

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.

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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.

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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.,

Aug. 1972. K. D. Timmerhaus, W. J. O'Sullivan, and E. F. Hammel, Eds. Plenum, New York, 1974. Vol. 2, Quantum Crystals and Magnetism. xii, 668 pp., illus. Vol. 3, Superconductivity. xiv, 834 pp., illus. Vol. 4, Electronic Properties, Instrumentation, and Measurement. xii, 684 pp., illus. Each volume, \$35.

The Lymphatic System. Mario Battezzati and Ippolito Donini. Translated from the Italian edition (Padua, 1972) by Vilfrido Cameron-Curry. Halsted (Wiley), New York, ed. 2, 1974. 496 pp., illus. \$47.50.

Mechanism and Regulation of DNA Replication. Proceedings of two NATO Advanced Study Institutes, Aspen, Colo., and Cortina, Italy. Alan R. Kolber and Masamichi Kohiyama, Eds. Plenum, New York, 1974. xii, 460 pp., illus. \$32.50.

Mesoamerican Archaeology. New Approaches. Proceedings of a symposium, Cambridge, England, Aug. 1972. Norman Hammond, Ed. University of Texas Press, Austin, 1974. xxiv, 474 pp., illus. \$15.

Metamorphism. A Study of the Transformations of Rock-masses. Alfred Harker. Chapman and Hall, London, 1974 (U.S. distributor, Halsted [Wiley], New York). xii, 362 pp., illus. \$9.50. Reprint.

Molecular Collision Theory. M. S. Child. Academic Press, New York, 1974. x, 300 pp., illus. \$22. Theoretical Chemistry, vol. 4.

Mössbauer Effect Methodology. Vol. 9. Proceedings of a symposium, Chicago, Feb. 1974. Plenum, New York, 1974. viii, 344 pp., illus. \$29.50. A Publication of the New England Nuclear Corporation.

The Moths of America North of Mexico. Including Greenland. Fascicle 6.2, Gelechioidea, Oecophoridae. Ronald W. Hodges. Photographs by Richard B. Dominick and Charles R. Edwards. Drawings by Elaine R. Hodges. Classey and R.B.D. Publications, London, 1974 (U.S. distributor, Entomological Reprint Specialists, Los Angeles). x, 142 pp. + plates. Paper, \$57; by subscription, \$47.50.

Natural Gases in Marine Sediments. Papers from a symposium, Lake Arrowhead, Calif., Nov. 1972. Isaac R. Kaplan, Ed. Plenum, New York, 1974. viii, 324 pp., illus. \$25. Marine Science, vol. 3.

Neuropoisons. Their Pathophysiological Actions. Vol. 2, Poisons of Plant Origin. L. L. Simpson and D. R. Curtis, Eds. Plenum, New York, 1974. xiv, 306 pp., illus. \$25.

The Normal Microbial Flora of Man. Papers from a symposium, Aberystwyth, Wales, July 1973. F. A. Skinner and J. G. Carr, Eds. Academic Press, New York, 1974. xvi, 264 pp. + plates. \$15.50. The Society for Applied Bacteriology Symposium Series No. 3.

Nuclear Magnetic Resonance. Vol. 3. A Review of the Literature Published between June 1972 and May 1973. R. K. Harris, Senior Reporter. The Chemical Society, London, 1974. xxx, 426 pp., illus. £14. A Specialist Periodical Report.

The One Best System. A History of American Urban Education. David B. Tyack. Harvard University Press, Cambridge, Mass., 1974. xii, 354 pp., illus. \$15.

Organic Electronic Spectral Data. Vol.

10, 1968. John P. Phillips, Henry Feuer, and B. S. Thyagarajan, Eds. Interscience (Wiley), New York, 1974. xvi, 1034 pp. \$40.

Organometallic and Coordination Chemistry of Platinum. Umberto Belluco with the collaboration of six others. Academic Press, New York, 1974. xii, 702 pp., illus. \$45.50. Organometallic Chemistry.

Ovarian Function. Proceedings of a symposium, Noordwijkerhout, The Netherlands, Aug. 1973. T. K. A. B. Eskes, H. L. Houtzager, and E. V. van Hall, Eds. Excerpta Medica, Amsterdam, 1974 (U.S. distributor, Elsevier, New York). viii, 280 pp., illus. \$25.

Oxyurata of Animals and Man. Part 2. K. I. Skrjabin, N. P. Shikhobalova, and E. A. Lagodovskaya. Translated from the Russian edition (Moscow, 1961). Israel Program for Scientific Translations, Jerusalem, 1974 (U.S. distributor, International Scholarly Book Services, Portland, Ore.). vi, 460 pp., illus. \$40. Essentials of Nematology, vol. 10.

Parasites in the Immunized Host. Mechanisms of Survival. Proceedings of a symposium, London, Nov. 1973. Associated Scientific Publishers (Elsevier, Excerpta Medica, North-Holland), New York, 1974. viii, 280 pp., illus. \$16.20. Ciba Foundation Symposium 25 (new series).

Pathobiology Annual. Vol. 4, 1974. Harry L. Joachim, Ed. Appleton-Century-Crofts (Prentice-Hall), New York, 1974. x, 352 pp., illus. \$24.

People or Penguins. The Case for Optimal Pollution. William F. Baxter. Columbia University Press, New York, 1974. viii, 110 pp. Cloth, \$5.95; paper, \$1.95.

The Perception of Color. Ralph M. Evans. Wiley-Interscience, New York, 1974. xiv, 248 pp., illus. \$14.95.

Quantum Statistical Mechanics in the Natural Sciences. A Volume Dedicated to Lars Onsager on the Occasion of His Seventieth Birthday. Proceedings of a conference, Coral Gables, Fla., Nov. 1973. Stephen L. Mintz and Susan M. Widmayer, Eds. Plenum, New York, 1974. xii, 492 pp., illus. \$32.50. Studies in the Natural Sciences, vol. 4.

Reagents for Organic Synthesis. Vol. 4. Mary Fieser and Louis F. Fieser. Wiley-Interscience, New York, 1974. x, 660 pp., illus. \$24.95.

Reptiles and Amphibians in the Service of Man. Wilfred T. Neill. Pegasus (Bobbs-Merrill), Indianapolis, 1974. x, 248 pp., illus. Cloth, \$6.95; paper, \$2.95. The Science and Society Series. A Biological Sciences Curriculum Study Book.

Research and Revolution. Science Policy and Societal Change in China. Richard P. Suttmeier. Lexington Books (Heath), Lexington, Mass., 1974. xvi, 190 pp., illus. \$15.

Research Strategies in Psychotherapy. Edward S. Bordin. Wiley-Interscience, New York, 1974. xii, 272 pp. \$16.95. Wiley Series on Personality Processes.

Return from the Nuclear Brink. National Interest and the Nuclear Nonproliferation Treaty. Lloyd Jensen. Lexington Books (Heath), Lexington, Mass., 1974. xx, 152 pp. \$12.50.

A Revision of the Old World Genus Zamarada (Lepidoptera: Geometridae). David Stephen Fletcher. The British

Museum (National History), London, 1974. 498 pp. + plates. £35.50. *Bulletin of the British Museum (Natural History)*, Entomology, Supplement 22.

Statistics of Local Public School Systems. Finance. 1969-70. Gerald Kahn. Office of Education, Washington, D.C., 1974 (available from Superintendent of Documents, Washington, D.C.). vi, 626 pp. Paper, \$8.45.

Stochastic Models in Biology. Narendra S. Goel and Nira Richter-Dyn. Academic Press, New York, 1974. xii, 270 pp., illus. \$19.50.

Street Drug Analysis and Its Social and Clinical Implications. Proceedings of a symposium, Toronto, Oct. 1973. Joan A. Marshman, Ed. Alcoholism and Drug Addiction Research Foundation, Toronto, 1974. viii, 120 pp., illus. Cloth, \$C8; paper, \$C5.50. International Symposia on Alcohol and Drug Addiction, No. 1.

Struggle in the Andes. Peasant Political Mobilization in Peru. Howard Handelman. Published for the Institute of Latin American Studies by the University of Texas Press, Austin, 1974. xviii, 304 pp., illus. \$10. Latin American Monographs, No. 35.

Studies in Numerical Analysis. Papers in Honour of Cornelius Lanczos. B. K. P. Scaife, Ed. Published for the Royal Irish Academy by Academic Press, New York, 1974. xxii, 334 pp., illus. \$13.

Theoretical Aspects of Aging. Proceedings of a symposium, Miami, Feb. 1974. Morris Rockstein, Marvin L. Sussman, and Jeffrey Chesky, Eds. Academic Press, New York, 1974. xii, 192 pp., illus. \$9.50.

Thermal Ecology. Proceedings of a symposium, Augusta, Ga., May 1973. J. Whitfield Gibbons and Rebecca R. Sharitz, Eds. U.S. Atomic Energy Commission, Oak Ridge, Tenn., 1974 (available as CONF-730505 from National Technical Information Service, Springfield, Va.). xvi, 672 pp., illus. Paper, \$13.60. AEC Symposium Series, 32.

Topics in Energy and Resources. Proceedings of a meeting, Coral Gables, Fla., Jan. 1974. Stephen L. Mintz and Susan M. Widmayer, Eds. Plenum, New York, 1974. viii, 162 pp., illus. \$19.50. Studies in the Natural Sciences, vol. 7.

Tracking Skill and Manual Control. E. C. Poulton. Academic Press, New York, 1974. xiv, 428 pp., illus. \$29.

The Uncertain Search for Environmental Quality. Bruce A. Ackerman, Susan Rose-Ackerman, James W. Sawyer, Jr., and Dale W. Henderson. Free Press, New York, 1974. x, 386 pp., illus. \$13.95.

Unpopular Science. An Unnatural Book About Natural Phenomena. Arthur Rosenblum. Running Press, Philadelphia, 1974. 111 pp., illus. Cloth, \$9.80; paper, \$3.95.

Viral Immunodiagnosis. Papers from a symposium, Montreal, Aug. 1973. Edouard Kurstak and Richard Morisset, Eds. Academic Press, New York, 1974. xiv, 334 pp., illus. \$18.

Voices from the Stone Age. A Search for Cave and Canyon Art. Douglas Mazonowicz. Crowell, New York, 1974. x, 212 pp., illus. \$12.95.

Women of the Forest. Yolanda Murphy and Robert F. Murphy. Columbia University Press, New York, 1974. xvi, 236 pp. Cloth, \$10; paper, \$3.45.