

# Introduction to a Special Issue of the Journal of Materials Science dedicated to Robert W. Cahn

I am pleased and honoured to dedicate this special issue of the Journal of Materials Science to Robert W. Cahn, FRS. I should perhaps begin by thanking all the authors who contributed their work, together with Rees Rawlings and the folks at Kluwer for making this endeavour possible. I doubt whether there is anyone in the field of Materials Science for whom the name of Robert Cahn is not familiar. I remember first meeting Robert as a fresh graduate student at my first conference. So this was Robert Cahn I said to myself, and recall being struck by his courteous, disarmingly open manner, and owlish demeanor.

Robert Cahn was born in Germany on Sept. 9th 1924, and became a British citizen in 1947. After a four year stint at the Atomic Energy Research Establishment at Harwell, Robert began his academic career at the University of Birmingham in 1951. He was later appointed Professor of Materials Science at University College of North Wales, before accepting a chair at the University of Sussex in 1965. Robert subsequently became Dean of the School of Engineering and Applied Sciences at Sussex University, a position which he held from 1973–78. This was followed by appointments at the University of Paris-Sud (France), the General Electric Corporate Laboratory and the California Institute of Technology. In 1986, Dr. Cahn was appointed to his current position as an Honorary Distinguished Research Fellow in the Dept. of Materials Science & Metallurgy at the University of Cambridge.

Over the years, Robert's research interests have spanned different aspects of physical metallurgy, including recovery, recrystallization, melt-quenching and intermetallics. These are areas in which he has published extensively and authoritatively. It is appropriate therefore, that some of these same themes are reflected in this special issue. He has received numerous honours including the 1996 Heyn Medal (awarded by the Deutsche Gesellschaft für Materialkunde), the Luigi Losana Gold Medal of the Italian Metallurgical Society (2001), the Acta Materialia Gold Medal (2002) and the David Turnbull Lectureship of the Materials Research Society (2002). Dr. Cahn has been elected a Fellow of the Royal Society, TMS and ASM, and is a member of the National Academies of Sciences of Spain, China, and India. His achievements in editing have been equally outstanding. Robert was one of the founding editors of the following publications: Journal of Nuclear Materials, Journal of Materials Science, Journal of Materials Research, and Intermetallics. He was also an editor for the Cambridge Solid State Science Series of monographs for Cambridge University Press (1972–92) and is currently the series editor of the Pergamon Materials Series (Pergamon, Oxford). In Robert's own words, "editing is like smoking or alcohol, one becomes addicted, but unlike those addictions it does no harm to health and it fulfils a vital function in the world of scientific research".

Robert has been, and continues to be, a prolific author. In addition to over 200 scientific papers, he has written or edited some 25 books. He is perhaps best known as the editor of the classic text 'Physical Metallurgy' (North-Holland, Amsterdam). This multi-author volume, which first appeared in 1965, is currently in its 4th edition. Dr. Cahn's most recent book, "The Coming of Materials Science" (Pergamon/Elsevier, Oxford, 2001) is currently in its second printing. His productivity is the envy of researchers many decades his junior. In part of his unpublished memoirs, which Robert was kind enough to share, he speaks of being a "GOM (grand old man), with the emphasis on *old*." I think we would agree to differ-most certainly, the emphasis is on *Grand*. Thank you Robert, our field is so much the richer for your contributions.

Helen M. Chan, January 2004