SCIENTIFIC NOTES AND NEWS

The 1945 Nobel prize in physics has been awarded to Professor Wolfgang Pauli, of the Institute for Advanced Study at Princeton, N. J., for his work on the "exclusion principle," which deals with regulation of electrons in the outer shell of atoms and molecules. The 1944 prize in chemistry has been awarded to Professor Otto Hahn, Germany, an authority on radioactivity, for his discovery of a method of breaking the heavy atom nucleus. Artturi Wirtanen, of Finland, the biochemist, has received the 1945 award in chemistry for his discoveries relating to food chemistry.

A DINNER in honor of the seventieth birthday of Dr. Gilbert N. Lewis, for thirty-three years a professor of chemistry at the University of California at Berkeley, was given by members of the department of chemistry. Five years ago he relinquished the deanship of the College of Chemistry, which he had held for twenty-eight years. He was presented with a booklet in honor of the occasion.

THE Hayden Memorial Geological Prize of the Academy of Natural Sciences of Philadelphia for the three-year period ending with 1945 has been awarded to Dr. Joseph Augustine Cushman, director of the Cushman Laboratories at Sharon, Mass., in recognition of his work on foraminifera. Dr. Cushman will go to Philadelphia to receive the prize at ceremonies in the academy on a date to be announced.

MAJOR GENERAL NORMAN T. KIRK, the Surgeon General of the Army, presented on November 19 the Distinguished Service Medal to Brigadier General James Stevens Simmons, U.S.A., in recognition of his work as chief of the Preventive Medicine Service, Office of the Surgeon General, from November, 1939, to August, 1945.

The gold medal of the Illuminating Engineering Society, awarded for "meritorious achievement conspicuously furthering the profession, art, or knowledge of illumination engineering," was presented recently at a joint meeting with the American Institute of Electrical Engineers to Preston S. Millar, president of the Electrical Testing Laboratories of New York City.

PURDUE UNIVERSITY, at its eighty-first commencement, conferred an honorary degree on Dr. Ira L. Baldwin, dean of the College of Agriculture of the University of Wisconsin, in recognition of his outstanding work in the fields of science and agriculture.

Dr. F. B. Plummer, professor of petrology in the University of Texas, was elected president of the Texas Academy of Sciences at the annual meeting of the academy, which was held at Waco on November 10. Dr. C. M. Smith, curator of the Museum of Baylor University, was elected secretary, and Dr. Don O. Baird was reelected as representative of the American Association for the Advancement of Science.

Dr. Max Cutler, director of the Chicago Tumor Institute, has been elected an honorary member of the Cuban Radiological Society.

BRIGADIER GENERAL JAMES STEVENS SIMMONS, U.S.A., chief of the Preventive Medicine Service of the Office of the Surgeon General, U.S.A., was elected president for the year 1945–46 of the American Academy of Tropical Medicine at its twelfth annual meeting, held on November 14 at Cincinnati, Ohio. On November 15 he was also made president of the American Society of Tropical Medicine.

DR. FREDERICK B. LLEWELLYN, consulting engineer on the staff of the Bell Telephone Laboratories, has been elected president of the Institute of Radio Engineers for the year 1946. He succeeds Dr. William L. Everitt, head of the department of electrical engineering of the University of Illinois.

The annual meeting of the Connecticut Academy of Arts and Sciences was held in New Haven, on November 15. Officers for the year 1945–1946 were elected as follows: President, Alexander Petrunkevitch; Vice-presidents, G. Evelyn Hutchinson, Frederick A. Pottle and Herbert Thoms; Secretary, G. F. Eaton; Treasurer, Laurence G. Tighe; Librarian, James T. Babb; Publication Committee—the president, the vice-presidents, the secretary, the librarian and Alfred R. Bellinger and Sydney K. Mitchell.

At the annual meeting on October 26 and 27 in New York City, the Society of Rheology elected the following officers: President, Dr. W. F. Fair, Jr.; First Vice-president, Professor J. W. McBain; Second Vice-president, Professor Henry Eyring; Secretary-Treasurer, Dr. R. B. Dow; Editor, Dr. W. H. Markwood, Jr., and Publishing Editor, Dr. Turner Alfrey.

The Eastern Missouri Chapter of the Society of American Bacteriologists held its twenty-fourth regular meeting on November 6. Dr. Robert A. MacCready, Captain, Medical Corps, A.U.S., Jefferson Barracks, Missouri, spoke on "The Serological Identification of a Salmonella Culture," and Dr. Homer Whitmire on the "Public Health Aspects of the Control of Some Insect Vectors." Dr. R. O. Meuther was elected *President*; John A. Doubly, *Vice-president*; Mrs. Grace Montrose McCrary, Secretary-treasurer, and Dr. John B. Rehm, Councilor.

Dr. Dudley B. Reed, professor of hygiene in the School of Medicine of the University of Chicago, has retired with the title emeritus, after having been connected with the school for thirty-four years.

In the department of mathematics at Princeton University, Dr. Luther P. Eisenhart, dean of the Graduate School and chairman of the department, and Dr. J. H. M. Wedderburn, professor of mathematics, have retired with the rank of professor emeritus; Dr. S. Lefschetz, Henry Burchard Fine professor, has been appointed chairman of the department; Dr. D. C. Spencer, associate professor of mathematics at the University of California, has been appointed associate professor and will assume his duties in the spring; Dr. Samuel Eilenberg, associate professor of mathematics at the University of Michigan, has been appointed lecturer for the winter term; Dr. Max Shiffman, of the College of the City of New York, has been appointed lecturer for the spring term, and Dr. George W. Whitehead, of Purdue University and Aberdeen Proving Ground, has been appointed Fine instructor in mathematics for the academic year 1945-

Dr. LISE MEITNER, the Austrian physicist, will join in February the faculty of the Catholic University of America, where he is visiting professor.

Dr. Curtis H. Waldon, professor of pharmacology at the School of Pharmacy of Purdue University, has been made dean of the School of Pharmacy of Montana State University.

Dr. Harold Howe, professor of agricultural economics and land economist, has been appointed dean of the Graduate School of Kansas State College at Manhattan to succeed Dr. James E. Ackert, who is retiring.

Dr. Milton Woodburn, for twenty-two years a member of the faculty of the University of Buffalo, has become head of the department of chemistry.

Dr. WILLIAM A. Mosher, assistant to the director of research of the Hercules Powder Company, has been appointed professor of chemistry and head of the department at the University of Delaware.

Dr. Albert H. Cooper, on leave as a captain in the Chemical Warfare Service, has been appointed professor of chemical engineering and chairman of the department at the University of Denver.

Dr. G. W. Beadle, of Stanford University, has been appointed professor of biology and chairman of the Division of Biology of the California Institute of Technology. He will take up the work on July 1, 1946.

AT Cornell University, Dr. Harold H. Williams, as-

sociate director of the Research Laboratory at Detroit of the Children's Fund of Michigan, has been appointed professor of biochemistry. Effective on October 1, Dr. George C. Kent, research associate professor in botany and plant pathology in the Experiment Station of Iowa State College, has been appointed professor of plant pathology.

Dr. H. K. Wilson, professor of agronomy at the University of Minnesota, has become head of the department of agronomy of Pennsylvania State College. He succeeds Dr. C. F. Noll, who has retired with the title of professor emeritus.

Dr. George A. Gries has been made associate professor of botany and plant pathology and associate plant physiologist at the Agricultural Experiment Station of Purdue University. For three years previously he had been connected with the Connecticut Agricultural Experiment Station at New Haven.

Dr. James H. M. Henderson, who for the past two years has been carrying on war research at the University of Chicago, has become assistant professor in chemistry and agriculture, and a member of the research staff of the George Washington Carver Foundation at Tuskegee Institute, Alabama.

Dr. Jack G. Roof has returned to his position as assistant professor, of physical chemistry at the Oregon State College after three and a half years spent in research connected with the war program at the Technological Institute of Northwestern University, at Panama and at Edgewood Arsenal.

DR. VINCENT W. COCHRANE, of the Lederle Laboratories at Pearl River, N. Y., has recently been appointed assistant plant pathologist at the Connecticut Agricultural Experiment Station, to fill the vacancy left by the resignation of Dr. George A. Gries.

Dr. Frank G. Viets, Jr., has resigned as associate agricultural chemist of the South Dakota Agricultural Experiment Station to become agronomist in the Division of Soils, Fertilizers, and Irrigation, U. S. Department of Agriculture, at the Irrigation Branch Experiment Station, Prosser, Washington. Dr. Louis W. Holm, of the University of Chicago Toxicity Laboratories, has been appointed associate agricultural biochemist.

Dr. E. M. Mrak, associate professor of food technology, has resumed his work at the University of California at Berkeley after having completed his assignment as chairman of the committee on food research of the military planning division, office of the Quartermaster General. The committee on food research organized a program of scientific investigation in connection with the Army food program, which was

carried out in the various commercial, university and government laboratories.

DR. WILLIAM A. SHURCLIFF, of the Office of Scientific Research and Development, who served for eight years as acting head of the laboratory of physics of the American Cyanamid Company, has been named technical consultant to the Bureau of Industry of the New York State Department of Commerce.

Dr. Frank J. Rudert, Ph.D. (Cornell), has joined the Merrell Research Laboratories to study the development of new antibiotics.

Dr. J. H. Simons, professor of physical chemistry at Pennsylvania State College, has been appointed director of the Fluorine Research Laboratories.

PROFESSOR EMERITUS WILLIAM H. HOBBS, of the University of Michigan, has returned from a month's field season spent in mapping the now abandoned shore-lines of Glacial Lake Leverett, which was discovered in 1943 (Science, September 10, 1943, pp. 227-230).

THE special committee on atomic energy of the Senate opened hearings beginning on Monday, November 26. Among the witnesses were Dr. Vannevar Bush, director of the Office of Scientific Research and Development; Dr. Harold Urey, professor of chemistry at the University of Chicago; Dr. Irving Langmuir, associate director of the Research Laboratories of the General Electric Company at Schenectady; Dr. E. P. Wigner, Thomas P. Jones professor of physics at Princeton University; Dr. H. D. Smyth, reseach chemist of Carleton and Hovey Company; Dr. Edward U. Condon, now director of the National Bureau of Standards, and representatives of government, labor and agriculture.

WALTER N. BANGHAM, director of the plant research department of the Goodyear Rubber Plantations Company, San José, Costa Rica, has recently returned from a two-week visit to the El Palmar area of Mexico, where he made a survey of planting practices on the Hevea Plantations for the Secretaria de Agricultura y Fomento, Mexico.

Dr. John B. Lucke has returned to his work as associate professor of geology and head of the department of geology and geography at the University of Connecticut. During the past year, as Lieutenant, U.S.N.R., he was photo interpretation officer in charge of terrain and beach studies at the Joint Intelligence Center, Pacific Ocean Areas, Pearl Harbor, T. H.

Anthony Pugliese, A.U.S. retired, assistant professor of design at Brooklyn College, has returned from military leave. He is an honorary member of the Armée de l'Air Français. He will divide his time between the Veterans' and War Counseling Office and studio classes in the department of design.

PROFESSOR ROGER ADAMS, head of the department of chemistry of the University of Illinois, and chairman of the board of directors of the American Chemical Society, has been appointed special adviser to Lieutenant General Lucius DuB. Clay, deputy military governor of Germany and U. S. deputy member of the Allied Group Control Council in Berlin.

Dr. Allen B. Scott has returned to his position as instructor in chemistry at the Oregon State College after four years of military service. He was separated with the rank of captain in the artillery of the Seventieth Division and was decorated with the Bronze Star medal.

The British Medical Journal reports that Professor R. P. Linstead, F.R.S., has been appointed director of the chemical research laboratory in the Department of Scientific and Industrial Research. He was formerly Firth professor of chemistry in the University of Sheffield and in 1939 was elected to the chair of chemistry of Harvard University. During the war he returned to Great Britain.

SPECIAL ARTICLES

THE RELATION BETWEEN EPIDEMICS OF ACUTE BACTERIAL PNEUMONIA AND INFLUENZA1

THERE is insufficient knowledge of the underlying causes of the localized epidemics of pneumonia which are known to occur in institutions, camps, rural areas,

¹ This investigation was supported in part through the Commission on Acute Respiratory Diseases, Board for the Investigation and Control of Influenza and Other Epidemic Diseases in the Army, Preventive Medicine Service, Office of The Surgeon General, United States Army, and by grants from the Commonwealth Fund, the W. K. Kellogg Foundation, the John and Mary R. Markle Foundation and the International Health Division of the Rockefamilies and hospital wards.2 In the present paper the possibility will be discussed that some of these localized outbreaks of bacterial pneumonia are related to epidemic influenza. One instance of a laboratory confirmation of this hypothesis will be reported.

According to Collins and Gover^{3, 4} 16 widespread epidemics of influenza have occurred in the United

feller Foundation to the Board for the Investigation and Control of Influenza and Other Epidemic Diseases for the Commission on Acute Respiratory Diseases.

² M. Finland, Medicine, 21: 307-344, 1942. an extensive bibliography of reported epidemics.)

3 S. D. Collins, Pub. Health Rep., 45: 361-406, 1930.

4 Mary Gover, Pub. Health Rep., 58: 1033-1061, 1943.