

# Books of the Week

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**ANATOMY OF THE CELL**—Björn Afzelius, transl. from Swedish by Birgit Satir—Univ. of Chicago Press, 127 p., 36 plates, \$2.45. Describes the components of the cell as seen through the electron microscope and shows how the study of the organelles can help us understand how the cell functions.

**ATTITUDE, EGO-INVOLVEMENT AND CHANGE**—Carolyn W. Sherif and Muzaffer Sherif, Eds.—Wiley, 316 p., \$9.75. Deals with such topics as psychological selectivity in self-esteem formation, promise and limitations of laboratory experiments, and conceptual systems of attitude change.

**CHANGING ENVIRONMENTAL HAZARDS:** Challenges to Community Health—Task Force on Environmental Health, Gaylord W. Anderson, Chmn.—Public Affairs Press, 101 p., diagrams, paper, \$2. Report with recommendations to the National Commission on Community Health Services.

**CREATIVITY:** Its Educational Implications—John Curtis Gowan, George D. Demos and E. Paul Torrance, Eds.—Wiley, 336 p., \$7.95. Collection of readings on recognizing creativity in young children, how not to block but encourage it, suggesting curriculum for creativity and discussing the role of teachers and parents.

**DIAMONDS IN PICTURES**—George Switzer—Sterling Pub. Co., 80 p., illus., \$3.95. Informative text, tells about the Kimberly and other diamond mines, describes early and advanced processes of separation, cutting tools and techniques, factors affecting value, and deals with synthetic and industrial diamonds.

**THE EXPLOSION OF SCIENCE:** The Physical Universe—Colin Bayley and others; Sir Bernard Lovell and Tom Margerison, Eds.—Meredith Press, 216 p., 480 illus., color plates, \$24.95; until 12/31/67 \$19.95. Attempts to describe for the layman in non-mathematical terms the complex ideas behind what is happening in the physical sciences and what are the implications of these advances.

**FOOD AND NUTRITION**—William H. Sebrell Jr., James J. Haggerty and the Editors of LIFE—Time-Life Bks., 200 p., illus., \$3.95 direct to publisher, Time & Life Bldg., Chicago Ill. 60611. Deals in essay form and visually with the many aspects of food, from national and tribal diets, methods of production and preservation, to human digestion, feasts, fads and famines.

**GLACIER BAY:** The Land and the Silence—Dave Bohn; David Brower, Ed.—Sierra Club, 165 p., photographs by author, maps, \$25. Magnificently illustrated history and description of the landscape of Glacier National Park Monument, an area in Alaska covering some 4400 square miles and still emerging from the Little Ice Age.

**HEALTH CARE FACILITIES:** The Community Bridge to Effective Health Services—Task Force on Health Care Facilities, Ray E. Brown, Chmn.—Public Affairs Press, 67 p., paper, \$2. Report includes recommendations to the National Commission on Community Health Services.

**INDUSTRIAL ELECTRICAL SYSTEMS:** Energy Systems Engineering—Editors of POWER—McGraw-Hill, 351 p., illus., \$12.50. Collection of reports covering motors, motor control and insulation, adjustable speed drives, transformers, high frequencies and other aspects of power in the field of electrical engineering.

**JOURNAL OF HYDRONAUTICS,** Vol. 1, No. 1, July 1967—J. P. Breslin, Ed.—Am. Institute of Aeronautics and Astronautics, 64 p., illus., paper, \$3; quarterly, subscription to members \$4, for non-members price available upon request. Devoted to publication of original pa-

pers contributing to the advancement of the science and engineering of all types of marine craft, installations and instruments devised to explore and make use of the oceans of the world.

**MAGNETISM AND THE COSMOS**—W. R. Hindmarsh and others, Eds.—Am. Elsevier Pub. Co., 436 p., illus., \$27.50. Articles presented at the NATO Advanced Study Institute at Newcastle upon Tyne, 1965, discussing geomagnetism; stellar, solar and planetary magnetism.

**MATHEMATICAL CHALLENGES TO THE NEO-DARWINIAN INTERPRETATION OF EVOLUTION**—Paul S. Moorhead and Martin M. Kaplan, Eds.—Wistar Institute Press, 140 p., paper, \$5. Symposium (1966) papers and discussion of such topics as evolutionary challenges to mathematical interpretation of evolution, and problems of vicarious selection.

**METHODS OF PSYCHOPHYSIOLOGY**—Clinton C. Brown—William & Wilkins, 502 p., illus., \$16.75. Presents the techniques for measuring biological processes, deals with the physiological phenomena to be measured and discusses optimum procedures for measuring them accurately and sensitively.

**THE MIDDLE EAST:** A Social Geography—Stephen H. Longrigg—Aldine Pub. Co., 288 p., 69 photographs, map, paper, \$2.95. Examines the region, its antiquity and the present peoples of the Arab and non-Arab countries, their economy and public life.

**MUSIC, PHYSICS AND ENGINEERING**—Harry F. Olson—Dover, 2nd ed., 460 p., illus., paper, \$2.75. Enlarged version of 1952 publication with new material on acoustics; on monaural, binaural, monophonic and stereophonic systems, magnetic tape sound, electronic music and music composed by computers.

**THE MYSTERIOUS GRAIN**—Mary Elting and Michael Folsom—Evans & Co. (Lippincott), 118 p., illus., by Frank Cieciorka, \$4.50. The story of the search and scientific discovery of the self-propagating wild plant from which modern corn evolved.

**THE PETROLEUM CHEMICALS INDUSTRY**—Richard Frank Goldstein and A. Lawrence Waddams—Spon Ltd. (Barnes & Noble), 3rd ed., 523 p., diagrams, \$22. An up-to-date and comprehensive survey of modern developments in those fields of industrial organic chemistry in which oil is the most economic starting material, including new processes in the field of aromatic hydrocarbons.

**PHASE STABILITY IN METALS AND ALLOYS**—Peter S. Rudman, John Stringer and Robert I. Jaffee, Eds.—McGraw-Hill, 594 p., diagrams, \$21.50. Proceedings of the Battelle Institute Colloquium, 1966, deals with the problem of why under a given set of conditions—temperature, pressure, composition—a given structure or phase occurs.

**THE PHYSIOLOGICAL CLOCK**—Erwin Bünning—Springer-Verlag (N.Y.), rev. 2nd ed., 167 p., diagrams, paper, \$3. Monograph deals entirely with the biological measurement of time in which unicellular organisms as well as cells of higher plants, animals and man utilize periods of approximately 24 hours.

**THE PRINCIPLES OF DIVING**—Mark Terrell—Barnes A. S., 240 p., photographs, drawings, tables, \$8.50. Comprehensive discussion of the sea as an environment, of the principles of diving without apparatus, and using both surface air supply and self-contained equipment. Deals with underwater work and future developments.

**ROCKS AND MINERALS:** A Guide for Collectors of the Eastern United States—H. H. Nicolay and A. V. Stone—Barnes, A. S., 255 p.,

photographs, color plates, \$8.50. A state-by-state guide for field trips from Maine to Florida, indicates location of minerals and fossils after short introduction to the geologic history of each state.

## TEXTBOOKS

**CHEMICAL THERMODYNAMICS:** A Problems Approach—Norman O. Smith—Reinhold, 278 p., \$8.50. Intended for college and early graduate level students who struggle for a comprehension of elementary thermodynamics.

**AN INTRODUCTION TO METALLURGY**—A. H. Cottrell—St. Martins Press, 548 p., illus., \$12. This text presents metallurgy as a single applied science, from atomic theory, through thermodynamics, reaction kinetics and crystal physics to elasticity and plasticity.

**INTRODUCTION TO NUCLEAR CHEMISTRY**—D. J. Carswell—Elsevier Pub. Co. (N.Y.), 279 p., diagrams, \$11. Undergraduate course text for students intending not to specialize in this field.

**PHYSICS:** Matter, Energy and the Universe—Gaylord P. Harnwell and George J. F. Legge—Reinhold, 557 p., illus., \$9.95. Text gives abbreviated introduction to classical concepts, emphasizes contemporary ideas and applies physically motivated mathematics wherever it leads to clarification.

**WAVE MECHANICS**—H. T. Flint—Methuen (Barnes & Noble), 9th rev. ed., 152 p., diagrams, \$4.50; paper, \$2.35. Text retains account of the historical development both in theory and practice, and emphasizes those parts of wave mechanics most important to present-day students.

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