

books OF THE WEEK

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ANTIPOLLUTION LAB: Elementary Research Experiments and Science Projects on Air, Water and Solid Pollution in Your Community—Elliott H. Blaustein, preface by René Dubos—Sentinel Bks., 1972, 128 p., illus., paper, \$1.50. Demonstrates simple and practical scientific techniques for the detection of many different kinds of environmental pollution, and describes ways of measuring deficiencies in body processes caused by pollutants.

ASPECTS OF ISOMERISM—Peter Uzzell—Methuen (Harper), 1972, 54 p., illus., paper, \$2.75. Introduction to the varied aspects of isomerism to be found both in organic and inorganic chemistry, including polarized light types of isomerism in complex compounds, and classification according to symmetry.

BANKRUPTCY OF ACADEMIC POLICY—Peter Caws, S. Dillon Ripley, and Philip C. Ritterbush, Ed.—Acropolis Bks., 1972, 128 p., illus., paper, \$3.95. Essays concerned with university goals and governance, the aim of an institution to increase knowledge, the promotion of learning, and extension of the foundations of academic policy.

CARE OF BOOKS, DOCUMENTS, PRINTS AND FILMS—William K. Wilson and James L. Gear—NBS (GPO), 1972, 24 p., illus., paper, 45¢. Practical hints for the consumer, based on research at the National Bureau of Standards in connection with problems of preservation at the National Archives.

THE COMPLETE GUIDE TO SCIENCE-FAIR COMPETITION—John C. Stoltzfus and Morris N. Young—Hawthorn Bks., 1972, 245 p., photographs, \$5.95. Discusses the significance and functioning of science fairs, the procedures for selecting a project, and demonstrates how to prepare and present a winning exhibit.

THE DIVINE PROPORTION: A Study in Mathematical Beauty—H. E. Huntley—Dover, 1971, 186 p., illus., paper, \$2.50. An original publication, explores on the basis of simple mathematical formulas the relationship between geometry and aesthetics.

FOR THOSE WHO LIVE AND BREATHE: A Manual for Patients with Emphysema and Chronic Bronchitis—Thomas L. Petty and Louise M. Nett—Thomas, C. C., 1972, 2nd ed., 109 p., illus., \$6.25. Explains and describes what is known about emphysema and chronic bronchitis today, and what treatment and rehabilitation procedures are available.

THE GEOMETRY OF HUNGER—D. S. Halacy, Jr.—Harper, 1972, 280 p., photographs, drawings, \$7.95. Summarizes the various causes of population explosion in man's history, deals with the efforts directed at population control, discusses sources of nutrition and malnutrition, and the outlook for balancing the world's population and food supply.

INTERLIBRARY COMMUNICATIONS AND INFORMATION NETWORK: Proceedings of Conference, 1970—Joseph Becker, Ed.—Am. Lib. Assn., 1972, 347 p., diagrams, \$15. Offers 31 papers concerned with practical methods of extending library service capabilities, discussing the technology and organization of network services.

LATERAL THINKING: Creativity Step by Step—Edward de Bono—Harper, 1972, 300 p., drawings, \$8.95. A book to be worked through slowly, at home or at school, proposes a restructuring of thought processes by rearrangement of available information.

MAN AND HIS ENVIRONMENT: Food—Lester R. Brown and Gail W. Finsterbusch—Harper, 1972, 208 p., diagrams, paper, \$3.25. Helps the understanding of the interconnections, interactions and consequences of man's intervention with nature in order to satisfy his growing demands for food.

MASS SPECTROMETRY: Techniques and Applications—George W. A. Milne, Ed.—Wiley-Interscience, 1972, 521 p., diagrams, \$24.95. Covers such topics as automatic acquisition and processing of mass-spectral data, computer-assisted interpretation of mass spectra, newer ionization techniques, mass spectrometry in peptide chemistry, and some aspects of metastable transitions.

MAPS & MAN: An Examination of Cartography in Relation to Culture and Civilization—Norman J. W. Thrower—Prentice-Hall, 1972, 184 p., 70 maps, \$5.95; paper, \$2.95. Amply illustrated study presents a wide variety of cartographic forms, from stick charts to computer maps, written especially for the non-cartographer who wishes or needs to know about maps.

THE MIND OF THE SCIENTIST—Michael Hoskin—Taplinger, 1972, 128 p., illus., \$5.95. Imaginary conversations with Galileo, Newton, Herschel, Darwin and Pasteur, prepared by historian of science in connection with BBC television series.

NUTRITION AGAINST DISEASE: Environmental Prevention—Roger J. Williams—Putman Pub. Corp., 1972, 319 p., \$7.50. An annotated discussion of the nutritional needs of body cells and tissues, draws attention to a considerable amount of research in the field of nutritional prevention against a variety of diseases.

OCEANOGRAPHY: Readings from SCIENTIFIC AMERICAN—Introd. by J. Robert Moore—Freeman, 1972, 417 p., photographs, drawings, diagrams, \$11; paper, \$5.75. Fully illustrated articles discuss basic scientific aspects of the sea, and the ways in which they relate to human activities and needs.

ORIGINS OF LIFE: Cosmic Evolution, Abundance and Distribution of Biologically Important Elements—Lynn Margulis, Ed.—Interdisciplinary Commun. Associates (Gordon & Breach), 1972, 238 p., diagrams, \$19.50. Proceedings of the Second Conference, includes discussion of evolution of the earth's atmosphere, and physical facts about Venus and Mars.

POLYNESIAN SEAFARING—Edward Dodd—Dodd, 1972, 172 p., photographs, drawings, maps, \$17.50. Handsome volume, presents the author's speculative exploration of how the early Polynesians constructed their vessels, double canoes and single-hull outriggers, and in their long voyages may have navigated by aligning stars both fore and aft.

THIS CYBERNETIC WORLD of Men, Machines and Earth Systems—V. L. Parsegian—Doubleday, 1972, 217 p., diagrams, \$6.95. Designed to be read by laymen as well as professionals, the book presents a broad view of the subject, applying the cybernetic approach to mechanisms that range from regulating speed of rotation of an engine or control of temperature, to muscular movements of the body, neural processes, molecular movements, or social relationships.

THE TREATMENT OF DRUG ABUSE: Programs, Problems, Prospects—Raymond M. Glassco and others—Jt. Information Service, APA & NAMH, 1972, 250 p., \$7. Generally discusses the state of drug abuse, history of treatment and present approaches, and describes in detail the experience of nine established drug treatment programs.

WILDLIFE OF AUSTRALIA—Vincent Servery—Taplinger, 1972, 150 p., 40 color plates, photographs, \$9.95. Generously illustrated, informative chapters deal with the shape of the land, with its mammals which include the wide variety of marsupials, its birds, reptiles and amphibians. Indexed.

TEXTBOOKS

CHEMISTRY FOR CHANGING TIMES—John W. Hill—Burgess Pub. Co., 1972, 272 p., photographs, drawings, diagrams, \$8.50; paper, \$5.50. Designed to arouse the interest of nonscience students, the text attempts to be self-motivating, stimulate thought, discussion and concern for the relationship of chemistry to life and living.

CHILD PSYCHIATRY—Leo Kanner, prefaces by Adolf Meyer and others—Thomas, C. C., 1972, 4th ed., 735 p., \$16.50. Practical and comprehensive in orientation, this classic text addressed to both pediatrician and child psychiatrist, has been updated to include recent findings and new pertinent material.

CRYSTAL STRUCTURE ANALYSIS: A Primer—Jenny Pickworth Glusker and Kenneth N. Trueblood—Oxford Univ. Press, 1972, 192 p., illus., \$10; paper, \$4.50. Intended for both undergraduate and research workers, the book is designed to serve as an introduction to the principles underlying structure analysis by X-ray diffraction from single crystals.

INTRODUCTION TO PHYSIOLOGICAL PSYCHOLOGY—Francis Leukel—Mosby, 1972, 2nd ed., 495 p., illus., \$13.75. Offers elementary background for the understanding of physiological concepts to psychology majors, deals with the organization of life, response systems, and the senses. Study Guide available, \$4.75.

INTRODUCTORY BIOCHEMISTRY—M. Frank Mallette and others—Williams & Wilkins, 1972, 811 p., illus., \$16.75. Material for selective use in two-semester course, discusses history and nature of biochemistry, its language in terms of chemical structure and biochemical reactions, and relates these topics to biological processes and systems.

MECHANICAL PROPERTIES OF SOLID POLYMERS—I. M. Ward—Wiley-Interscience, 1972, 375 p., 12 plates, diagrams, \$19.95. Advanced text, develops the mechanics of polymer behavior first, then discusses molecular and structural interpretations.

PHYSICAL CHEMISTRY—Walter J. Moore—Prentice-Hall, 1972, 4th ed., 977 p., photographs, diagrams, \$16.95. Substantially rewritten, brings statistical mechanics into the text as early as possible to use its methods in subsequent discussions; each chapter includes many new illustrative problems to help student understand the theory, applications and related mathematics.

PLANET EARTH: Its Physical Systems Through Geologic Time—Arthur N. Strahler—Harper, 1972, 438 p., photographs, drawings, diagrams, \$11. Structure and content of this text reflect an attempt to supply unification and relevance in the study of earth sciences, treating the basic principles of these sciences from a systems point of view, and considering man's role in changing the balance of natural systems.

POPULATION: Facts and Methods of Demography—Nathan Keyfitz and Wilhelm Flieger—Freeman, 1971, 613 p., diagrams, tables, \$13.50. Advanced text, offers latest demographic data gathered from 90 countries, explains modern techniques tailored to computer use, and instructs in the analysis of viable interpretations of population data.

PRINCIPLES OF BIOGEOGRAPHY—David Watts—McGraw-Hill, 1971, 402 p., diagrams, maps, \$8.95. On the advanced undergraduate level, text deals with the different patterns by which energy and chemical elements are transferred between organisms and their environment, also discusses the inherent demographic limitations in the development of ecosystems.

THERMODYNAMICS OF ELECTRICAL PROCESSES—Malcolm McChesney—Wiley-Interscience, 1972, 278 p., diagrams, \$12.50. Text offers quantitative discussion of the statistical thermodynamic properties of those materials of most interest to engineer and physicist, mainly metals and semiconductors.