

ing is clear and direct; he does not avoid discussing mathematics, but he skillfully traces a path through his argument that avoids technical burdens. The general reader, for whom the book is intended, will find much that is fascinating and enjoyable.

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Some Other Books of Interest

Plants in Danger. What Do We Know? STEPHEN D. DAVIS and eight others. International Union for Conservation of Nature and Natural Resources, Cambridge, U.K., 1986. xlv, 461 pp., illus. Paper, \$21.

It is noted in the preface to this book that, although much has been written about threatened plants, "it is . . . clear that plant conservation . . . is not yet fully accepted as a fundamental part of conservation as a whole." Attributing this in part to ignorance of how much information on plants is available, the compilers have set out to provide a guide to sources of information that will answer the question posed in the subtitle. After an overview chapter, an essay on "conclusions for the future," and other introductory material, entries for some 200 nations and territories (including islands and island groups), listed alphabetically, are presented. Ranging in length from a few lines to several pages, the entries generally give data on area and population and brief summaries of the floristics and character of the vegetation of the locale, followed by bibliographies of checklists, floras, field guides, and other publications and, where possible, names and addresses of voluntary conservation and nature study groups, botanical gardens, and other relevant organizations. Laws protecting plants are also summarized. Appendixes list general and regional references with a geographical index and give the status of various countries with respect to the ratification of conservation conventions.—K.L.

Science and Technology in Chinese Civilization. CHENG-YIH CHEN, ROGER CLIFF, and KUEO-MEI CHEN, Eds. World Scientific, Singapore, 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xx, 352 pp., illus. \$64. From a workshop, San Diego, CA, and a conference, Berkeley, CA, summer 1985.

This collective volume provides, in the words of the principal editor, a "representative sample of current work in the history of science and technology by Chi-

nese scholars." The volume opens with six papers under the heading Mathematics: a comparison of early Chinese and Greek work on the concept of limit, an account of mathematical formalisms in ancient China, and discussions of the work of Tsu Ch'ung-Chih (429–500) on the value of pi, of Wang Lai (1768–1813) on number systems of variable base, of Bao Qi-Shou (19th century) on combinatorial functions, and of Li Shan-Lan (1811–1822) on summation of series and powers and the volume of curved-surface pyramids. Five papers under the heading Science discuss the use of historical records in modern astronomy, three ancient books on optics, the generation of chromatic scales in 5th-century bells, early meteorological instruments (wind gauge, rain gauge, and evaporator), and earthquake records. The final section of the volume, Technology, contains papers on early metallurgy, sliding bearings and lubrication (tribology), and the development and spread of gunpowder and rocketry, the last of which is also the subject of the most recent installment of Joseph Needham's *Science and Civilisation in China* (volume 5, part 7; Cambridge University Press, 1986). The Chinese characters for names and key terms are inserted in the text, and the reference lists include many items from the Chinese-language literature. The volume also includes an index and a brief chronology of Chinese history.—K.L.

History of Electron Microscopes. HIROSHI FUJITA, Ed. Japan Scientific Societies Press, Tokyo, 1986 (U.S. distributor, International Specialized Book Services, Portland, OR). x, 219 pp., illus. Paper, \$38.

The present volume devoted to electron microscopy as it developed in Japan was prompted by the 11th International Congress on Electron Microscopy, which was held in Kyoto in 1986. The volume opens with a group of nine papers by Japanese authors who recount early efforts in Japan, dating mainly from the establishment in 1939 of an electron microscopy subcommittee of the Japan Society for the Promotion of Science and including work during and immediately after World War II. Work at three universities (Tohoku, Tokyo, and Osaka) and four commercial firms (Hitachi, Shimadzu, Toshiba, and JEOL) is described. The commercial development of electron microscopes is the subject of five further papers, which deal with Philips and Zeiss as well as Akashi, Hitachi, and JEOL and include many photographs and lists of features and specifications of the equipment discussed. The text, entirely in English, reads awkwardly in spots and suffers from

lapses in proofreading, but these sections contain much factual information and could be a useful complement to *The Beginnings of Electron Microscopy*, a collection of memoirs by scientists from various countries edited by Peter W. Hawkes (Academic Press, 1985; reviewed in *Science* 231, 63 [1986]). The "catalogues" section that concludes the volume consists of advertisements from a number of manufacturers, Japanese and otherwise, of electron microscopes and related equipment.—K.L.

Books Received

Antibiotic Resistance Genes. Ecology, Transfer, and Expression. Stuart B. Levy and Richard P. Novick, Eds. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, 1986. xviii, 436 pp., illus. \$68. Banbury Report, 24. Based on a meeting, Cold Spring Harbor, NY, 1986.

Beyond the Mechanical Universe. From Electricity to Modern Physics. Richard P. Olenick, Tom M. Apostol, and David L. Goodstein, Eds. Cambridge University Press, New York, 1986. xiv, 574 pp., illus. \$24.95.

Biochemical Modulation of Anticancer Agents. Experimental and Clinical Approaches. Frederick A. Valeriote and Laurence H. Baker, Eds. Nijhoff, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xviii, 350 pp., illus. \$69.95. Developments in Oncology. From a symposium, Detroit, MI, June 1986.

Biochemistry of Virus-Infected Plants. R. S. S. Fraser. Research Studies Press, Letchworth, Hertfordshire, England, 1987 (U.S. distributor, Wiley, New York). x, 259 pp., illus. \$54.95. Research Studies in Botany and Related Applied Fields, 3.

The Biological Chemistry of Marine Copepods. E. D. S. Corner and S. C. M. O'Hara, Eds. Oxford University Press, New York, 1986. x, 349 pp., illus. \$73. Oxford Science Publications.

Biological Nomenclature Today. A Review of the Present State and Current Issues of Biological Nomenclature of Animals, Plants, Bacteria and Viruses. W. D. L. Ride and T. Younes, Eds. ICSU Press, Miami, and IRL Press, Oxford, U.K., 1987. vi, 70 pp. Paper, \$20. International Union of Biological Sciences Monograph Series, no. 2. Based on a symposium, Brighton, U.K., July 1985.

Cancer Biology and Therapeutics. Joseph G. Cory and Andor Szentivanyi. Plenum, New York, 1987. x, 276 pp., illus. \$49.50. From a symposium, Tampa, FL, Jan. 1986.

Carcinogenesis and Adducts in Animals and Humans. M. C. Poirier and F. A. Beland, Eds. Karger, New York, 1987. viii, 116 pp., illus. \$66.25. Progress in Experimental Tumor Research. From a workshop, Cambridge, MA, Feb. 1986.

Cardiac Electrophysiology and Pharmacology of Adenosine and ATP. Basic and Clinical Aspects. Amir Pelleg, Eric L. Michelson, and Leonard S. Dreigus, Eds. Liss, New York, 1987. xviii, 395 pp., illus. \$66. Progress in Clinical and Biological Research, vol. 230. From a symposium, Bala Cynwyd, PA, May 1986.

Direct Methods Macromolecular Crystallography and Crystallographic Statistics. H. Schenk, A. J. C. Wilson, and S. Parthasarathy, Eds. World Scientific, Singapore, 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xiv, 425 pp., illus. \$62. From a school, Madras, India, Dec. 1985.

Disordered Semiconductors. Marc A. Kastner, Gordon A. Thomas, and Stanford R. Ovshinsky, Eds. Plenum, New York, 1987. xiv, 778 pp., illus. \$115. Institute for Amorphous Studies Series.

Diving Birds of North America. Paul A. Johnsgard. University of Nebraska Press, Lincoln, NE, 1987. xii, 292 pp., illus. \$45.

Dynamical Systems and Singular Phenomena. Gikō Ikegami, Ed. World Scientific, Singapore, 1987 (U.S. distributor, Taylor and Francis, Philadelphia). x, 244 pp., illus. \$39. World Scientific Advanced Series in Dynamical Systems, vol. 2. From a conference, Kyoto, Japan, July 1986.

Early Detection of Occupational Diseases. World Health Organization, Geneva, 1986 (available from