

Ernest George Merritt

April 28, 1865 — June 5, 1948

Ernest George Merritt died in the Tompkins County Memorial Hospital in Ithaca on June 5, 1948, after a brief illness. He was born in Indianapolis on April 28, 1865. After one year of study at Purdue University, he entered the Engineering College at Cornell where he graduated with the degree of Mechanical Engineer in 1886. Following a year of graduate study as a Fellow in Physics at Cornell, he became Instructor in Physics in 1889 and was appointed an Assistant Professor in 1892, after which he spent a year of study in Berlin. He was promoted to a full Professorship in 1903. In 1919, he succeeded Edward L. Nichols as Head of the Department of Physics at Cornell. He relinquished his administrative duties to devote himself to writing and research becoming Professor of Physics Emeritus in 1935.

When the Cornell Graduate School was organized in 1909 Professor Merritt became its first Dean. He resigned this position in 1914 in order to have more time to devote to research. He was faculty representative on the Board of Trustees for three years, 1931-1933. During World War I, he directed experimental and development work for Submarine Detection at the U.S. Naval Experimental Station at New London, Connecticut.

Outside the class room and the research laboratory, Professor Merritt gave freely of his time to professional activities. A charter member and one of the active organizers of the American Physical Society, he became its first Secretary in 1899 and continued in that position until 1912 when he was elected President of the Society, an office that he held for two years. He was one of the founders and editors of the "Physical Review," which was started at Cornell University in 1893 and which was the first scientific journal in this country to be devoted exclusively to Physics. He participated actively in these editorial duties until the sponsorship of the journal was assumed by the American Physical Society in 1913. He was elected Secretary of Section B of the American Association for the Advancement of Science in 1895 and later served as Chairman of that Section.

Professor Merritt was a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Physical Society, the Institute of Radio Engineers, the Optical Society of America, Sigma Xi, Tau Beta Pi, and Phi Kappa Phi.

Throughout his scientific career, Professor Merritt was active in research. Although contributing to a wide range of subjects, his chief interest was displayed in the fields of luminescence and of electric waves. In collaboration with Professor Nichols and others, he did pioneer work in investigating the luminescent properties of many materials

and in establishing quantitative relationships for the changes in these properties under varied conditions. These studies not only won international recognition, but today serve as a fundamental basis for numerous and significant applications. Electric oscillations claimed his attention as early as 1897. In more recent years, he became interested in problems dealing with the fading and polarization of radio waves and the effect of sunset or of a solar eclipse upon the direction of such waves and in other problems related to the Heaviside layer. However complicated the experiment or problem under consideration might be, he sought always to analyze the results and interpret them in the simplest possible terms.

As a teacher and personal counsellor, Professor Merritt made a profound and lasting impression upon his students and colleagues. During his years of activity at Cornell, more than 400 physicists now living received advanced degrees in physics or were members of the departmental staff. His skill as a teacher was perhaps best displayed as he led a class through a mathematical deduction, causing each alert listener to feel like a discoverer, even though the leader knew well enough where the "exploration" would end. When demonstrating the then-new phenomena of electric waves to graduate students, he was the envy and the inspiration of his pupils because of his skill in throwing together crude pieces of apparatus that would work perfectly to demonstrate the point in mind. The puzzled or discouraged student who sought him out for help came away cheered and steadied, filled with calm confidence, determined to try again.

Professor Merritt, always interested in humanity, sympathized warmly with the peoples of Europe in their vicissitudes after the two world wars. His ancestral Quaker sympathies led him to engage in practical efforts to alleviate the distress of the citizens of any European country in need of help. He made no distinction between those who fought for us and those who fought against us. In company with Mrs. Merritt, he made collections of used clothing over a period of two and one-half years for the relief of people in Europe. In addition, the Merritts sent various necessities to two schools in Alsace and food to individuals that Professor Merritt knew personally were in dire need. Nor did he forget his home community, in whose welfare problems he maintained an active interest. The Cornell campus was for Professor Merritt not only a professional workshop but also home. For forty-five of the more than sixty years, which he spent at the University, he and his family lived on the campus. His figure became familiar to many generations of students and to Faculty associates as they saw him day by day go quietly but busily about his professional duties and his personal activities. The home as well as the laboratory was a source of the helpful influence and the inspiration which so richly benefited many a colleague and former student and which will continue as an asset of the University that he served so long and so graciously.