

*Solid State Science: Past, Present and Predicted.* Edited by D. L. WEAIRE and C. G. WINDSOR (Bristol: Adam Hilger, 1987.) [Pp.xviii 308.] Price £35-00 hardback, ISBN 0 85274 584 2; £15-00 paperback, ISBN 0 85274 586 9.

SOLID STATE SCIENCE ... Predicted. I naturally turned eagerly to the chapter on superconductivity, where the future has arrived, in no uncertain terms, since completion of this book. The author, T. D. Clark, presciently states "it may be that a new class of superconductors with very high transition temperatures (say  $> 100$  K) will suddenly appear". But his most concrete guess at such a superconductor is metallic hydrogen. The point is that scientific prediction can really only be an extrapolation of the present, and the value of this book lies in its assessment of the present status in many branches of solid-state science. It is the historical material, however, which is most interesting, on the whole, to the non-specialist, notably in C. S. Smith's "Prehistory" and R. W. Cahn's metallurgy chapter. The optics chapter, by S. McMurry and B. Henderson, though less than 10% of the book, is an interesting and wide-ranging survey of the optical properties of solids, ending with a discussion of the impact of the laser on solid-state optics. It should be required reading for undergraduate or postgraduate students entering the field: the same can be said of a number of the chapters in the various sub-disciplines of solid-state science.

The book, then, is an excellent library volume, and enjoyable leisure reading for any physicist: unfortunately the price is rather high for the general-interest market. Make sure your library has it.

W. J. FIRTH