

this case comparative psychology. Other cetacean studies seem parochial in comparison to his. Herman offers a telling comparison between aquatic and terrestrial mammals and simultaneously proves the editors' assertion that dolphin truth is more alluring than myth.

A prominent feature of the book is that it addresses several audiences at once using two distinct writing styles. The editors' essays are written in a manner that directs them squarely at the lay audience, whereas virtually all the other authors have written in journal style for a professional audience. There is a concomitant disparity in how results are interpreted. The authors of data chapters interpret their results for other scientists, that is, in the most parsimonious manner possible. The editors interpret these same results for lay readers in a freer, speculative vein. In one instance, writing about Marsh and Kasuya's fascinating chapter on the life cycle of female pilot whales, the editors indulge in the very speculation the authors specifically caution against. There is a certain irony here in that speculation on the results of others is what the editors credit with having created the dolphin myth in the first place.

Of all the audiences addressed, this book may best satisfy beginning marine mammal biologists and general scientists who are looking for a broad perspective on modern dolphin research. Cetacean specialists will already be familiar with over half its contents and will cite other books in preference to this one. Lay readers may become lost in the jargon, statistics, and writing style of the data chapters and thereby miss the larger points about dolphin research that the editors hoped to convey. For all who read it carefully, the book offers a tantalizing cross-section of adaptations within the dolphin world and raises a satisfying number of unanswered questions.

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## Some Other Books of Interest

**Teleconnections Linking Worldwide Climate Anomalies.** Scientific Basis and Societal Impact. MICHAEL H. GLANTZ, RICHARD W. KATZ, and NEVILLE NICHOLLS, Eds. Cambridge University Press, New York, 1991. x, 535 pp., illus. \$54.50.

In keeping with the modern communication age, which has made us ever more aware of unusual happenings in all parts of

the globe, meteorologists have coined the word "teleconnection" to describe families of related climatic phenomena at far-spread locations. This book is a collection of 17 self-contained papers dealing with the geophysical, ecological, and human dimensions of "teleconnected" climate perturbations in various geographical regions. One unifying theme of the volume is the teleconnection complex known as El Niño-Southern Oscillation (ENSO), the strong coupling between temperature changes in the surface ocean water off the Peru-Ecuador coast (El Niño episodes) and oscillations in the east-west gradient of atmospheric pressure across the South Pacific Basin. This phenomenon has a distinct cyclic character, with typical periods of several years. The reader will learn how the strong ENSO episodes are linked with droughts and food shortages in India, Australia, China, and Brazil, as well as how snow cover over the Eurasian land mass, the Asian monsoon, and Atlantic hurricanes might fit into this teleconnection. Also documented are the effects of ENSO events on the yield of cereal crops and the well-being of various exotic marine creatures in Australia, the population of anchoveta in the southeastern Pacific, and shrimp landings in the Gulf of Mexico. Efforts of various governments to alleviate the associated hardships through agricultural reforms and improved long-range forecasting are also described. Lest the reader gain the impression that ENSO is to be blamed for every possible climate calamity, one chapter points out that rainfall variability in certain locations, such as Morocco and the Sahel region of Africa, is most likely related to other teleconnections. The book is targeted at a general audience. With the exception of the two chapters on theory and statistical methods the text has a strong empirical and descriptive flavor and includes an abundance of charts and drawings, as well as historical anecdotes that make for entertaining reading. For readers who desire to pursue the subject at a more technical level there are extensive and up-to-date bibliographies at the ends of the chapters.

—*Ngar-Cheung Lau, Princeton University*

**Glass.** Nature, Structure, and Properties. HORST SCHOLZE. Springer-Verlag, New York, 1991. xiv, 454 pp., illus. \$98. Translated with revisions from the German edition (Berlin, 1988) by Michael J. Lakin.

This work by the late Horst Scholze is intended to provide a unified overview of the subject for engineers and scientists who are concerned with glass. However, it has value for any researcher who desires an

overview of the fundamentals of glass science and technology and for students of the field. The book's introduction covers the basic phenomenology of crystallization and vitrification and gives a detailed review of each of the major types of glass. The main text is divided into two major chapters. The first, divided into six subsections, discusses the nature and structure of glass. The second, which consists of nine subsections, covers viscosity, thermal expansion, and density and includes large sections on optical and mechanical properties. It also reviews electrical properties, surface tension, the technologically important subject of chemical resistance, and finally thermal properties. The author's primary interest in glass as a technological material is readily apparent, but he gives ample coverage to the structural and theoretical aspects of the glassy state. The discussion of each topic is thorough and shows an impressive understanding of the material, and each also includes a pleasant historical perspective and, in most instances, an up-to-date account of new developments. However, computer-simulation investigations, which have recently provided much structural insight, receive little attention. On the whole, Scholze's book should provide an excellent source of information on glass in all its aspects. The author has read, digested, and organized a vast amount of literature (more than one thousand references are cited), and the result is a valuable overview of the whole field.

—*C. A. Angell, Arizona State University*

## Books Received

**Advances in Coal Spectroscopy.** Henk L. C. Meuzelaar, Ed. Plenum, New York, 1992. xx, 416 pp., illus. \$85. Modern Analytical Chemistry.

**The American Atom.** A Documentary History of Nuclear Policies from the Discovery of Fission to the Present. Philip L. Cantelon, Richard G. Hewlett, and Robert C. Williams, Eds. 2nd ed. University of Pennsylvania Press, Philadelphia, 1992. xvii, 369 pp. \$39.96; paper, \$16.95.

**Behçet's Disease.** Basic and Clinical Aspects. J. Desmond O'Duffy and Emre Kokmen, Eds. Dekker, New York, 1991. xii, 679 pp., illus. \$175. Inflammatory Disease and Therapy, vol. 8. From a conference, Rochester, MN, Sept. 1989.

**The Bone Hunters.** The Heroic Age of Paleontology in the American West. Uri Lanham. Dover, New York, 1992. xiv, 285 pp., illus. Paper, \$5.95. Reprint, 1973 ed.

**Children in Poverty.** Child Development and Public Policy. Aletha C. Huston, Ed. Cambridge University Press, New York, 1992. x, 331 pp., illus. \$44.50. From a conference, Lawrence, KS, June 1988.

**Computational Aspects of the Study of Biological Macromolecules by Nuclear Magnetic Resonance Spectroscopy.** Jeffrey C. Hoch, Flemming M. Poulsen, and Christina Redfield, Eds. Plenum, New York, 1991. x, 464 pp., illus. \$115. NATO Advanced Science Institute Series A, vol. 225. From a workshop, Il Ciocco, Italy, June 1990.

**Directions in Electromagnetic Wave Modeling.** Henry L. Bertoni and Leopold B. Felsen, Eds. Plenum,

New York, 1991. xii, 560 pp., illus. \$115. From a conference, New York, Oct. 1990.

**Dynamics of Organizational Populations.** Density, Legitimation, and Competition. Michael T. Hannan and Glenn R. Carroll. Oxford University Press, New York, 1992. xvi, 286 pp., illus. \$29.95.

**Echoes of War.** The Story of H<sub>2</sub>S Radar. Bernard Lovell. Hilger, Philadelphia, 1992 (U.S. distributor, American Institute of Physics, New York). xxii, 287 pp., illus. \$40.

**Electromagnetics in Medicine and Biology.** Carl T. Brighton and Solomon R. Pollack, Eds. San Francisco Press, San Francisco, 1992. viii, 365 pp., illus. \$37.50. From a meeting, Philadelphia, Oct. 1990.

**Fishes of the Sea.** The North Atlantic and Mediterranean. John and Gillian Lythgoe. Photographs by Planet Earth Pictures. MIT Press, Cambridge, MA, 1992. 256 pp. \$35.

**Foundations of Astronomy.** Michael A. Seeds. 3rd ed. Wadsworth, Belmont, CA, 1992. xviii, 701 pp., illus. \$49.95.

**Genes and Phenotypes.** Kay E. Davies and Shirley M. Tilghman, Eds. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1991. Genome Analysis, vol. 3. x, 174 pp., illus. \$40.

**Geomorphic Responses to Climatic Change.** William B. Bull. Oxford University Press, New York, 1991. xviii, 326 pp., illus. \$59.95.

**Heat Conduction Using Green's Functions.** J. V. Beck *et al.* Hemisphere (Taylor and Francis), Philadelphia, 1992. xxviii, 523 pp., illus. \$125. Series in Computational and Physical Processes in Mechanics and Thermal Sciences.

**Human Biology.** An Integrative Science. P. O'Higgins, Ed. Published for the Australasian Society for Human Biology by the Centre for Human Biology, University of Western Australia, 1991. xx, 460 pp., illus. Paper, \$A25. From a conference, Nedlands, Western Australia, Dec. 1990.

**Immunology of Milk and the Neonate.** Jiri Mestecky, Claudia Blair, and Pearay L. Ogra, Eds. Plenum, New York, 1991. xiv, 488 pp., illus. \$115. Advances in Experimental Medicine and Biology, vol. 310. From a symposium, Miami, Oct. 1990.

**Many-Particle Theory.** E. K. U. Gross, E. Runge, and O. Heinonen. Hilger, Philadelphia, 1992 (U.S. distributor, American Institute of Physics, New York). x, 433 pp., illus. \$150. Translated from the German edition (Stuttgart, 1986).

**Mechanisms in Fibre Carcinogenesis.** Robert C. Brown, John A. Hoskins, and Neil F. Johnson, Eds. Plenum, New York, 1992. xiv, 589 pp., illus. \$135. NATO Advanced Science Institutes Series A, vol. 223. From a workshop, Albuquerque, NM, Oct. 1990.

**Municipal Waste Incineration Risk Assessment.** Deposition, Food Chain Impacts, Uncertainty, and Research Needs. Curtis C. Travis, Ed. Plenum, New York, 1991. x, 314 pp., illus. \$85. Contemporary Issues in Risk Analysis, vol. 5. From a workshop, Cincinnati, June 1989.

**A Nation of Fliers.** German Aviation and the Popular Imagination. Peter Fritzche. Harvard University Press, Cambridge, MA, 1992. xiv, 282 pp., illus. \$27.95.

**Nutrition and Behavior.** New Perspectives. Robin B. Kanarek and Robin Marks-Kaufman. Van Nostrand Reinhold, New York, 1991. xii, 308 pp., illus. \$42.95. An AVI book.

**Observing the Sun.** Peter O. Taylor. Cambridge University Press, New York, 1992. xiv, 159 pp., illus. \$29.95. Practical Astronomy Handbook Series, 3.

**Personality Dynamics.** Benjamin B. Wolman. Plenum, New York, 1992. x, 163 pp. \$32.50.

**Physics and Politics in Revolutionary Russia.** Paul R. Josephson. University of California Press, Berkeley, 1992. xx, 422 pp. + plates. \$39.95. California Studies in the History of Science.

**Predictability, Stability, and Chaos in N-Body**

**Dynamical Systems.** Archie E. Roy, Ed. Plenum, New York, 1991. xii, 601 pp., illus. \$135. NATO Advanced Science Institutes Series B, vol. 272. From an institute, Cortina d'Ampezzo, Italy, Aug. 1990.

**Prehistoric Hunters of the High Plains.** George C. Frison. With contributions by Bruce A. Bradley *et al.* 2nd ed. Academic Press, San Diego, CA, 1991. xviii, 532 pp., illus. \$59.95. New World Archaeological Record.

**Recombinant DNA Laboratory Manual.** Judith W. Zyskind and Sanford I. Bernstein. 2nd ed. Academic Press, San Diego, CA, 1992. xiv, 224 pp., illus. Spiral bound, \$29.95.

**Semiclassical Mechanics with Molecular Applications.** M. S. Child. Clarendon (Oxford University Press), New York, 1991. x, 417 pp., illus. \$98. International Series of Monographs on Chemistry, 25.

**Techniques and Concepts of High-Energy Physics VI.** Thomas Ferbel, Ed. Plenum, New York, 1991. x, 438 pp., illus. \$125. NATO Advanced Science Institutes Series B, vol. 275. From an institute, St. Croix, June 1990.

**Unusual Telescopes.** Peter L. Manly. Cambridge University Press, New York, 1992. xviii, 221 pp., illus. \$39.95.

**The Violence of the Green Revolution.** Third World Agriculture, Ecology and Politics. Vandana Shiva. Zed Books, Atlantic Highlands, NJ, and Third World Network, Penang, Malaysia, 1992. 264 pp., illus. \$49.95; paper, \$17.50.

**Who Lives? Who Dies?** Ethical Criteria in Patient Selection. John F. Kilner. Yale University Press, New Haven, CT, 1992. xiv, 359 pp. \$35; paper, \$15. Reprint, 1990 ed.

**Wide Gap II-VI Semiconductors.** R. Triboulet, R. L. Aulombard, and J. B. Mullin, Eds. Hilger, Philadelphia, 1991 (U.S. distributor, American Institute of Physics, New York). viii, 163 pp., illus. \$100. From a workshop, Montpellier, France, Jan. 1991.

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