

water molecules. The first of the solution chapters concentrates on the possible molecular significance of "structure-making" and "structure-breaking" solutes. The final chapter expresses the hydrophobic attraction of two nonpolar solutes as a consequence of an averaging of all configurations of the solvent molecule that surround them.

Ben-Naim's book is essentially a progress report on a difficult but important topic in physical chemistry. Its clarity and imaginativeness will stimulate continued progress toward a molecular theory of water.

DAVID EISENBERG

*Molecular Biology Institute
and Department of Chemistry,
University of California,
Los Angeles*

Nonmetallic Crystals

The Major Ternary Structural Families. O. MULLER and R. ROY. Springer-Verlag, New York, 1974. x, 488 pp., illus. \$31.20. *Crystal Chemistry of Non-Metallic Materials*, vol. 4.

Though the last in the numbering sequence, this is the first volume to be published in a proposed four-volume series, edited by Rustum Roy, on the crystal chemistry of nonmetallic materials. The philosophy of the series, as set forth in Roy's general preface, will probably be developed more clearly in the volumes dealing with principles of crystal chemistry and properties of solids in relationship to crystal structures.

The present volume is an excellent reference source. The tables that summarize the various structural types include appropriate references. More important still are the many fine figures, which are of tremendous value to the research scientist. The first four chapters deal with the A_2BX_4 , ABX_4 , and ABX_3 structures. Although oxides are emphasized, there is a detailed treatment of many other structure types formed when the anion is a chalcogenide or halide. A 177-page appendix contains useful additional tables summarizing a wide variety of structural data. The book includes a rather complete set of effective ionic radii for the most common ions, based on work of Shannon and Prewitt, who considered the particular structure type in arriving at their values.

The authors have put together in one book a large amount of information useful to the solid state scientist.

This reviewer looks forward to the appearance of the other volumes. As reference books, the set should be indispensable to scientists doing research on solids.

AARON WOLD

*Departments of Chemistry and
Engineering, Brown University,
Providence, Rhode Island*

Books Received

Advances in Electronics and Electron Physics. Vol. 36. L. Marton and Claire Marton, Eds. Academic Press, New York, 1974. xiv, 390 pp., illus. \$34.50.

Advances in Heterocyclic Chemistry. Vol. 17. A. R. Katritzky and A. J. Boulton, Eds. Academic Press, New York, 1974. xii, 360 pp., illus. \$39.50.

Air Pollution and Atmospheric Diffusion—2. M. E. Berlyand, Ed. Translated from the Russian edition (Leningrad, 1973) by H. Olaru. P. Greenberg, Transl. Ed. Halsted (Wiley), New York, and Israel Program for Scientific Translations, Jerusalem, 1974. vi, 242 pp., illus. \$26.75.

Anti-inflammatory Agents. Chemistry and Pharmacology. Vol. 2. Robert A. Scherrer and Michael V. Whitehouse, Eds. Academic Press, New York, 1974. xviii, 382 pp., illus. \$28.50. *Medicinal Chemistry*, vol. 13-2.

Architectural Psychology. Proceedings of a conference, Lund, Sweden, June 1973. Rikard Küller, Ed. Studentlitteratur, Lund, and Dowden, Hutchinson and Ross, Stroudsburg, Pa., 1974 (distributor, Halsted [Wiley], New York). 450 pp., illus. \$24.

Art and Environment in Native America. Papers from a symposium, Lubbock, Tex., Oct. 1971. Mary Elizabeth King and Idris R. Traylor, Jr., Eds. Texas Tech Press, Lubbock, 1974. 170 pp., illus. Paper, \$5. Special Publications of The Museum, Texas Tech University, No. 7.

Asimov on Chemistry. Isaac Asimov. Doubleday, Garden City, N.Y., 1974. xviii, 268 pp., illus. \$8.95.

Color Atlas of the Diseases of Fishes, Amphibians and Reptiles. E. Elkan and H.-H. Reichenbach-Klinke in collaboration with Marsha Landolt. T.F.H. Publications, Neptune City, N.J., 1974. 256 pp. \$30.

A Concrete Look at Nature. Central Park (and Other) Glimpses. Eugene Kinkead. Quadrangle (New York Times), New York, 1974. xiv, 242 pp., illus. \$8.95.

Contemporary Topics in Molecular Immunology. Vol. 3. G. L. Ada, Ed. Plenum, New York, 1974. xiv, 260 pp., illus. \$16.50.

Current Topics in Membranes and Transport. Vol. 5. Felix Bronner and Arnost Kleinzeller, Eds. Academic Press, New York, 1974. xii, 330 pp., illus. \$29.50.

Dermatophytes in Human Skin, Hair

and Nails. James T. Sinski. Photographs by Kurt C. Kamps. Thomas, Springfield, Ill., 1974. xiv, 44 pp. \$7.95. *American Lecture Series*, No. 946.

Electrical Conductivity in Ceramics and Glass. Part B. N. M. Tallan, Ed. Dekker, New York, 1974. xxiv pp. + pp. 313-674, illus. \$29.75. *Ceramics and Glass: Science and Technology*, vol. 4.

Elementary Excitations in Solids, Molecules, and Atoms. Part A. A NATO Advanced Study Institute, Antwerp, June 1973. J. T. Devreese, A. B. Kunz, and T. C. Collins, Eds. Plenum, New York, 1974. xii, 376 pp., illus. \$28. NATO Advanced Study Institutes Series B, vol. 2.

Energy in Perspective. Jerry B. Marion. Academic Press, New York, 1974. xii, 208 pp., illus. Paper, \$4.95.

Enzyme Engineering. Vol. 2. Papers from a conference, Henniker, N.H., Aug. 1973. E. Kendall Pye and Lemuel B. Wingard, Jr., Eds. Plenum, New York, 1974. xiv, 470 pp., illus. \$27.50.

Ethnic Groups of America. Their Morbidity, Mortality and Behavior Disorders. Vol. 2, The Blacks. Ailon Shiloh and Ida Cohen Selavan, Eds. Thomas, Springfield, Ill., 1974. xvi, 296 pp., illus. Cloth, \$17.50; paper, \$12.95.

Initial Reports of the Deep Sea Drilling Project. Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES). Vol. 24. May-June 1972. Prepared for the National Science Foundation by the Scripps Institution of Oceanography, La Jolla, Calif., 1974 (available from the Superintendent of Documents, Washington, D.C.). xx, 1184 pp., illus. \$19.20.

Insolubilized Enzymes. M. Salmona, C. Saronio, and S. Garattini, Eds. Raven, New York, 1974. x, 226 pp., illus. \$18.50. Monographs of the Mario Negri Institute for Pharmacological Research.

The Interaction between Science and Philosophy. Papers from a symposium, Jerusalem, Jan. 1971. Y. Elkana, Ed. Humanities, Atlantic Highlands, N.J., 1974. xx, 482 pp. \$17.50. The Van Leer Jerusalem Foundation Series.

Interfaces in Polymer Matrix Composites. Edwin P. Plueddemann, Ed. Academic Press, New York, 1974. xxii, 294 pp., illus. \$25. *Composite Materials*, vol. 6.

Intracellular Parasitic Protozoa. Masamichi Aikawa and Charles R. Sterling. Academic Press, New York, 1974. iv, 76 pp., illus. Paper, \$7.50. *Ultrastructure of Cells and Organisms*.

Intrauterine Devices. Development, Evaluation, and Program Implementation. Proceedings of a workshop, Seattle, Oct. 1973. Robert G. Wheeler, Gordon W. Duncan, and J. Joseph Speidel, Eds. Academic Press, New York, 1974. xviii, 260 pp., illus. \$16.50.

Introduction to Noise Analysis. R. W. Harris and T. J. Ledwidge. Pion Limited, London, 1974 (U.S. distributor, Academic Press, New York). x, 102 pp., illus. \$6.50. *Applied Physics Series*, 7.

Introduction to Quantum Optics. H. M. Nussenzveig. Gordon and Breach, New York, 1973. xvi, 246 pp., illus. \$19.95. *Documents on Modern Physics*.

Low Temperature Physics—LT 13. Proceedings of a conference, Boulder, Colo.,