

# Casper Lehman Cottrell

*May 13, 1895 — February 26, 1968*

Casper Lehman Cottrell, Professor of Electrical Engineering, Emeritus, was born in Annville, Pennsylvania, on May 13, 1895.

His formal education resulted in the award of an A.B. degree from George Washington University in 1920 and his Ph.D. from Cornell in 1928. Subsequent formal studies were pursued under postdoctoral fellowships at Columbia University and the University of Pennsylvania.

Professor Cottrell's practical experience began before the receipt of his baccalaureate degree. Between 1915 and 1918 he was a laboratory assistant in the photometry and radio fields at the National Bureau of Standards, and between 1918 and 1920 he was in the radio laboratory of the United States Signal Corps. Additional experience was gained in the physics laboratory of the Westinghouse Electric Company, in color research for the Munsell Color Company, and in biophysics research for Cornell.

Beginning as an instructor in physics at Cornell in 1920, Professor Cottrell decided to devote his professional life to the educational field where he remained until his retirement in 1963. After a year as an Assistant Professor of Physics at the University of Maryland, he accepted a similar appointment at Kenyon College in 1928, where he remained until 1934 when a health problem took him to Arizona for the next two years. Returning East, Professor Cottrell accepted an appointment for a year as Professor of Physics at Center College before coming back to Cornell in 1937 to conduct biophysics research.

In 1941 he was attracted to the College of Engineering, first in the Department of Mechanics, then, the following year, in the School of Electrical Engineering where he was promoted to Associate Professor in 1946 and to Professor in 1952, until retirement as Professor Emeritus in 1963.

Although Professor Cottrell's consulting and research were primarily related to the biological effects of light, his list of publications includes the intriguing titles of "Fertility Study of Eggs by Radio Conductivity," and "Bioelectric Potentials in Hens' Eggs." His researches in the fields of optics, color, and vision have been widely hailed as major contributions to progress in illuminating engineering and his work in this field was recognized on a number of occasions by the Illuminating Engineering Society. During his sabbatic leave in 1950-51, under a research grant

from the Illuminating Engineering Research Institute, he developed the now famous Cottrell Visibility Meter for measuring contrast-brightness threshold.

Honorary and professional associations to which he belonged include: Illuminating Engineering Society (Fellow); American Association for the Advancement of Science (Fellow); American Association of Physics Teachers; Sigma Xi; American Society for Engineering Education; Gamma Alpha; Sigma Phi Epsilon; Institute of Electrical and Electronic Engineers; Optical Society of America; Eta Kappa Nu; Tau Beta Pi. He was secretary treasurer of the central New York section of the Illuminating Engineering Society in 1950-51 and its chairman in 1951-52.

Although well known for his consulting and research, Professor Cottrell is best remembered by his former colleagues and students as a dedicated teacher and adviser. In both functions he was willing to spend many hours with students who found their course material too difficult to grasp or who found themselves in need of serious counsel on matters both academic and nonacademic. He could see through falseness, however, and was quick to point out the error in the student's approach, whether it be in an academic or nonacademic matter. He was an active participant in social affairs that involved students or alumni, and his presence at these affairs was earnestly sought.

He is survived by his widow, the former Pernetta Erneste Goodman; two daughters, Mrs. Pernetta Marie Deemer and Mrs. Anne Louise Cuff; a son Thomas Henry Ernest Cottrell; eight grandchildren; and a half-brother, Earl Young of Reading, Pennsylvania.

*Paul D. Ankrum, Everett M. Strong, William H. Erickson*