

generally available in geological libraries. He provides the biological reader with more than a glimpse (77 pages) of the rich detail and complexity of the fossil record of a group of microorganisms whose preservation through 150 million years and more might seem unlikely. Through the main text and 38 pages of appendices and bibliographies, he provides both—or any other venturesome reader—with a short course in fossil dinoflagellates. As the very first book to attempt such a presentation, this volume is unique and successful.

The brief chapter subtitled “history of study” reveals the author at his best, citing the major contributions made by a few early workers which laid the groundwork for the recent expansion, and lucidly tracing the intricacies of discovery and nomenclature that transformed Ehrenberg’s fossil xanthidia first into Wetzel’s hystrichospheres and then into spiny dinoflagellate cysts, while the still enigmatic acritarchs became defined by default.

Line drawings and light and scanning electron micrographs are plentiful and are excellently reproduced and generally effective, although some of the originals were of inferior quality. Misprints are few and, except for one completely botched sentence, trivial. More significant are a goodly number of internal inconsistencies and contradictions, individually minor misstatements of fact, and failure at times in the discussion to distinguish clearly between dinoflagellates and acritarchs. One biting personal attack on a contemporary colleague strikes a distasteful note.

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Solid Water

Ice Physics. PETER V. HOBBS. Clarendon (Oxford University Press), New York, 1975. xviii, 838 pp., illus. \$85.

I have found it difficult to form a coherent opinion of this fascinating and frustrating book. It is simultaneously a very large compendium of facts and a systematic discussion of the properties of ice. It presents a strange mixture of elementary and unnecessary detail—for example, on the composition of water and the energy of its decomposition—along with the discussion of esoteric topics. In a sense it is a Victorian-style book.

On the whole, I found the discussions of the various properties of ice to be sound but uninspired. There is a tendency simply to list the observations of many investiga-

tors (the survey of the literature is very thorough), often without discriminating between conflicting data. This is not always the case, and occasional judgments are put forward by the author, but there are few speculations and rarely are conclusions stated. It is this aspect of the book that I found frustrating.

On the other hand, the coverage is impressive. There are after all not many places where one can find a discussion of “bergships” and “pykrete,” a section on the use of ice and reinforced ice as construction materials, or a description of the modern theory of the role of sliding friction in skiing. It is this material that I found fascinating.

In the introduction the author points out that he did not finish the book so much as abandon it. In a field in which the literature is enormous and widely dispersed, it is inevitable that an author will miss important references. For example, the work of Bondot is omitted from the section on amorphous solid water. It is also inevitable that a book on the subject of ice will rapidly become out of date. It is unfortunate that the exciting developments of the last two years in the study of amorphous solid water could not be included in the text.

Ice Physics will likely be a standard reference, valuable as a library resource. It is not likely to inspire a reader to seek solutions to the many unanswered questions concerning the behavior of this fascinating material.

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Books Received

Astronomy and Astrophysics Abstracts. Vol. 11, Literature 1974. Part 1. S. Böhm and seven others, Eds. Published for Astronomisches Rechen-Institut by Springer-Verlag, New York, 1974. x, 580 pp. \$35.10.

Biological Monitoring for Industrial Chemical Exposure Control. A. L. Linch. CRC Press (Chemical Rubber Co.), Cleveland, 1974. viii, 188 pp., illus. \$36.

Cable Television. A Guide to Federal Regulations. Steven R. Rivkin. Crane, Russak, New York, 1975. x, 374 pp. \$16. Rand Cable Television Series.

Ionic Polymers. L. Holliday, Ed. Halsted (Wiley), New York, 1975. xii, 416 pp., illus. \$43.50.

Spectroscopic Data. Vol. 1, Heteronuclear Diatomic Molecules. S. N. Suchard, Ed. IFI/Plenum, New York, 1975. Two volumes. xxx + pp. 1–610, and xxx + pp. 611–1236. \$95.

Statistical Inference. S. D. Silvey. Chapman and Hall, London, and Halsted (Wiley), New York, 1975. 192 pp. Paper, \$6.95. Monographs on Statistical Subjects. Reprint of the 1970 edition.

Steroid Hormones. Ralph I. Dorfman, Ed. North-Holland, Amsterdam, and Elsevier, New York, 1975. xvi, 280 pp. \$35.50. Methods in Investigative and Diagnostic Endocrinology, vol. 3.

Supportive Care. Theory and Technique. Werner M. Mendel. Mara Books, Los Angeles, 1975. xii, 252 pp. \$12. Second edition of *The Therapeutic Management of Psychological Illness*.

System Dynamics. A Unified Approach. Dean Karnopp and Ronald Rosenberg. Wiley-Interscience, New York, 1975. xii, 402 pp., illus. \$19.95.

Techniques and Topics in Bioinorganic Chemistry. C. A. McAuliffe, Ed. Halsted (Wiley), New York, 1975. xviii, 352 pp., illus. \$34.95. Aspects of Inorganic Chemistry.

Technology Transfer. University Opportunities and Responsibilities. Proceedings of a conference, Cleveland, Oct. 1974. Office of Research Administration, Case Western Reserve University, Cleveland, 1975. iv, 196 pp. + appendix. Paper, \$5.

Textbook of Limnology. Gerald A. Cole. Mosby, St. Louis, 1975. x, 284 pp., illus. \$12.

Thymus and Self. Immunobiology of the Mouse Mutant *Nude*. Jørgen Rygaard. F.A.D.L., Copenhagen, and Wiley-Interscience, New York, 1975. 194 pp., illus. \$18.95.

Toxicological Evaluation of Some Food Colours, Enzymes, Flavour Enhancers, Thickening Agents, and Certain Food Additives. World Health Organization, Geneva, 1975 (U.S. distributor, Q Corp., Albany, N.Y.). 204 pp. Paper, \$6.20. WHO Food Additives Series, 1974, No. 6.

Trek of the Oil Finders. A History of Exploration for Petroleum. Edgar Wesley Owen. American Association of Petroleum Geologists, Tulsa, Okla., 1975. xvi, 1648 pp., illus. \$38. Memoir 6. Semicentennial Commemorative Volume.

Thromboembolism. Etiology, Advances in Prevention and Management. A. N. Nicolaides, Ed. University Park Press, Baltimore, 1975. xiv, 348 pp., illus. \$29.50.

Transition Metals. Part 1. D. W. A. Sharp, Ed. Butterworth, London, and University Park Press, Baltimore, 1974. xii, 296 pp., illus. \$37.50. MTP International Review of Science. Inorganic Chemistry, Series Two, vol. 5.

Ultrasound in Medicine. Vol. 1. Proceedings of a meeting. Denis White, Ed. Plenum, New York, 1975. xxiv, 612 pp., illus. \$47.50.

The Urban Environment. A Teacher's Guide, Grades K-3. Phyllis S. Busch. Ferguson, Chicago, 1975. xiv, 218 pp., illus. Paper, \$4.85.

The Washington Lobbyists for Higher Education. Lauriston R. King. Lexington Books (Heath), Lexington, Mass., 1975. xiv, 130 pp. \$12.50. Lexington Books Politics of Education Series.

Wildflowers of the Southeastern United States. Wilbur H. Duncan and Leonard E. Foote. University of Georgia Press, Athens, 1975. viii, 296 pp., illus. \$12.

The Windows to His World. The Story of Trevor Kincaid. Muriel L. Guberlet. Pacific Books, Palo Alto, Calif., 1975. 288 pp., illus. \$9.95.

The World of the Wasp. Joy O. I. Spoczynska. Illustrated by Melchior Spoczynski. Crane, Russak, New York, 1975. 188 pp. + plates. \$11.75.

A Zoogeographic Analysis of the South American Chaco Avifauna. Lester L. Short. American Museum of Natural History, New York, 1975. pp. 163–352. Paper, \$9.60. *Bulletin of the American Museum of Natural History*, vol. 154, article 3.