

# books OF THE WEEK

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**ACRONYMS AND INITIALISMS DICTIONARY:** A Guide to Alphabetic Designations, Contractions, Acronyms, Initialisms and Similar Condensed Apellations—Ellen T. Crowley and Robert C. Thomas, Eds.—Gale, 1973, 4th ed., 650 p., \$27.50. Contains nearly 103,000 entries in current use.

**ANNUAL REVIEW OF EARTH AND PLANETARY SCIENCES, Vol. 1**—Fred A. Donath, Francis G. Stehli and George W. Wetherill, Eds.—Annual Reviews, 1973, 350 p., illus., \$10. Among topics covered are rock fracture, the interior of Jupiter and Saturn, magnetospheric electrons, mammalian origins, chemistry of subsurface waters, and theory and nature of magnetism in rocks.

**A BRIEF GUIDE TO SOURCES OF METALS INFORMATION**—Marjorie R. Hyslop—Info Resources Pr, 1973, 180 p., \$12.95. A definitive key to where to look, and where to consult for every type of scientific and technical information related to metals, indicating the extent and limits of services available.

**THE COMPUTER SURVIVAL HANDBOOK:** How to Talk Back to Your Computer—Susan Wooldridge and Keith London—Gambit, 1973, 216 p., illus. by Robert Osborn, \$6.95. Team of computer experts writes entertainingly about the serious business of managing to get good service from the computer, how to avoid waste of time, money and talent, including the risk of computerized embezzlement.

**CONCRETE TECHNOLOGY, Vol. 1: Properties of Materials**—D. F. Orchard—Halsted Pr (Wiley), 1973, 3rd ed., 375 p., diagrams, tables, \$26. Completely updated, with extended sections on the fatigue of concrete subjected to fluctuating loads, and on shrinkage and creep of concrete.

**THE DEVELOPMENT OF SCIENCE AND MATHEMATICS CONCEPTS IN CHILDREN:** Final Report—Asian Expert Seminar, Bangkok, 1972—UNIPUB, 1973, 102 p., paper, \$3. Discusses work done, problems and new research in concept development in children, aged 3-12, in Asian countries.

**DIGITAL ELECTRONICS**—F. Dokter and J. Steinhauer—B & N, 1973, 270 p., plates, diagrams, \$19.75. Provides a general survey of the whole field of digital techniques, systematically deals with coding, switching algebra, realization of basic logical functions, basic logical circuits, electronic switches and digital modules.

**THE DISCHARGED MENTAL PATIENT:** A Five-Year Statistical Survey—Robert V. Heckel, Charles Perry and P. G. Reeves, Jr.—U of SC Pr, 1973, 205 p., tables, \$14.95. This intensive study analyzes in detail the behavioral changes which occurred in nearly 1,000 hospitalized patients in the period from admission through four years following discharge.

**ELECTRONIC MUSIC: A Listener's Guide**—Elliott Schwartz—Praeger, 1973, 306 p., plates, \$12.50. Introduces reader to both historical and aesthetic aspects of electronic music, explains the development of computer-generated sound, live plus electronic, the nature of performance, includes observations by composers, and experimenting with tape composition at home.

**THE FALLACY OF I.Q.**—Christopher Jencks and others, Carl Senna, Ed.—Third Pr, 1973, 184 p., tables, \$7.95. Explores and reevaluates the results of past studies and theories linking race and I.Q.

**FIRST CATCH YOUR TIGER**—Oliver Graham-Jones, introd. by Gerald Durrell—Taplinger, 1973, 223 p., photographs, \$7.95. Resident veterinary surgeon tells of his experiences with some formidable patients inside the London zoo's animal hospital.

**FREE RADICALS**—Jay K. Kochi, Ed.—Wiley-Interscience, 1973, 730 p., diagrams, tables, \$37.50. Monograph deals with the dynamics of elementary processes, from rate processes in the gas phase, to oxidation-reduction reactions of free radicals and metal complexes.

**FROZEN FUTURE:** A Prophetic Report from Antarctica—Richard S. Lewis and Philip M. Smith; introd. by Walter Sullivan—Quadrangle, 1973, 455 p., photographs, diagrams, map, \$12.50. Authoritative articles outline the plans and achievements of international cooperation in scientific experimental work, and the findings of the operational activities of Antarctic research.

**THE FUTURE OF MEDICAL EDUCATION**—William G. Anlyan, M.D., and others; Judy Graves, Ed.—Duke U Pr, 1973, 192 p., \$8.50. Discussion and major recommendations on expansion of medical education's scope and responsibilities, basic conditions for progress, and medical education's obligations to the nation's health.

**THE FUTURE OF POPULATION GROWTH:** Alternative Paths to Equilibrium—Tomas Frejka—Wiley-Interscience, 1973, 268 p., diagrams, tables, \$9.95. Applying traditional demographic theory in a nontraditional way, the author identifies demographic trends that can realize the desired goal of a no growing state.

**GIANT REPTILES**—Sherman A. Minton, Jr., and Madge Rutherford Minton—Scribner, 1973, 345 p., photographs, \$9.95. Summarizes factual information on the world's crocodilians, big turtles, giant lizards and snakes, and relates these facts to the store of reptile myth and folklore.

**GRAVITATIONAL WAVES IN EINSTEIN'S THEORY**—V. D. Zakharov, transl. from Russian by R. N. Sen—IPST (Halsted Pr), 1973, 204 p., \$15. A generalized critical review of the recent literature, with emphasis on mathematically rigorous methods, tests and criteria which isolate the gravitational fields corresponding to the solutions of Einstein's equations.

**HANDBOOK FOR PROSPECTORS**—Richard M. Pearl—McGraw-Hill, 1973, 5th ed., 459 p., photographs, diagrams, \$14.50. Completely rewritten and up-to-date compact reference for the prospector-rockhound, with emphasis on U.S., Canada, Mexico and Australia.

**INTRODUCTION TO STELLAR ATMOSPHERES AND INTERIORS**—Eva Novotny—Oxford U Pr, 1973, 543 p., diagrams, \$19.50. Reviews the pertinent observational data; deals with the atmosphere and the interior of a star, respectively; and presents detailed calculations of a model atmosphere and a number of model interiors. Comprehensive text at the intermediate level.

**INTRODUCTION TO THE STUDY OF BIOLOGICAL MEMBRANES**—Marcelino Cerejido and Catalina A. Rotunno—Gordon, 1973, 261 p., photographs, diagrams, \$14.50. Emphasizing general phenomena and modern views, the book treats the structure of the membrane, its role, active transport, movement and distribution of ions, epithelial membranes, modification of membrane properties, and association-induction hypothesis.

**JET SAFARI TO AFRICA**—Robert P. L. Straughan—A S Barnes, 1973, 256 p., 200 photographs, \$17.50. Describes and depicts what the tourist can see covering 23,000 miles from Dakar, Senegal, through Kruger Park, Zambia, Kenya, Amboseli, Tanzania, Olduvai Gorge, Serengeti and Nairobi.

**JOURNEYS TO THE FAR NORTH**—Olaus J. Murie—Am West, 1973, 255 p., photographs, illus. by author, maps, \$8.95. First-hand de-

scription of experiences in the Arctic by a trained biologist whose expeditions took him to the wilderness of the Hudson Bay region, Labrador and many parts of Alaska.

**LAND USE AND WATER RESOURCES** in Temperate and Tropical Climates—H. C. Pereira—Cambridge U Pr, 1973, 246 p., photographs, diagrams, \$14.95; paper, \$5.95. Summarizes in plain language information now available to guide decisions on policy for land-management in watersheds, including results of both research and practical experience.

**L-DOPA AND PARKINSONISM:** A Psychological Assessment—Manuel Riklan—C C Thomas, 1973, 402 p., diagrams, tables, \$15.75. Monograph provides a critical review of the existing behavioral literature, briefly considers some of the known biochemical, pharmacological and physiological aspects of L-Dopa, and more broadly assesses the role of certain catecholamines in behavior.

**THE LOGARITHMIC CENTURY**—Ralph E. Lapp—P-H, 1973, 263 p., charts, tables, \$7.95. Popularly written analysis of the economic-ecological implications of the exponential growth of U.S. resource and energy consumption, graphically illustrated by the author's 53 full-page projections. Special attention is paid to the energy crisis and the outlook for nuclear power.

**MODELS OF DOOM:** A Critique of The Limits to Growth—H. S. D. Cole, Marie Jahoda and others, Eds.—Universe Bks, 1973, 244 p., graphs, tables, \$8; paper, \$2.95. Interdisciplinary team at Sussex University's Science Policy Research Unit examines and evaluates the structure and assumptions of the MIT world models and preliminary technical report. Includes a reply by the authors of The Limits to Growth.

**ORIGINS OF LIFE: Planetary Astronomy**—Lynn Margulis, Ed.—Springer-Verlag, 1973, 268 p., diagrams, \$14.80. Third Conference Proceedings present the edited record of the dialogue of scientists from various disciplines interchanging and debating reactions to the findings on lunar rock samples and the Martian surface.

**PARASITES OF LABORATORY ANIMALS**—Robert J. Flynn—Iowa St U Pr, 1973, 884 p., photographs, drawings, tables, \$35. Definitive one-volume reference brings together information on parasites of endothermal animals, reptiles, amphibians, and fishes used in laboratory work. Lists parasites by classes, with morphology, life cycle, pathological effects, diagnosis, control and public health data.

**PHYTOCHEMISTRY, Vol. 1: The Process and Products of Photosynthesis. Vol. 2: Organic Metabolites**—Lawrence P. Miller, Ed.—Van Nos Reinhold, 1973, 410 p., 445 p., illus., tables, \$22.50, \$24.50. Vol 1 deals with the carbohydrates, vol. 2, with amino acids, proteins, steroids, lipids, terpenes and flavonoids.

**THE POWER AND THE FRAILTY:** The Future of Medicine and the Future of Man—Jean Hamburger, transl. from French; preface by André Cournand—Macmillan, 1973, 140 p., \$4.95. Physician ponders the use man has made of medical progress in regard to the individual as well as the species, finds it wanting, and proposes his conclusions.

**PROCEEDINGS OF THE SEVENTH INTERNATIONAL SEAWEED SYMPOSIUM**—Kazutosi Nisizawa, Ed.—Halsted Pr (Wiley), 1973, 607 p., photographs, diagrams, tables, \$42.50. Presents 125 papers by researchers on marine algae, their distribution, taxonomy and morphology, ecology and resource management, their physiology and cultivation, chemistry and biochemistry, and application.

**RABIES: In Animals and Man**—Geoffrey P. West—Arco, 1973, 168 p., photographs, illus., maps, \$6.95. Veterinarian summarizes what is known about rabies on a world-wide basis, and outlines current research.