

# books OF THE WEEK

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**ANIMAL COLONIES: Development and Function Through Time**—Richard S. Boardman, Alan H. Cheetham and William A. Oliver, Jr., Eds.—DH&R, 1973, 612 p., 200 photographs, 140 diagrams, tables, \$35. Brings together the views of zoologists and paleontologists specializing in the study of metazoan colonies.

**ANNUAL REVIEW OF ECOLOGY AND SYSTEMATICS**, Vol. 4—Richard F. Johnston, Peter W. Frank and Charles D. Michener, Eds.—Annual Reviews, 1973, 424 p., diagrams, \$12. Articles assess desert and tundra ecosystems, reproduction and aggression as ecologic variables, marginal populations, character convergence, and photosynthesis relative to foliage canopies.

**ANNUAL REVIEW OF NUCLEAR SCIENCE**, Vol. 23—Emilio Segre, J. Robb Grover and H. Pierre Noyes, Eds.—Annual Reviews, 1973, 449 p., illus., \$12. Topics covered include Cerenkov counters in high-energy physics, trace element analysis, symmetries in nuclei, and two-to-two scattering processes.

**ANNUAL REVIEW OF PHYSICAL CHEMISTRY**, Vol. 24—H. Eyring, C. J. Christensen and H. S. Johnston, Eds.—Annual Reviews, 1973, 546 p., illus., \$12. Covers such topics as high-speed liquid chromatography, structure of simple liquids, optical properties of polymers, chemistry of the planets, artificial intelligence and machines that understand.

**APPLICATIONS OF THE LASER**—Leon Goldman, M.D.—CRC Pr, 1973, 320 p., photographs, diagrams, \$25. Informal overview of the applications of many laser systems, showing some of the directions the laser can take now and may take in the future—from wave guides, laser metal working and holography to laser dentistry, fusion and safety.

**BEHAVIORAL REGULATORS OF BEHAVIOR IN PRIMATES**—C. R. Carpenter, Ed.—Bucknell U Pr, 1974, 303 p., photographs, diagrams,

\$27.50. Research papers on such topics as dynamics of primate colonies, grooming, ontogenetic development, maternal regulation of infant behavior, and communicative and adaptive behavior.

**CARE OF THE WILD, FEATHERED AND FURRED: A Guide to Wildlife, Handling and Care**—Mae Hickman and Maxine Guy—Unity Pr, 1974, 144 p., illus. by David Haskins, \$7.95; paper, \$3.95. Well-organized description of the authors' 60 years of combined experience with treating injured, lost and frightened birds and baby animals.

**CHILDREN SOLVE PROBLEMS**—Edward de Bono—HarRow, 1974, 227 p., drawings, \$5.95. Shows collection of children's mechanical inventions to solve a set of tasks ranging from a sleep machine to finding methods to improve the human body, each presented with the author's insightful commentary.

**CURRENT BIOCHEMICAL APPROACHES TO LEARNING AND MEMORY**—Walter B. Essman and Shinshu Nakajima, Eds.—Halsted Pr, 205 p., photographs, diagrams, tables, \$15. Represents multidisciplinary methodologies where biochemical parameters are varied and biochemical changes are measured.

**DEVELOPMENTS IN POWDER METALLURGY**—R. F. Smart—M&B (Crane-Russak), 1973, 80 p., illus., \$5.50. Monograph briefly describes recent developments in powder production and processing, and discusses their relevance to the engineer and parts designer.

**ELECTRONIC MEASUREMENTS SIMPLIFIED**—Clayton Hallmark—TAB Bks, 1974, 240 p., photographs, diagrams, \$7.95; paper, \$4.95. A practical guide to how, when and where to make measurements with what.

**THE FIRST FARMERS**—Jonathan Norton Leonard and Editors of Time-Life Books—Time-Life Bks, 1973, 160 p., color plates, photographs, maps, \$7.95. Traces the invention of agriculture and its effect on early civilizations.

**IMMUNOLOGY: The Many-Edged Sword**—Harold M. Schmeck, Jr.—Braziller, 1974, 143 p., \$6.95; paper, \$2.95. Summarizes for the layman the problems medical research has encountered in exploring the complex system of immunology.

**THE INTERPRETATION OF CULTURES: Selected Essays**—Clifford Geertz—Basic Bks, 1973, 480

p., \$15. Illustrating his theories with material drawn from empirical studies in Indonesia and elsewhere, anthropologist shows how culture operates as a system of shared symbols that enables individuals to give form and meaning to their particular experiences.

**THE INVISIBLE MADE VISIBLE: The Expansion of Man's Vision of the Universe Through Technology**—Ernst von Kluon—N.Y. Graphics Soc, 1974, 290 p., 39 color plates, 236 photographs, \$22.50. Beautiful book, describes the development of increasingly sophisticated methods that have expanded man's vision of new dimensions of matter, revealed structure of universe and atom, arrested time, and penetrated hidden secrets.

**KINETICS AND MECHANISMS OF REACTIONS**—B. E. Dawson—Methuen (B&N), 1973, 68 p., diagrams, paper, \$3.50. Concise, introductory treatment relates theoretical studies with laboratory investigations.

**ORGANIC CHEMISTRY OF LIFE: Readings from SCIENTIFIC AMERICAN**—Introd. by Melvin Calvin and William A. Pryor—W H Freeman, 1973, 464 p., photographs, drawings, diagrams, \$12; paper, \$6.95. Introductions place each of the 47 articles in their latest scientific perspective.

**OWLS OF THE WORLD: Their Evolution, Structure and Ecology**—John A. Burton, Ed.—Dutton, 1974, 8x11, 216 p., color photographs, 80 paintings by John Rignall, maps, \$17.95. Handsome attempt to describe every known species of owl, region by region, discusses the origins of owls, their biology and nature, includes check-list and voice-list.

**PATRICK MOORE'S COLOR STAR ATLAS**—Patrick Moore—Crown, 1974, 112 p., 130 photographs and diagrams, 16 star maps, \$7.95. An observer's fully illustrated guide to the major stars and constellations, concise and practical work of reference for the amateur.

**THE SALMON: Their Fight for Survival**—Anthony Netboy—HM, 1974, 632 p., photographs, maps, tables, \$15. A highly readable and comprehensive account of the evolution and life history of the Pacific and Atlantic salmon, their migrations, the fisheries, exploitation and protection.

**SCIENCE AND THE EVOLUTION OF PUBLIC POLICY**—James A. Shannon, Ed.—Rockefeller U Pr, 1973, 288 p., diagrams, \$11. Contributions deal with the purpose and utility of scientific research activities in both academic and industrial enterprises, and the dominant role federal support plays in these regards.

**STUDYING INSECTS: A Practical Guide**—R. L. E. Ford—Warne, 1973, 150 p., color plates, photographs, drawings, \$5.95. Emphasis is on studying and conserving living insects, primarily butterflies and moths, breeding, preserving larvae, and care of collections.

**THERMIONIC ENERGY CONVERSION**, Vol. 1: Processes and Devices—G. N. Hatsopoulos and E. P. Gyftopoulos—MIT Pr, 1973, 265 p., photographs, diagrams, tables, \$17.95. Deals with thermionic conversion generally, discusses in detail the performance of diode thermionic converters, vacuum and vapor thermionic converters.

**THE TOTAL SYNTHESIS OF NATURAL PRODUCTS**, Vols. 1 and 2—John ApSimon, Ed.—Wiley-Interscience, 1973, 604 p., 754 p., illus., \$24.95, \$22.50. Vol. 1 deals with carbohydrates, prostaglandins, pyrrole pigments, nucleic acids, antibiotics, and oxygen ring compounds. Vol. 2 covers monoterpenes, sesquiterpenes, triterpenes, and aromatic steroids.

## MINERAL DEPOSITS ORIGIN, EVOLUTION, AND PRESENT CHARACTERISTICS J. H. TATSCH

This is no ordinary book on mineral deposits. Nor does it simply detail the gross characteristics of mineral deposits. Rather, it shows how minerals have originated, have evolved, and have become deposited in their present environments in accordance with a single long-lived deep-seated global mechanism that has been operating within the Earth during the 4.6 billion years that the Earth is believed to have been in existence. This mechanism is the Tectonospheric Earth Model, which has been described in the book, **THE EARTH'S TECTONOSPHERE**, by the same author, ISBN:0-912890-00-2.

Chapter headings: 1, Mineral deposits: a global survey; 2, The Tectonospheric Earth Model: a new concept; 3, The geometrical, mechanical, thermal, and chemical behavior of the Earth during the past 4.6 billion years: a summary; 4, Intrusive and extrusive activity: a long-lived deep-seated basis for the origin and evolution of mineral deposits; 5, Mineral deposits: origin and distribution 4.6 billion years ago; 6, Mineral deposits: evolution during the past 4.6 billion years; 7, Mineral deposits: present distribution as a function of the Earth's behavior during the past 4.6 billion years.

This book, composed almost entirely of proprietary material, summarizes the results of an independent research project undertaken to determine the most probable geometrical, mechanical, thermal, and chemical aspects of the origin, evolution, and present characteristics of the Earth's minerals, including petroleum. Because of its proprietary nature, very little of this material has been published in scientific journals, nor is it expected that very much of it will be offered for publication other than in book form. This approach, we feel, permits the reader to gain a better perspective of the subject matter presented.

Available directly from the publisher or through any book dealer. Hard cover, 6 x 9 inches, 264 pp. + viii. Table of contents, line drawings, index, 632 references. \$64.00. ISBN:0-912890-01-0. LC:73-78206.

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