

REVIEWS OF BOOKS

Concise Encyclopedia of Magnetic and Superconducting Materials
Ed. Jan Evetts, Pergamon Press, Oxford 1992

The boom in solid state physics, which has taken place during last 20 years is so enormous that it would seem impossible to present the details of all important materials systems and their properties in an encyclopedia consisting of a single volume. However, the editor has restricted the topics covered to the modern magnetic and superconducting materials. In his preface to the *Concise Encyclopedia* Jan Evetts from Cambridge University explains that these two important classes of material have much in common, both in the phenomenology which underlies their behavior and in many of the issues that relate to their fabrication and optimization as bulk materials or thin films for application in technology. Therefore, the treatment of these distinct materials, each at their own characteristic stage of development, in a single volume brings a conceptual freshness to our appreciation of both classes of materials. It should be stressed that Evetts has been sufficiently successful in achieving this goal. The volume contains 117 articles, alphabetically organized and written by over 120 acknowledged experts within the field of magnetic and superconducting materials. The subject matter extends from physics to engineering design and applications. There are particularly interesting articles devoted to the problems of high T_c superconductors and related materials written by J. Bardeen, E.H. Brandt, A.M. Campbell, J.R. Clem, J.R. Cooper, T. Datta, G. Deutscher, J.E. Evetts, T.H. Geballe, D.M. Ginsberg, R. Griessen, J.K. Hulm, S. Jin, P.H. Kes, V.G. Kogan, T.E. Mitchell, M. Tinkham, H.W. Weber, J.M. Wheatley and other authors.

This is an important book, and most people working in solid state physics and materials science will find it both interesting and rewarding. With its huge number of articles and accompanying references this book provides an outstanding source of information and should be invaluable in every science library. Its relatively low price also makes it a viable object to purchase for individuals who are active in research. It seems that book can be warmly recommended to a wide student audience. It should be added that the high standard of production we have come to expect from Pergamon Press is amply demonstrated in this book.

Henryk Szymczak