

OBITUARIES

Paul W. Merrill, for more than 40 years an astronomer at Mount Wilson and Mount Palomar Observatories, died on July 19 after having undergone surgery in a Los Angeles Hospital. An authority on variable stars and stellar spectroscopy, he retired officially from the observatories' staff in 1952, but continued his research interests at the Pasadena headquarters of the observatories until his death, which came in his 73rd year.

Dr. Merrill, who spent his early years in Minneapolis, graduated from Stanford University in 1908. As a PhD candidate at the University of California at Berkeley, he held an assistantship at Lick Observatory as well as a fellowship at the University. After obtaining his doctorate in 1913, he served as an instructor in astronomy at the University of Michigan and later worked as a physicist with the National Bureau of Standards. In 1918, he was appointed astronomer at Mount Wilson and Mount Palomar Observatories, a post he was to retain for the balance of his career.

In recognition of his work in spectral astronomy, Dr. Merrill was awarded the Henry Draper Medal of the National Academy of Sciences and the Bruce Medal of the Astronomical Society of the Pacific. His book, *The Nature of Variable Stars*, was published in 1938.

Dr. Merrill was a fellow of the American Physical Society and the American Academy of Arts and Sciences, a past-president of the American Astronomical Society, a foreign associate of the British Royal Astronomical Society, and an honorary member of the Association of Variable Star Observers.

Charles A. Proctor, 82, emeritus professor of physics at Dartmouth College, died of a heart attack in Hanover, N. H., on April 14. Born in Hanover in 1878, he graduated from Dartmouth and received his doctorate at the University of Chicago, where he studied under a Parker Fellowship and served as research assistant to Nobel Laureate Albert Michelson. From 1904 until 1907 he taught at the University of Missouri before returning to Dartmouth as an assistant professor of mathematics and a fourth-generation faculty member. He was appointed professor of physics in 1918 and emeritus professor in 1945.

An authority on optics and the physics of photography, Prof. Proctor is credited with having contributed significantly to the development of the Technicolor process. While serving as a captain in the Army Signal Corps' Science and Research Division during World War I, he was sent to France on a secret mission to observe developments in military photography. He was a fellow of the American Physical Society and a member of the Optical Society of America.



H. P. Robertson

Howard P. Robertson, professor of mathematical physics at the California Institute of Technology since 1947, died on August 26 at the age of 58. He had been hospitalized because of injuries sustained in a traffic accident two weeks earlier.

A native of Hoquiam, Wash., he received the BS and MS degrees at the University of Washington in Seattle, was awarded his doctorate at Caltech in 1925, spent two years in Munich and Göttingen as a national research fellow, and returned to Caltech in 1927 as assistant professor of mathematics. Two years later he accepted an appointment as associate professor of mathematical physics at Princeton. He was named a full professor in 1938, at the age of 35. In 1947, after 18 years as a member of the Princeton faculty, he returned to Caltech as professor of mathematical physics, remaining in that post until his death.

Prof. Robertson, who was known as a brilliant and versatile theorist, served frequently during the past two decades as a scientific adviser to the government on matters pertaining to defense. Most recently, he was chairman of the Defense Science Board and a member of the President's Science Advisory Committee. He was a fellow of the American Physical Society and had been foreign secretary of the National Academy of Sciences since 1958.

Ona K. De Foe, professor of mathematics and physics at the St. Louis College of Pharmacy, died on June 29 at the age of 64. Born in Swedeborg, Missouri, he was educated at Drury College and Washington University in St. Louis, where he received his PhD in 1926. From 1920 to 1926, while still a fellow and a graduate student at Washington, he taught physics and chemistry at the College of the Ozarks in Clarksville, Ark., and at Jackson Academy in St. Louis. Upon completing his doctoral work, he accepted an appointment as professor of mathematics and physics at the College of the Ozarks. From 1932 until the time of his death he served as professor of mathematics and physics at the St. Louis College of Pharmacy.

Prof. De Foe, whose primary research interest was the scattering of x rays, was a member of the American Physical Society.