tions, as well as from the AIP Niels Bohr Library in New York. The result is a lavishly illustrated and affectionate account of Bohr from his earliest years until his death.

Much of the more personal material will be familiar to anyone who has read previously published studies of Bohr—in particular the collection *Niels Bohr: His Life and Work as Seen by His Friends and Colleagues* (North-Holland, Amsterdam, 1967) edited by Stefan Rozental. Nevertheless, there is merit in having a portrait that is the work of a single author, and the present work is unquestionably more authoritative and balanced than the quite good biography written more than 20 years ago by Ruth Moore.

In one particular area Blaedel's book includes much interesting detail not to be found in earlier accounts of Bohr: the background to Bohr's disastrous interactions with Winston Churchill during World War II. Another chapter that does not cover familiar ground concerns Bohr's lifelong interest in poetry and the ideas of the great poets, especially Goethe and Schiller. Clearly there was a strongly romantic side to Bohr's nature, and it appears in some of his writings, especially in letters to his wife.

This book spares no effort to celebrate the greatness of Niels Bohr, both as a scientist and as a human being, but I suspect that the magic of his influence cannot be adequately conveyed to anyone who did not actually work with him. Clearly it was something that transcended the demands he placed on his young associates, who suffered through draft after draft of the papers he hammered out with them, using them as both sounding boards and amanuenses. (And his propensity for changing articles over and over again, even after they had reached proof stage, must have driven editors and printers to distraction!) Yet, as the book makes clear, he commanded loyalty and affection from essentially all of that band of brilliant younger colleagues who, under his fatherly influence, were the chief creators of quantum mechanics. The crucial element may well have been his ability to reconcile seeming contradictions through the doctrine of complementarity, which pervaded his philosophy of both physics and human affairs.

I do have minor criticisms. Bohr appears a little too much as an embodiment of all the virtues. For example, one would hardly guess from this account that his performance as a lecturer and public speaker was what Abraham Pais once described as "divinely bad," and it would not have detracted in the least from his greatness to acknowledge that fact. The English rendering of the text is in general good, though I was briefly thrown by the phrase "lattice spectrograph," until I realized that "lattice" was to be read as "grating." The fact that neither the translator nor the author is a physicist is also evident at various other places in the text. However, as a general picture of Bohr and his work this book can be warmly recommended. (Outside North America the book is available from Springer-Verlag, Heidelberg, FRG; ISBN 3-540-19334-0.)

ANTHONY P. FRENCH
Massachusetts Institute of Technology

BOOK NOTE

Symposium on the Foundations of Modern Physics 1987: The Copenhagen Interpretation 60 Years after the Como Lecture

Edited by Pekka Lahti and Peter Mittelstaedt
World Scientific, Singapore (Teaneck, N. J.), 1987. 523 pp. $75.00 hc ISBN 9971-50-382-4; $37.00 pb ISBN 9971-50-460-X

As stated in this book's foreword, the aim of the 1987 Symposium on the Foundations of Modern Physics was "to review the main aspects of the Copenhagen interpretation of quantum mechanics, to discuss the relevance of this interpretation for our present understanding of quantum mechanics, to present some systematic interpretations of the theory, and to discuss the role of the observer in quantum physics." The book consists of the invited and contributed lectures presented at the symposium, held in Finland in August 1987. A reprint of Niels Bohr's Como lecture "The Quantum Postulate and the Recent Development of Atomic Theory," published in *Nature* in 1928, is included. There are contributions by David Bohm, Bernard d'Espagnat and C. F. von Weizsäcker, among others.

—PER H. ANDERSEN

NEW BOOKS

Atomic Physics

Advances in Atomic and Molecular Physics, Vol. 25. D. Bates, B. Bederson, eds. Academic, San Diego, Calif., 1988. 559 pp. $99.50 *hc* ISBN 0-12-003825-0. *Compilation*

Aspects of Many-Body Effects in Molecules and Extended Systems. *Lecture Notes in Chemistry 50.* Proc. Wksp., Calcutta, February 1988. D. Mukherjee, ed. Springer-Verlag, New York, 1989. 565 pp. $73.00 *pb* ISBN 0-387-50765-5

Fundamental Processes of Atomic Dynamics. *NATO ASI Series B: Physics 181.* Proc. Inst., Maratea, Italy, September 1987. J. S. Briggs, H. Kleinpoppen, H. O. Lutz, eds. Plenum, New York, 1988. 693 pp. $120.00 *hc* ISBN 0-306-42988-8

Mathematical Models of Chemical Reactions: Theory and Applications of Deterministic and Stochastic Models. P. Érdi, J. Tóth. Princeton U. P., Princeton, N. J., 1989. 259 pp. $59.50 *hc* ISBN 0-691-08532-3. *Monograph*

Methods in Computational Chemistry, Vol. 2: Relativistic Effects in Atoms and Molecules. S. Wilson, ed. Plenum, New York, 1988. 291 pp. $55.00 *hc* ISBN 0-306-42946-2. *Monograph compilation*

Methods of Molecular Quantum Mechanics. Second edition. R. McWeeny. Academic, London, 1989. 573 pp. £65.00 *hc* ISBN 0-12-486551-8. *Monograph text*

Modern Quantum Chemistry: Introduction to Advanced Electronic Structure Theory. Revised edition. A. Szabo, N. S. Ostlund. McGraw-Hill, New York, 1989. 466 pp. $39.95 *hc* ISBN 0-07-062739-8. *Text*

Simple Molecular Systems at Very High Density. *NATO ASI Series B: Physics 186.* Proc. Wksp., Les Houches, France, March 1988. A. Polian, P. Loubeyre, N. Boccara, eds. Plenum, New York, 1989. 512 pp. $105.00 *hc* ISBN 0-306-43028-2

The Structure of Small Molecules and Ions. Proc. Wksp., Neve Ilan, Israel, December 1987. R. Naaman, Z. Vager. Plenum, New York, 1988. 351 pp. $75.00 *hc* ISBN 0-306-43016-9

Topological Methods in Chemistry. R. E. Merrifield, H. E. Simmons. Wiley, New York, 1989. 233 pp. $35.00 *hc* ISBN 0-471-83817-9. *Text*

Condensed Matter Physics

Amorphous Silicon and Related Materials, Vols. A and B. *Advances in Disordered Semiconductors 1.* H. Fritzsche, ed. World Scientific, Singapore (Teaneck, N. J.), 1989. 1123 pp. $159.00 (set) *hc* ISBN 9971-50-615-7. *Compilation*

Beyond the Crystalline State: An Emerging Perspective. *Springer Series in Solid-State Sciences 84.* G. Venkataraman, D. Sahoo, V. Balakrishnan. Springer-Verlag, New York, 1989. 207 pp. $69.00 *hc* ISBN 0-387-19110-0. *Monograph text*

Current Issues in Condensed Matter Structure. *Current Issues in Solid State Science.* A. M. Stoneham, ed. Adam Hilger, Bristol, UK (AIP, New York), 1987. 222 pp. £14.50 ($39.00) *pb* ISBN 0-85274-450-1. *Reprint compilation from* J. of Physics C: Solid State Physics