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we hear that

Darleane Hoffman has been named to head the Chemistry-Nuclear Chemistry Division at the Los Alamos Scientific Laboratory effective 1 July. She is currently

on leave from LASL as a Guggenheim Fellow.

Roderick M. Grant has been named to the Henry Chisholm Chair in Physics at Denison University, Granville, Ohio.

obituaries

Ladislav L. Marton

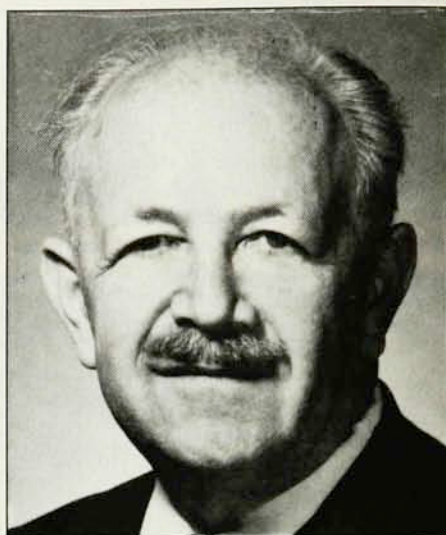
Ladislav L. (Bill) Marton, a Fellow of the American Physical Society, died in Washington, D.C. on 22 January. He was known as one of the early pioneers in electron microscopy, and also as editor-in-chief of *Advances in Electronics and Electron Physics* and *Methods of Experimental Physics*, a definitive multi-volume treatise.

Born in Hungary in 1901, he received his doctorate in physics at the University of Zurich in 1924. He later joined the faculty of the University of Brussels in 1929, serving as assistant professor and as a research fellow of the Solvay Institute during 1936-38. Here he and his wife, Claire, whom he married in 1933, built one of the first electron microscopes. He contributed to the development of the electron microscope as a viable experimental tool, and used it for the first application to biological specimens and the first studies of contrast in those. For this work he was honored with the medal of the International Union against Cancer in 1938, and also was elected to the Royal Academy of Belgium.

In 1938 he accepted two positions in the United States, at the RCA Research Laboratories in Camden, New Jersey, and the University of Pennsylvania. This was followed by a term as professor at Stanford University. With a Rockefeller grant he established the Division of Electron Optics, where he and Mrs. Marton built electron microscopes. In 1946 he joined the National Bureau of Standards, where he founded the Electron Physics Section and was later its head (1948-62). During this period he achieved recognition for interference experiments which demonstrated the coherence of electron waves over very long paths, and for his experiments in characteristic energy losses of electrons passing through metal films (later identified with excitation of the electron plasma).

Marton was a founder of the first Division of the APS (Division of Electron Physics), and was its chairman from 1946 to 1948.

Marton's wife was a very close collaborator in all his scientific work and co-edited many publications with him. In 1947 they began the editorship of the series *Advances in Electronics and Electron Physics* for Academic Press. It was



MARTON

followed by the *Methods of Experimental Physics* in 1957. At the time of Marton's death the 50th volume of *Advances in Electronics and Electron Physics* was in preparation. It is now planned that this shall be a commemorative volume in his honor.

Marton headed the Office of International Relations at NBS from 1962 to 1970. In this work he coordinated overseas research and visiting scientist programs. His wide international acquaintance made him especially valuable in numerous liaison functions with counterpart institutions abroad.

Following his retirement from NBS in 1970, he joined the Smithsonian Institution as an honorary research associate. He was able to provide significant assistance to his new museum colleagues in their attempts to document the history of physics in the twentieth century. At his death he was writing a book on the history of the electron, which is unfinished.

His colleagues and friends mourn the loss of a quiet, modest scientist, with a fine sense of humor and wide intellectual interests, and whose active imagination led many others to the enjoyment of physical science. He was instrumental in furthering the careers of many younger associates. We especially remember his bold transpositions of ideas from optics to quantum mechanics; and his conviction that experimental observations would resolve theoretical dilemmas, once the scientist could catch the feel of the phenomena.

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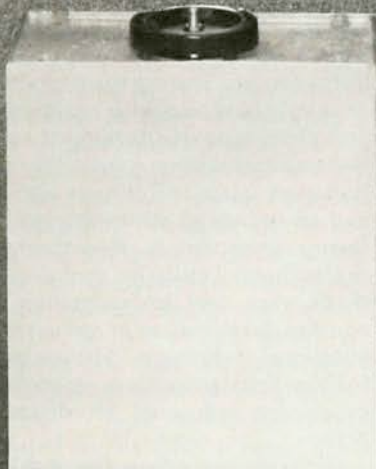
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obituaries

Marton took inspiration from the philosophy of Spinoza, especially from a sentence in Spinoza's *Ethics*: "There is nothing over which a free man ponders less than death; his wisdom is to meditate not on death, but on life."

HOWLAND A. FOWLER
National Bureau of Standards
Washington, D.C.

Paul I. Richards

Paul I. Richards, a physicist and applied mathematician at the Arcon Corporation, Waltham, Massachusetts, died 19 November. Born in 1923 in Orono, Maine, he received his PhD in physics from Harvard in 1947. During the period 1943-1945 he worked as a research associate in the Radio Research Laboratory at Harvard. From 1947 to 1952 he was a physicist at Brookhaven National Laboratory during which time he worked in collaboration with E. E. Hays and Samuel Goudsmit on the development of the magnetic time-of-flight mass spectrometer. During this period his interests also extended into the fields of artificial intelligence, operations research, and pure and applied mathematics.

In 1952 Richards joined Transistor Products, Inc., Division of Clevite Corporation, where he served as director of research for two years. He then became associated with Technical Operations, Inc. where he held the position of senior physicist for 14 years. Since 1968 he had been a senior scientist with the Arcon Corporation. During these years he was primarily occupied with radiation transport problems. He developed a rigorous Boltzmann equation solution for neutron transport in an infinite air atmosphere and an improved atmospheric diffusion theory for neutrons. His other work includes thermal radiation transport theory, shock-wave and hydrodynamic theory and the development of associated computational techniques. His contributions to these fields placed him among the most prominent industrial physicists of his time.

Richards served on the Publications Committee of the Society for Industrial and Applied Mathematics from 1965 to 1968 and was an editor of *SIAM Review* during the same period. He wrote two books. The first, *Manual of Mathematical Physics*, published in 1959, is a useful collection of formulas and theorems for physicists, while his second book, *Proper Words in Proper Places*, published in 1964, serves as a guide for technical writers.

Beyond his professional achievements, he was a lover of nature and an accomplished musician. Paul Richards will be remembered by those who were fortunate enough to know him as a kind and gifted