

Clinton J. Davisson, 1937 Nobel laureate, died on February 1 at his home in Charlottesville, Va. His age was 76. A native of Bloomington, Ill., he received his BS from the University of Chicago in 1908 and his PhD from Princeton University in 1911. That same year he became an instructor in physics at the Carnegie Institute of Technology. In 1917 Dr. Davisson left Carnegie Tech on a leave of absence to work during the first World War with Western Electric Co. After the war he stayed at the Western Electric Research Laboratories, which in 1925 became known as the Bell Telephone Laboratories.

Dr. Davisson and Sir George P. Thomson shared the Nobel Physics Prize in 1937 for their independent discovery ten years earlier of the diffraction of electrons by crystals, which provided the first experimental verification of the wave nature of the electron. His discovery of electron diffraction (in collaboration with L. H. Germer, also of the Bell Laboratories) has been referred to by Davisson himself as the most notable of "the many lucky breaks which came my way during the years". The following account of that event has been given by a colleague:<sup>1</sup>

"... It was just a fortunate chance that he had taken up the study of the reflection of very slow electrons from metal surfaces, for it was in the course of this study that he discovered that the reflected electrons grouped themselves into clearly-defined beams. Accident played a dramatic part. Davisson's first observations were made upon polycrystalline masses of metal; then one day the tube broke and the target got oxidized, and in the course of the prolonged heating necessary to undo the harm, the metal was changed from an aggregate of a large number of small crystals to an aggregate of a few large crystals. The system of beams was radically changed. Davisson trained the incident electrons against the surface of a large single crystal, and the key was in his hand."

During his thirty years with the Laboratories, Dr. Davisson's work in electron physics led to important applications in the development of communication systems, and during World War II he made significant contributions to the magnetron and crystal physics programs then in progress at Bell Laboratories. He retired in 1946 at the age of 65, and from 1947 until 1949 he held a research professorship in physics at the University of Virginia. He was a fellow of the American Physical Society.

Willis M. Rayton, professor of physics at Dartmouth College, Hanover, N. H., died of cancer on September 21 at the college infirmary. His age was 48. Born in Rochester, N. Y., he received his bachelor of science degree from Hamilton College in 1931. He later attended the University of Rochester, where he was awarded the MS degree in 1933 and the PhD in 1936. After serving as an instructor of physics at the

<sup>1</sup> K. K. Darrow, "Electron Physics in America", *Physics Today* IX:8:25 (August 1956).

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