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Obituary

Professor Robert W. Cahn

Professor Robert W. Cahn passed away on April 9, 2007. He was a founding Editor of the *Journal of Nuclear Materials*, together with Professors J.P. Howe and P. Lacombe. The first issue of the *Journal* was published in the spring of 1959.

He was born in Germany on April 9, 1924, and received his university education at Cambridge University beginning in 1942. After completing graduate work he held positions at several universities in the United Kingdom and in France. He returned to Cambridge in 1983. At the time of his death he held the position Honorable Distinguished Research Fellow in the Department of Materials Science and Metallurgy. Cahn was a Fellow of the American Society for Metals, and held many other distinctions.

Robert Cahn made major contributions to research in metallurgy, to the establishment of the field of materials science, and to publishing. His work as a graduate student is credited with proving the existence of dislocations in crystals, one of the central concepts in the mechanical properties of materials. In addition, as a graduate student he proposed a now established model for the mechanism of recrystallization of heavily deformed metals. He made other contributions too numerous to list. For example, he studied the structure and properties of uranium, a topic of special relevance to the *Journal*.

Especially during the early part of his career, the field of materials science was rapidly evolving from the then separate fields of metallurgy, ceramics, solid state physics and other specialized and largely empirical subfields. His research and writing were strong influences in helping to develop the field to a more unified science, where properties and performance of all classes of materials are seen to depend on basic principles of structure, composition and processing. Astonishing as it seems he somehow also found time to make truly prodigious contributions to publishing. He was editor for several journals, three encyclopedias, notably the hefty and authoritative *Physical Metallurgy*, which he co-edited with Peter Haasen, textbook series, and was author of books and many scientific papers.

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