of four new councilors-at-large for three-year terms: Cecil L. Brown, director of the Esso Laboratories, Standard Oil Company of Louisiana, Baton Rouge; M. L. Crossley, research director, American Cyanamid Company, Bound Brook, N. J.; Glenn T. Seaborg, University of California, Berkeley; and Roger J. Williams, director, Biochemical Institute, University of Texas.

Roger Adams, a member of the new Publications Committee of AAAS is chairman of the Chemical Society's Board of Directors.

The Royal Society, London, at its anniversary meeting November 30, elected Sir Robert Robinson president, Sir Thomas Merton treasurer, Sir Alfred Egerton and Sir Edward Salisbury secretaries, and E. D. Adrian foreign secretary. Other members of the Council include: C. H. Andrewes, W. T. Astbury, W. Brown, E. C. Bullard, A. C. Chibnall, C. A. Lovatt Evans, N. H. Fairley, R. A. Fisher, S. Goldstein, E. L. Hirst, H. W. Melville, M. H. A. Newman, M. L. E. Oliphant, C. F. A. Pantin, H. H. Read, and Sir Reginald Stradling.

Edward B. Tuohy, associate professor of anesthesiology, Mayo Clinic and Mayo Foundation, was elected president of the American Society of Anesthesiologists, Inc., for 1947 at a meeting in New York City December 12.

Meetings

The 8th International Congress of Genetics will be held in Stockholm in the summer of 1948. Swedish geneticists have formed an Organization Committee for the Congress, with Gunnar Dahlberg, University of Uppsala, chairman, and Gert Bonnier, Institutet för Husdjursförädling, Wiad, Eldtomta, general secretary.

Recent Deaths

Frank Clifford Stockwell, 63, Stevens Institute, died at his home in Hoboken, N. J., December 29. He had been chairman of the Department of Electrical Engineering since 1925.

George Klemperer, 81, retired propressor of internal medicine, University of Berlin, where he was active in cancer and metabolism research, died December 24 in Boston. He retired in 1933 and came to the United States in 1935.

Porter James Crawford, 51, director of the Caribbean region of the International Health Division, Rockefeller Foundation, died December 27 in Havana. Dr. Crawford joined the foundation in 1928 and until 1934 studied control of yellow fever in Brazil. During the next three years he worked on malaria control in Panama, and in 1939 was made regional director of the division.

Collins P. Bliss, 80, Scarsdale, N. Y. dean emeritus of the New York University College of Engineering, died December 28 at Tupper Lake, New York.

Christian I. Gunness, 64, head of the Department of Agricultural Engineering, Massachusetts State College, died December 21 of coronary thrombosis.

An Anglo-American agreement for the exchange of German technical information acquired by the two nations since VE-Day has been announced by the Commerce Department. Under the agreement representatives of each nation will be able to select from the other's storehouse of German scientific and technical documents which have been microfilmed. Requests for British documents should be addressed to the Office of Technical Services, Department of Commerce.

The International Committee on Weights and Measures met in Sèvres and Paris October 22–29 for its first session since 1937. Members from Roumania, Sweden and Jugoslavia, who had expected to attend, were unable to do so. From the Japanese member, H. Nagaoka, no news has been received since 1939. The remaining eleven members who took part in the session were Louis de Broglie of France; G. Cassinis, Italy; M. Châtelain, U.S.S.R.; E. C. Crittenden, U.S.A.; M. Dehalu, Belgium; W. J. deHaas, The Netherlands; E. S. Johansen, Denmark; W. Kösters, Germany; Z. Rauszer, Poland; M. Ros, Switzerland; and J. E. Sears, Great Britain. Albert Pérard, director of the International Bureau of Weights and Measures also attended.

Mr. Sears was elected president of the Committee and Mr. Dehalu permanent secretary until the next session in 1948. The position of sous-directeur of the International Bureau was re-established, and Charles Volet was appointed.

The International Bureau was able to continue its work with very little interruption during the war though rising costs and inability of some countries to pay their dues created financial difficulties. To meet these difficulties and also provide for the enlarged scope assigned to the Bureau in recent years the Committee recommended that the General Conference of Weights and Measures scheduled to be held in 1948 arrange for an increase in national contributions to the Bureau.

Technical problems considered by the Committee included practicability of adopting the wave length of some spectral line as the primary standard of length, the definition of units of heat, and revision of the international scale of temperature. Decisions were made to proceed with the adjustments of the units of electricity and light which had been planned for 1940, and introduce the new units into practice as of January 1, 1948.

The electrical units designated as "international" are to be replaced by "absolute" units derived directly from the basic mechanical units and consistent with them within the errors of measurement. The "international" units used in various countries are slightly different, and as a basis for comparisons mean international units were set up at the International Bureau before the war by taking means of the units maintained by the national laboratories of France, Germany, Great Britain, Japan, U.S.S.R. and the United States. The relations accepted by the International Committee for transferring from one system of units to the other are as follows:

1 mean international ohm = 1.00049 absolute ohms

1 mean international volt = 1.00034 absolute volts

Some questions have arisen regarding maintenance of the mean ohm since 1939, and precise relations of the various national units to the absolute values adopted are not yet certain. Differences from the above factors, however, will generally not exceed 1 unit in the last decimal. For the United States, for example, the conversion factor for volts will be 1.00033, while that for ohms will be approximately 1.00050. This makes the U.S. "international" watt equal to 1.00016 "absolute" or mechanical watts. For electrical measurements this relation is very exact, but the combined uncertainties of measurement of actual absolute magnitudes amount to several parts in 100,000, and the rounded factor 1.0002 may well be used when heat or mechanical energy is to be evaluated. The units of light to be introduced are the "new candle" and "new lumen," the magnitudes of which are fixed by taking the brightness of a black-body radiator at the temperature of solidification of platinum as 60 candles per square centimeter. For light differing in color from that given by this primary standard the values are determined by use of standard spectral luminosity factors previously adopted by the Committee. This new combination makes the primary unit about 1.8 per cent smaller than the old international candle as represented by carbon-filament lamps, but the difference becomes smaller at higher temperatures so that practically no change will be made in the ratings for ordinary tungsten-filament lamps in the United States.—*E. C. Crittenden,* Associate Director, Bureau of Standards, Washington, D. C.

NRC News

The Committee on Research in Endocrinology has announced that requests for grants-in-aid during the period July 1, 1947, to June 30, 1948 will be received until February 28, 1947. In addition to a statement of the problem and research plan or program, applicants are asked to submit infomation about method of attack, institutional support of the investigation, and uses to be made of the sum requested. No part of any grant may be used by the recipient institution for administrative expenses.

The Committee makes grants-in-aid of research in the general field of experimental and clinical endocrinology. Applications for support of research in the problems of sex in the narrower sense are not administered by this committee and should be directed to the Committee for Research in Problems of Sex of the NRC.

The Committee on Research in Endocrinology will continue to give consideration to the support of studies of the effect of sex hormones on nonsexual functions, e.g., on general metabolism and metabolism of steroid hormones. Application blanks may be obtained by addressing the Secretary, Division of Medical Sciences, National Research Council, 2101 Constitution Ave., Washington 25, D. C.