

Books of the Week

For the editorial information of our readers, books received for review are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N.W., Washington 6, D. C.

ADVANCED ORGANIC CHEMISTRY—Louis F. Feiser and Mary Feiser—*Reinhold*, 1158 p., illus., \$14. Up-to-date and comprehensive account of fundamental organic chemistry as interpreted by modern theory, covering history, theory and details of experimentation.

AN ALGORITHM FOR TRANSLATING CHEMICAL NAMES TO MOLECULAR FORMULAS—Eugene Garfield—*Inst. for Scientific Information*, 68 p., paper, \$5. Algorithm for manual and for computer translation directly from chemical nomenclature.

ANIMAL BEHAVIOR: Its Evolutionary and Neurological Basis—V. G. Dethier and Eliot Stellar—*Prentice-Hall*, 118 p., illus., \$2.95; paper, \$1.50. Simple, complex, bilateral and vertebrate nervous systems and behavior.

AVIATION & SPACE DICTIONARY—Ernest J. Gentile and Charles Edward Chapel, Eds.—*Aero Pubs.*, 4th ed., 444 p., illus., \$10. Lists 10,000 definitions in aeronautics and space technology.

BIRTH OF A ROCKET—Erik Bergaust—*Putnam*, 48 p., illus., \$2.50. Describes parts, assembly and function of modern solid and liquid rockets.

BLUEPRINT READING: Interpretation of Architectural Working Drawings—William J. Hornung—*Prentice-Hall*, 129 p., illus., \$6.65. Translates the intricacies of blueprint reading into non-technical language, fully illustrated.

A CHRONOLOGY AND FACT BOOK OF THE UNITED NATIONS, 1941-1961—Waldo Chamberlin and Thomas Hovet, Jr., preface by An-

drew W. Cordier—*Oceana*, 64 p., \$2.50; paper, \$1. Useful list of significant events from the origins of the U.N. to the present.

COASTAL PLANT GEOGRAPHY OF MAURITIUS—Jonathan D. Sauer—*La. State Univ. Press*, 153 p., illus., paper, \$3. Botanist's field survey report on topography and vegetation of an island in the Indian Ocean.

GRAVITATIONAL STRESS IN AEROSPACE MEDICINE—Otto H. Gauer and George D. Zuidema, Eds.—*Little*, 278 p., illus., \$13.50. Comprehensive review of research on the circulatory, nervous and psychological effects of acceleration and G stress on the human system.

THE GREAT IDEAS TODAY, 1961—William Benton, Ed.—*Encyclopaedia Britannica (Crowell)*, 562 p., illus., \$8.95. Designed to examine the events and problems of today with reference to the great ideas of the past.

GROUND COVERS FOR EASIER GARDENING—Daniel J. Foley—*Chilton Co.*, 224 p., illus., \$5.50. Abundantly illustrated handbook on the selection and care of ground covers, vines and dwarf shrubs.

GROUND SUPPORT SYSTEMS FOR MISSILES AND SPACE VEHICLES—Kenneth Brown and Peter Weiser, Eds.—*McGraw*, 490 p., illus., \$15. Complete and practical treatment of systems and subsystems, aimed at reader with engineering background.

HOW TO KNOW THE BUTTERFLIES—Paul R. and Anne H. Ehrlich—*Brown, W. C.*, 262 p., illus., \$3.25; paper, \$2.75. Illustrated keys to all categories of North American butterflies from family to species, with notes and index.

IMPORTED INSECTS—Naomi Talley—*Dial Press*, 64 p., illus. by H. D. Tee-Van, \$2.50. Tells young people how entomologists search for the natural enemies of insect pests to be imported as "biological controls."

MATHEMATICAL MODELS—H. Martyn Cundy and A. P. Rollett—*Oxford Univ. Press*, 2nd ed.,

286 p., illus., \$6.50. Detailed instructions for making wide variety of models illustrating plane and solid geometry.

METABOLIC PATHWAYS (Second Edition of Chemical Pathways of Metabolism), Vol. II—David M. Greenberg, Ed.—*Academic Press*, 814 p., \$24. Advanced text and reference work for the practicing biochemist and research worker.

NEW MEXICO BIRDS AND WHERE TO FIND THEM—J. Stokley Ligon—*Univ. of N. Mex. Press*, 360 p., illus., \$8.50. Simplified and practical guide to the 399 species which nest in the state, much of it applicable to the Southwest in general.

PENGUIN SCIENCE SURVEY 1961, Parts 1 & 2—Arthur Garratt, S. A. Barnett and Anne McLearn, Eds.—*Penguin*, 236 p., 248 p., illus., paper, \$1.45 each. Presents results and trends of current research in the physical and biological sciences.

THE PHYSIOLOGY OF NATURAL HIBERNATION—Ch. Kayser—*Pergamon*, 325 p., illus., \$9. Scholarly and detailed discussion of hibernating mammals, integrates the mechanisms of thermoregulation in these animals with the reactions of their endocrine and nervous systems.

RELIABILITY THEORY AND PRACTICE—Igor Bazovsky—*Prentice-Hall*, 292 p., \$10.95. Reliability mathematics as applied to systems engineering.

SEXUALITY AND THE GENETICS OF BACTERIA—Francois Jacob and Elie L. Wollman—*Academic Press*, 374 p., illus., \$10. Detailed account of sexual processes in bacteria and the main advances in understanding bacterial genetics through the study of bacterial conjugation.

SHIP MODEL BUILDING—Gene Johnson—*Cornell Maritime*, 3rd rev. ed., 301 p., illus., \$4. Includes complete working plans for the hobbyist.

SMALL BOAT ENGINES, INBOARD AND OUTBOARD—Conrad Miller—*Sheridan House*, 316 p., illus. by Allen Beechel, \$6. Practical handbook.

SPACE FOR EVERYONE—Philip S. Egan—*Rand McNally*, 72 p., illus. by Seymour Fleishman, \$2.95; paper, \$1.50. Basic facts for boys and girls to help them understand the solar system and problems of rocketry.

STATE BIRDS AND FLOWERS—Olive L. Earle—*Morrow*, 64 p., illus. by author, \$2.78. Handsome little book, for young readers.

THE STORY OF X-RAYS FROM ROENTGEN TO ISOTOPES—Alan Ralph Bleich—*Dover*, 186 p., illus., paper, \$1.35. Radiologist's non-technical account of X-rays at work.

TEST PILOT—Martin Caidin—*Dutton*, 183 p., photographs, \$3. Tells young people about the training and skills involved in taking experimental machines to record heights.

THERMAL REGIMES OF COMBUSTION—Lev Abramovich Vulis, transl. from Russian by Morris D. Friedman and Glenn C. Williams—*McGraw*, 299 p., diagrams, \$7.50. Comprehensive treatment of elementary thermal combustion theory.

TRAILBLAZER OF AMERICAN SCIENCE: The Life of Joseph Henry—Sarah R. Riedman—*Rand McNally*, 224 p., illus., \$3.50. Tells about an early American scientist, his discoveries and inventions. For young people.

UNDERSTANDING DIGITAL COMPUTERS—Paul Siegel—*Wiley*, 403 p., illus., \$8.50. Exposition of the principles involved in operating and programming digital computers.

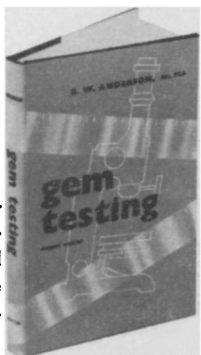
THE WONDERFUL LIFE OF FLOWERS—Paul Jaeger, transl. from French by J. P. M. Brenan—*Dutton*, 195 p., 9" x 12", 165 photographs by R. H. Noailles and others, \$12.50. Beautifully illustrated work of French botanist presenting many aspects of plant life in the light of recent research.

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