"how-to" guide for crystal workers. Chapters on crystal sawing, flat grinding and the preparation of cylindrical and doubly curved surfaces deal in techniques and hardware. The x-ray orientation goniometer alone consumes 50 pages, and the many illustrations include sketches of apparatus and circuit diagrams. Bragg angles for crystals (using copper K  $\alpha$  x rays) appear in extensive tables, and an appendix on stereographic projection concludes the book.

Crystal Growth (Int. Series in the Science of the Solid State, Vol. 6). B. R. Pamplin,

ed. 672 pp. Pergamon, New York, 1975. \$45.00

Nearly everyone concerned with crystal-growing methods will find something of interest here. The volume's contributors—most of them British—have covered both theory and practice in 17 chapters. Theoretical subjects include interface stability and nucleation. Zone melting, bulk crystallization, growth from the vapor phase and from molten metal solutions, and crystal pulling number among topics treated experimentally. Copious references, the bulk of them from 1973 and earlier, enhance the volume.

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Mössbauer Effect Data Index Covering the 1973 Literature. J. G. Stevens, V. E. Stevens, eds. 495 pp. Plenum, New York, 1975. \$49.50

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Elementary Excitations in Solids, Molecules, and Atoms, Part B (Lectures presented at a NATO Advanced Study Institute, Univ. of Antwerp, June 1973). J. T. Devreese, A. B. Kunz, T. C. Collins, eds. 385 pp. Plenum, New York, 1974. \$33.60

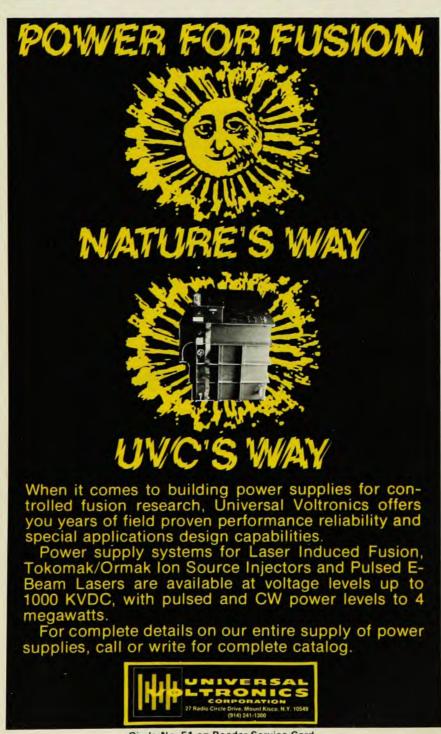
Atomic and Molecular Processes in Astrophysics (Fifth Advanced Course in Astrophysics, Valais, Switzerland, March 1975). A. Dalgarno, F. Masnou-Seeuws, R. W. P. McWhirter. 308 pp. Swiss Society of Astronomy and Astrophysics, Switzerland, 1975. Sw. Fr. 30

#### **Chemical Physics**

The Dynamics of Spectroscopic Transitions. J. D. Macomber. 332 pp. Wiley, New York, 1976. \$19.95

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The Interaction of Gases with Solid Surfaces (Int. Encyclopedia of Physical Chemistry and Chemical Physics, Vol. 3: Topic 14—



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Properties of Interfaces). W. A. Steele. 349 pp. Pergamon, New York, 1974. \$30.00

Atomic Collisions in Solids, Vols. 1 and 2. S. Datz, B. R. Appleton, C. D. Moak, eds. 942 pp. Plenum, New York, 1975. \$75.00

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Selected Papers of Great American Physicists: The Bicentennial Commemorative Volume of the American Physical Society 1976. S. R. Weart, ed. 176 pp. American Institute of Physics, New York, 1976. \$3.50 (Note: This volume is available to members of AIP Societies from Marketing Services, AIP, 335 E. 45th St., New York, N.Y. 10017 for \$3.50 prepaid, with checks payable to AIP.)

Historical Studies in the Physical Sciences, Vol. 6. R. McCormmach, ed. 549 Princeton U.P., New Jersey, 1975. \$30.00

Philosophical Problems of Modern Physics (Boston Studies in the Philosophy of Science, Vol. 18). P. Mittelstaedt. 211 pp. D. Reidel, Dordrecht, Holland, 1976.

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Encyclopaedic Dictionary of Physics, Vol. 5 (General, Nuclear, Solid-State, Molecular, Chemical, Metal and Vacuum Physics; Astronomy, Geophysics, Biophysics and Related Subjects). J. Thewlis, ed. 379 pp. Pergamon, New York, 1975. \$40.00

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