

OBITUARIES

Arthur G. Barkow, professor of physics at Marquette University, died of a heart attack at his home on December 20, 1962. Dr. Barkow, who was 52, was a native of Milwaukee and spent much of his academic career at Marquette University, where he received his BS in 1932, his MS in 1935, and his PhD in physics in 1944 (after doing graduate work at the University of Chicago).

He joined the Marquette faculty as an instructor in 1935 and in 1959 was made full professor. His early research was in x rays, but in recent years he worked in the field of high-energy nuclear physics under a series of NSF grants. In 1935 Dr. Barkow was a Ford Foundation Fellow at the Massachusetts Institute of Technology and a research participant at the Oak Ridge National Laboratory. He spent last summer at the University of Hamburg and at CERN doing research in elementary particles.

During the past two years he conducted in-service institutes for high-school teachers under NSF grants and for several years he was the representative of the Wisconsin Chapter to the National Council of the American Association of Physics Teachers. Dr. Barkow was a member of the American Physical Society, the Italian Physical Society, the American Crystallographic Association, the Health Physics Society, and Sigma Xi.

Gabriel Foëx, honorary director of the Institut de Physique de Strasbourg and of the Laboratoire Pierre Weiss de Magnétisme, died in Strasbourg on January 20. Professor Foëx, who was born at Chailly-sur-Clarens, France, on September 3, 1887, studied at the Universities of Marseille and Paris, and later became an assistant to Pierre Weiss at the Polytechnic Institute in Zurich. He accompanied Weiss to the University of Strasbourg in 1919 and received his doctoral degree there two years later. He spent his entire career at Strasbourg, becoming professor in 1933 and succeeding, on the death of Professor Weiss in 1940, to the directorship of the Institute and of the Laboratory of Magnetism. He spent the years of the Nazi occupation of France at Clermont-Ferrand, and after the war was awarded the Médaille de la Résistance for his activities during the period. Following the liberation, he returned to Strasbourg and succeeded, amid great difficulties, in reestablishing the Institute of Physics and the Laboratory of Magnetism. He retired in 1957.

Professor Foëx worked mainly on the paramagnetism of matter in different states and was among the first to recognize the importance of precise thermomagnetic studies for paramagnetic substances. He was coauthor with Pierre Weiss of a treatise on magnetism and of the ferromagnetism chapter of the *International Critical*

Tables. He was also an author of the *Tables Annuelles Internationales des Constantes et Données Numériques*. Professor Foëx was named a correspondent of the Académie des Sciences in 1954.

Glenn F. Rouse, a senior physicist in the Electron Devices Section of the National Bureau of Standards in Washington, D. C., died on January 21 at the age of 67.

Dr. Rouse, who was associated with the Bureau for seventeen years, was born in Milan, Ill. He received his AB degree from Cornell College in Iowa in 1920 and took his PhD in physics five years later at the University of Wisconsin. After serving for a time as an instructor at Lehigh University, he accepted an appointment as assistant professor of physics at American University in 1927. He was named to the role of associate professor in 1932, and he remained at American University until 1940, teaching both physics and mathematics.

During the Second World War he served as a physicist at the Signal Corps Laboratory in Belmar, N. J., working on the development of special tubes for radar applications. Dr. Rouse, who joined the Bureau in 1946 as a physicist and leader of an NBS electronics group, was known as an authority on electron emission and the physics of special radio tubes. He was a member of the American Physical Society.

James Barnes, retired head of the physics section of the Franklin Institute, died on December 26 in Bryn Mawr, Pa., at the age of 84.

A native of Halifax, N.S., Dr. Barnes graduated from Dalhousie University in 1899 and received his MA degree there in 1900. He continued his graduate studies at Johns Hopkins University, where he was awarded his PhD in 1904. After two years as an instructor in physics at Johns Hopkins, he joined the faculty of Bryn Mawr College as an associate in 1906 and, except for the years 1914 and 1915, which he spent at Cambridge and Manchester, remained there until 1931. He was appointed associate professor in 1910 and full professor in 1917. During his stay in England, he worked under Lord Rutherford on various problems relating to antisubmarine warfare for the Invention Board of the British Admiralty. In 1931, Dr. Barnes joined the Franklin Institute as head of the physics section. He retired in 1957.

A specialist in radiation problems, he was a major in the US Army Ordnance Reserve Corps and served as an advisor to the Frankford Arsenal, the Aberdeen Proving Grounds, and the Air Force's Wright Field. He was a fellow of the American Physical Society.