by the Engineering Council for Professional Development and by the American Institute of Chemical Engineers.

Professor Rhodes, the first director, received the degree of Ph.D. from Cornell University in 1914. After several years spent in teaching at the University of Montana and Cornell University, he was research chemist and chemical engineer and director of research of the chemical department of the Barrett Company. He also acted as consultant for the Anaconda Copper Company, the Atlantic Tar and Chemieal Company and other industrial concerns. He designed the refined products section of the main tar refinery of the U. S. Steel Corporation at Clairton, Pa. Since 1920 he has been professor of chemistry and chemical engineering at Cornell and has been chairman of the committee supervising the curriculum in chemical engineering since its establishment.

## AWARD OF THE LAMME MEDAL OF THE AMERICAN INSTITUTE OF ELEC-TRICAL ENGINEERS

THE 1937 Lamme Medal of the American Institute of Electrical Engineers has been awarded to Dr. Robert E. Doherty, president of the Carnegie Institute of Technology, Pittsburgh, Pa., "for his extension of the theory of alternating current machinery, his skill in introducing that theory into practice and his encouragement of young men to aspire to excellence in this field." The medal and certificate will be presented to him at the annual summer convention of the institute, which is to be held in Washington, D. C., from June 20 to 24.

The Lamme Medal was founded as a result of a bequest of the late Benjamin G. Lamme, chief engineer of the Westinghouse Electric and Manufacturing Company, who died on July 8, 1924, to provide for the award by the institute of a gold medal (together with a bronze replica thereof) annually to a member of the American Institute of Electrical Engineers, "who has shown meritorious achievement in the development of electrical apparatus or machinery" and for the award of two such medals in some years if the accumulation from the funds warrants. A committee composed of nine members of the institute awards the medal. Mr. Lamme made similar bequests to the Society for the Promotion of Engineering Education and to the Ohio State University.

Dr. Doherty was born in Illinois in 1885. He completed his secondary education at the academy of the University of Illinois, and later entered the university, from which he received the bachelor of science degree in 1908. Before he entered the University of Illinois he served for two years as a telegraph operator with the Baltimore and Ohio Railroad. After graduation he was employed as a student engineer by the General Electric Company and was later appointed designing engineer. In 1923 he was appointed consulting engineer for the General Electric Company, and after two years was selected to organize the advanced course in engineering offered by the company. He was also given the responsibility for educational work among the young college graduates that were employed and trained by the firm. In 1931 he was appointed professor of electrical engineering at Yale University, becoming head of the School of Engineering in 1933. Since becoming president of the Carnegie Institute in 1936 he has worked with his associates in reorganizing the curriculum of the College of Engineering.

Dr. Doherty has taken an active part in the educational programs of the professional societies. He was chairman of the committee on education of the American Institute of Electrical Engineers, 1931–33, and has served as a member of several of its committees. In 1934 he was appointed chairman of a committee of the Society for the Promotion of Engineering Education for studying objectives and length of curriculum in engineering colleges.

## AWARD OF THE WILLARD GIBBS MEDAL

DR. ROBERT R. WILLIAMS, of New York, chemical director of the Bell Telephone Laboratories, has been awarded the Willard Gibbs Medal of the Chicago Section of the American Chemical Society, one of the highest scientific honors bestowed in the United States, for "outstanding work in connection with the study and isolation of the beri-beri vitamin." Dr. Williams announced the discovery of the chemical structure of vitamin  $B_1$ , the antineuritic vitamin now called thiamin, in January, 1935. He characterized the achievement as a "preeminently cooperative enterprise" climaxing "nearly forty years of effort by scores of workers in many lands." He himself had sought isolation of the vitamin for twenty-five years, having begun his experiments in the Philippines in 1910.

By synthesizing the beriberi vitamin, Dr. Williams made it available to research workers for the first time. Patents concerned with the process of manufacture of synthetic vitamin  $B_1$  have been assigned to the Research Corporation, New York. Under license from this corporation, the vitamin is being produced commercially on a substantial scale and is being distributed by many of the prominent drug firms of the country. The Research Corporation is a non-profit organization dedicated to the management of patented processes and utilizes the proceeds for the support of scientific research.

Dr. Williams was born in Nellore, India, of American parents, on February 16, 1886. He was a student at Ottawa University, Kansas, and at the University of Chicago, from which he received the bachelor of science degree in 1907 and the master of science degree in 1908. Ottawa University conferred the degree of doctor of science upon him in 1935. From 1909 to 1915 he was chief chemist of the Philippine Bureau of Science, spending the year 1911–12 in postgraduate work at the University of Chicago.

He was for three years with the U. S. Bureau of Chemistry in Washington, D. C. In 1918 he was engaged in the Chemical Warfare Service and Air Service research in Washington; he was associated with the Melco Chemical Company, Bayonne, N. J., in 1919, and later joined the staff of the Western Electric Company. He was named chemical director of the Bell Telephone Laboratories in 1925. In this year he became research associate at Teachers College, Columbia University, where he has carried on much of his investigation. He is also research associate of the Carnegie Institution of Washington. The announcement of the Chicago section points out that "there is perhaps no more outstanding example of the broad attitude of some of the great corporations toward fundamental research than the brilliant synthesis of the beriberi vitamin by the chemical director of the Bell Telephone Laboratories."

Four laboratories contributed personnel or facilities to the basic research leading to the synthesis of the beriberi vitamin, while the depression beginning in 1929 afforded the investigators at the Bell Telephone Laboratories additional week-end leisure for work. Funds were granted by the Carnegie Corporation.

The Willard Gibbs Medal, founded by William A. Converse in 1911, was named for Josiah Willard Gibbs, from 1871 to 1903 professor of mathematical physics at Yale University, whose discoveries of the phase rule and other thermodynamical laws are the bases of modern physical chemistry.

## SCIENTIFIC NOTES AND NEWS

DR. LEONARD CARMICHAEL, dean of the Faculty of Arts and Science and chairman of the department of psychology at the University of Rochester, previously professor of psychology at Brown University, has been elected the seventh president of Tufts College, from which he graduated in 1921.

DR. FREDERICK B. MUMFORD, for thirty-three years dean of the College of Agriculture of the University of Missouri, has presented his resignation to take effect next September. He will be succeeded by Merritt F. Miller, who joined the faculty in 1904 and became assistant dean in 1929. Dr. Mumford's brother, Dr. Herbert W. Mumford, is dean of the College of Agriculture of the University of Illinois.

A MEETING in honor of Dr. Charles E. Coates, who recently retired as dean of the College of Pure and Applied Science and head of the department of chemistry of the Louisiana State University, was held by the Louisiana section of the American Chemical Society at Tulane University on January 18. As a tribute to Dr. Coates the meeting was designated the "Charles E. Coates meeting."

THE Dallas Agricultural Club of the Texas Agricultural Experiment Station gave a dinner on February 21 in honor of A. B. Conner, director of the station. The program included tributes to Mr. Conner as follows: "What Director Conner has Contributed to Texas Agriculture," by Victor H. Schoffelmayer, agricultural editor of *The Dallas News*; "Contributions of Director Conner to National Agriculture," by Dr. C. T. Dowell, director of the Louisiana Experiment Station; "Conner, Our Chief," by R. E. Dickson, superintendent of the Spur Experiment Station. AMONG the honorary degrees conferred at the midwinter commencement of Temple University, Philadelphia, was the degree of doctor of science on Dr. J. Leon Lascoff, president-elect of the American Pharmaceutical Association. The doctorate of laws was conferred on Henry Butler Allen, director of the Franklin Institute.

THE College of Charleston, South Carolina, will confer at the end of May the degree of doctor of laws on Dr. Harry Stoll Mustard, professor of preventive medicine at New York University.

In the issue of SCIENCE for January 28 it was stated that the degrees conferred on the occasion of the installation of Dr. Harris as president of Tulane University included the degree of doctor of humane letters on Dr. Walter Smith Leathers, dean of the School of Medicine of Vanderbilt University, and on Dr. Alphonse Mary Schwitalla, S.J., dean of the School of Medicine of St. Louis University. The degree conferred was that of doctor of laws.

THE Anthony F. Lucas gold medal for distinguished achievement in improving the practice of finding and producing petroleum was presented to Henry L. Doherty, president of the Cities Service Company, at the annual dinner of the American Institute of Mining and Metallurgical Engineers on February 16. Others who received awards from the institute were Thomas S. Washburn and John Hunter Nead, who won the Robert Woolston Hunt prize of \$250 for a paper presented to the institute last year; Roy A. Lindgren, who received the J. E. Johnson, Jr., award for his paper on performance and selection of refractories for blast-furnace linings, and Hal W. Harding, who