

recovery temperatures ($^{\circ}$ K); t_1 and t_2 are the times at T_1 and T_2 , respectively, to attain the same value of R_f . Thus, a mean estimate of Q was calculated to be 69 (\pm 4) kcal/mole. This value for Q was found to be very nearly that reported for self-diffusion in nickel (although for a temperature interval between 1085 and 1400 $^{\circ}$ C) [7]. Since the self-diffusion mechanism in nickel would be likely to control recovery behaviour in unalloyed nickel, the above assumption of equivalent states at the same R_f value may be valid.

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Book Reviews

An Atomic Approach to the Nature and Properties of Materials

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Pp xi + 477 (Wiley, 1967) £8

The advances made in understanding the properties of materials increasingly demand more emphasis in university courses. No doubt many textbooks will be published in the future which attempt to meet the demands of this new emphasis. The volume under review sets out to provide in one 500-page volume a comprehensive account of almost the whole of materials science. In general, the layout is excellent and the publishers are to be congratulated on the quality of both the printing and the illustrations.

The book contains seventeen more-or-less-independent chapters, each written by an authority in that subject. The standard of presentation varies from chapter to chapter but in general it is good. Predictably, the first four chapters discuss atomic structure, inter-

atomic binding, crystal structure, and imperfections in crystals. This leads to an account of the structure and properties of liquids, amorphous materials, and polymeric materials. This is followed by discussion of numerous aspects of electrical, magnetic, thermal, and mechanical properties. The concluding chapter discusses "The Atomic Viewpoint in Materials Application". Inevitably, the scope of the book is so wide that some subjects are inadequately covered. Thus, we find that the discussion of semiconductors, superconductivity, and dielectrical properties is so condensed as to be useless to the reader. In a book with this fashionable title, these are inexcusable shortcomings.

Although many industrial scientists and post-graduate students in technological subjects will find this book useful, few will find room for it on their bookshelves. It seems more likely to become a well-thumbed library reference book, since, at £8, it does not represent good value for money.

B. HENDERSON