VISITING PHYSICISTS AT CORNELL UNIVERSITY

DURING the academic year 1938–39 and summer of 1939 reports by non-resident speakers were presented at meetings of the faculty and graduate students in physics at Cornell University as follows:

September 26—*Photo-conductivity and the Theory of the Latent Image,* Professor N. F. Mott, University of Bristol.

October 20—*The Philosophical Interpretations and Misinterpretations of the Quantum Theory,* Professor Philipp Frank, German University of Prague.

November 7—*Some Metallurgical Problems from a Physicist's Point of View,* Dr. S. Dushman, General Electric Research Laboratory.

December 1—*The Separation of Isotopes by Chemical Methods,* Professor H. C. Urey, Columbia University.

January 16—*Behavior of Matter under High Pressure,* Professor Edward Teller, George Washington University.

March 6—*Design and Construction of the Large Westinghouse Electrostatic Generator,* Dr. W. E. Shoupp, Westinghouse Laboratories.

March 20—*Cloud Chamber Studies of Cosmic Rays,* Professor J. C. Street, Harvard University.

March 27—*Proton Reactions,* Professor L. A. DuBridge, University of Rochester.

May 1—*High Pressure Research,* Professor P. W. Bridgman, Harvard University.

May 15—*The Self-energy of the Electron,* Dr. V. F. Weisskopf, University of Rochester.

July 31—*Problems of the Pick-up Tube in Television,* Dr. E. G. Ramberg, Research Division, Radio Corporation of America.

August 7—*Some Significant Developments in Nuclear Physics,* Professor S. W. Barnes, University of Rochester.

AWARD OF THE WILLIAM H. NICHOLS MEDAL

THE William H. Nichols Medal of the New York Section of the American Chemical Society has been awarded for 1940 to Dr. John M. Nelson, professor of organic chemistry at Columbia University, "for important contributions to the chemistry of life processes." The official statement of the jury of award reads:

Professor Nelson is an internationally recognized authority on the isolation and purification of naturally occurring enzymes and the quantitative study of their mode of action. He is the author of seventy-five papers in scientific journals, and has devoted the major portion of his research to determining the characteristics and activities of enzymes, substances which accelerate chemical transformations in nature—carbohydrates, the organic compounds manufactured by green plants, and valence, the quality which causes elements to react.

Professor Nelson is noted as an investigator of those complex chemical substances, the enzymes, by virtue of which life processes are carried on. They are the catalysts, the lubricants for the wheels of the vital mechanism. His work has been concerned with two of these enzymes: invertase, which is typical of those involved in the digestive processes of animals and in related processes in plant life; and tyrosinase, which is typical of those involved in the respiratory process. The latter process is a reaction related to combustion by which foodstuffs and air produce heat and mechanical energy.

Since Professor Nelson undertook his research work, chemists have shown that enzymes are proteins, either simple or complex. Consequently, much of the work that he has directed has been closely related to molecules of proteins, the fundamental building blocks in nature. Until 1934, his research was actively centered on invertase, the enzyme that occurs in the small intestine of mammals and in the tissues of certain animals and plants. His many publications on the activity of invertase and on methods for preparing highly active and purified preparations established him as one of the authorities on enzymes in this country.

In 1934 Professor Nelson became interested in problems concerning the utilization of molecular oxygen in plants and animals. The investigations of several groups of workers, largely European, have shown that the use of oxygen in many respiration processes occurs through a series of reactions in which two types of enzymes function—dehydrogenases and oxidases. The action of the former enzymes has been fairly well defined, but the functions of the latter are still the subjects for extensive researches.

During the past year Professor Nelson succeeded in obtaining a crystalline protein which has characteristics similar to tyrosinase, an oxidase. The importance of this development is apparent from the fact that although thousands of enzymes are known to exist, only about ten have been crystalized in a pure form.

Professor Nelson was born in West Point, Neb., on October 19, 1876. He was graduated from the University of Nebraska in 1901, and during the next two years he was employed as chemist for the Nebraska Food Commission. During 1903–04 he was instructor in chemistry at the Rose Polytechnic Institute, Terre Haute, Ind. He received the Ph.D. degree from Columbia in 1907. In 1907–08 he was instructor in the Rensselaer Polytechnic Institute.

He joined the Columbia faculty in 1908 as tutor, becoming assistant professor in 1915, associate professor in 1916 and full professor in 1922. He has had charge of the instruction of organic chemistry in Columbia College and has directed graduate research. The medal will be presented at a dinner of the New York Section on March 8, when Professor Nelson will speak on the various phases of the research in which he has been engaged.

The Nichols Medal was founded in 1902 by the late Dr. William H. Nichols, a charter member of the American Chemical Society and chairman of the

board of the Allied Chemical and Dye Corporation, to "stimulate original research in chemistry."

DR. AMES AND THE NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

PRESIDENT ROOSEVELT appointed George Jackson Mead, aeronautical consulting engineer, vice-president and director of the United Aircraft Corporation at West Hartford, Conn., to membership on the National Advisory Committee for Aeronautics to succeed Dr. Joseph S. Ames, who has been chairman of the committee or its executive body for twenty-four years and whose resignation because of ill health was accepted by Mr. Roosevelt "with sincere regret."

Mr. Mead was appointed for the unexpired term of five years from December 1, 1938, to which Dr. Ames was named last year. Dr. Ames advised the advisory committee in September that because of his physical condition he "could not in justice to the committee or to myself accept another term as chairman."

In his letter accepting the resignation of Dr. Ames, President Roosevelt said:

> Our republic would not be worthy of the devoted service you have rendered for over twenty-four years without compensation if it could not on this occasion pause to pay tribute where it is so justly due.
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> When you were first appointed by President Wilson in 1915, very little was known about the science of aeronautics. To you and to your colleagues were entrusted by law the supervision and direction of the scientific study of the problems of flight. For the past twenty-four years you have served as chairman of the National Advisory Committee for Aeronautics, or chairman of its executive committee. The administration and the accomplishments of the committee under your leadership reflect your great scientific attainments, professional courage and executive ability.
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> That the people generally have not known of your brilliant and patriotic service is because it has been overshadowed by your passion for accomplishment without publicity. But the fact remains, and I am happy to give you credit for it, that the remarkable progress for many years in the improvement of the performance, efficiency and safety of American aircraft, both military and commercial, has been due largely to your own inspiring leadership in the development of new research facilities and in the orderly prosecution of comprehensive research programs.

SCIENTIFIC NOTES AND NEWS

PROFESSOR GEORGE R. HARRISON, director of the Research Laboratory of Experimental and Applied Physics at the Massachusetts Institute of Technology, was presented on October 11 with the Rumford Medal of the American Academy of Arts and Sciences in recognition of "his notable work in spectrum photometry and spectrum analysis." Dr. Harlow Shapley, director of Harvard Observatory and president of the academy, presided; the presentation was made by Professor Norton A. Kent, of Boston University. Dr. Harrison made an address entitled "New Methods in Spectroscopy."

THE Frederic E. Ives Medal of the Optical Society of America was presented on October 14 at the Lake Placid meeting to Dr. August Herman Pfund, professor of physics at the Johns Hopkins University, in recognition of his work with infra-red rays. Dr. R. C. Gibbs, of Cornell University, president of the society, made the presentation.

THE seventieth birthday of Dr. R. S. Woodworth, professor of psychology at Columbia University, was celebrated on October 17. At an informal luncheon held at the Faculty Club his colleagues presented to him an anniversary volume, "Psychological Issues," containing a collection of twenty-five of his publications, a copy of his portrait and a complete bibliography. A reception was held at the Faculty Club in the afternoon from four to six where he was greeted by officers of the university, his colleagues and students in psychology.

AT a special ceremony in connection with alumni day, Colgate University on October 15 conferred the doctorate of science on William S. Murray, consulting and analytical chemist of Utica, N. Y., and a trustee of the university. President George Barton Cutten conferred the degree after Dean Carl A. Kallgren had read the citation. Mr. Murray is chairman of the New York Republican State Committee.

DR. FRANK AYDELOTTE, president of Swarthmore College, has been elected director of the Institute for Advanced Study at Princeton, New Jersey. He succeeds Dr. Abraham Flexner, who has been director of the institute since its establishment in 1930.

DR. FRANKLYN B. SNYDER, formerly vice-president and dean of the faculties, will be installed as the eleventh president of Northwestern University on November 15. He succeeds Dr. Walter Dill Scott, formerly professor of psychology, who resigned recently after serving as president since 1920.

AT the Armour Institute of Technology, Chicago, Linton E. Grinter, director of the civil engineering curriculum and dean of the Graduate Division, has been appointed vice-president of the institute. He will continue as dean of the Graduate Division.

DR. HERBERT C. SADLER, Alexander Ziwet professor of engineering at the University of Michigan, has retired because of ill health. Resolutions were adopted at a meeting of the Regents on October 7 expressing their appreciation of his services and conferring on