

Books of the Week

For the editorial information of our readers, books received for review since last week's issue 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. Request free publications direct from publisher, not from Science Service.

ATOMIC ENERGY LEVELS: As Derived from the Analyses of Optical Spectra. Vol. III—Charlotte E. Moore—*Govt. Printing Office*, Nat. Bureau of Standards Circular 467, 245 p., \$2.50. Covers the elements Molybdenum through Lanthanum, Z-42 through 57; and Hafnium through Actinium, Z-72 through 89.

BASIC AERONAUTICAL SCIENCE AND PRINCIPLES OF FLIGHT—Robert D. Blacker—*Am. Technical Society* for U. S. Armed Forces Institute under the title AN INTRODUCTION TO GENERAL AERONAUTICS, 243 p., illus., \$5.95. A primer for the prospective pilot.

CHEMICAL ENGINEERING PRACTICE: Vol. 4, Fluid State—Herbert W. Cremer and Trefor Davies, Eds.—*Academic*, 642 p., \$17.50. Thermodynamics of physical systems.

COASTAL SAND DUNES OF OREGON AND WASHINGTON—William S. Cooper—*Geol. Soc. of Am.*, 169 p., illus., maps, \$3.50. Analyzes the environment, deals with the development of its forms and processes, and describes the history of the dunes.

COME NORTH WITH ME: An Autobiography—Bernt Balchen—*Dutton*, 318 p., illus., \$5. The Norwegian explorer, who became a U. S. A. F. Colonel, tells of his historic flights with Admiral Byrd.

THE DYNAMICS OF BACTERIAL POPULATIONS MAINTAINED IN THE CHEMOSTAT—Heimann Moser—*Carnegie Inst.*, 136 p., illus., cloth \$1.40, paper, \$1.15. A mathematical study of mutation and selection in continuously growing bacterial populations.

ELECTRIC CONDUCTION IN SEMICONDUCTORS AND METALS—W. Ehrenberg—*Oxford Univ.*

Press, 389 p., \$10.10. A textbook for students, research workers and engineers on the underlying theory and the electrical properties of semiconductors.

ELEMENTARY SCHOOL SCIENCE AND HOW TO TEACH IT—Glenn Blough, Julius Schwartz and Albert J. Huggett—*Dryden (Holt)*, rev. ed., 608 p., illus., \$6.75. For courses which combine the methods of teaching science with a survey of the science subject matter.

EXCAVATIONS, 1940, AT UNIVERSITY INDIAN RUIN, TUCSON, ARIZONA—Julian D. Hayden—*Southwestern Monuments Assn.*, 234 p., illus., paper, \$4. A large prehistoric Indian settlement, the area serves as a field laboratory for the University of Arizona.

HELICOPTERS TO THE RESCUE—How the Amazing "Whirly-Birds" Do the Impossible—C. B. Colby—*Coward-McCann*, 48 p., illus., \$2. A pictorial report showing the versatility of the helicopter in operation.

THE HIGH SCHOOL IN A NEW ERA—Francis S. Chase and Harold A. Anderson, Eds.—*Univ. of Chicago Press*, 465 p., \$5.75. Papers presented at a 1957 conference sponsored by the University of Chicago and the National Citizens Council for Better Schools.

INFORMATION AND COMMUNICATION PRACTICE IN INDUSTRY—T. E. R. Singer—*Reinhold*, 304 p., illus., \$8.75. On the organization and operation of an information department, and its many activities. Bibliographies.

JUVENILE DELINQUENCY—Joseph S. Roucek—*Philosophical Lib.*, 370 p., \$10. Fourteen specialists offer a systematic evaluation of current experience.

MATHEMATICS CLUBS IN HIGH SCHOOLS—Walter H. Carnahan, Ed.—*Nat. Council of Teachers of Mathematics*, 32 p., paper, 75¢. Incorporates successful ideas of experienced teachers to help students and teachers with their mathematics club activity.

MEDICAL ELECTRICAL EQUIPMENT: Principles, Installation, Operation and Maintenance of Electrical Equipment Used in Hospitals and Clinics—Robert E. Molloy, Advis. Ed.—*Philosophical Lib.*, 312 p., illus., \$15. There are now few fields of medical work in which electrical apparatus does not play an important role.

MEN, ROCKETS AND SPACE RATS—Lloyd Malan—*Messner*, rev. ed., 336 p., illus., \$5.95. Takes the reader into the cockpits of rocket ships, the laboratories of scientists and the U. S. testing grounds.

MIRROR TO PHYSIOLOGY: A Self-Survey of Physiological Science—R. W. Gerard—*Am. Physiological Soc.*, 372 p., illus., \$5. A pioneering survey of the profession, its training and

recruitment, its employment and income, and its research facilities and programs.

MODERN CHEMISTRY—Charles E. Dull, H. Clark Metcalfe and John E. Williams—*Holt*, rev. ed., 696 p., illus., \$4.96. A high school textbook, each unit followed by more difficult exercises: "Check Your Progress in Chemistry" and "Challenging Your Knowledge."

MODERN FOREIGN LANGUAGES IN THE HIGH SCHOOL—Marjorie C. Johnston, Ed.—*Govt. Printing Office* for Office of Education, 166 p., illus., paper, \$1. As late as 1955 only 14.2% of our public high school pupils were enrolled in any foreign, modern language.

NUCLEAR MAGNETIC RESONANCE—Frederick C. Nachod, Ed.—*N. Y. Acad. of Science*, Annals Vol. 70, Art. 4, 164 p., \$3.50. NMR is a new tool for the physicochemical investigation of molecular structure.

ON THE MAGNET—William Gilbert—*Basic Bks.*, 339 p., illus., \$8.50. Facsimile of the English version of Gilbert's investigations of magnetism, dating from about 1581.

RESEARCH IN PSYCHIATRY WITH SPECIAL REFERENCE TO DRUG THERAPY—Milton Greenblatt, Ed.—*Psychiatric Research Reports*, 9, 181 p., paper, \$2. Papers presented at APA Regional Research Conference in Philadelphia, November 1956.

SCIENCE AND TECHNOLOGY ACT OF 1958: Analysis and Summary—Senate Committee on Govt. Operations—*Govt. Printing Office*, 198 p., paper, 45¢. Discusses a bill to create a Department of Science and Technology and related matters.

SCIENCE AND TECHNOLOGY ACT OF 1958: Hearings, Part I—Subcommittee Reorganization—U. S. Senate Committee on Government Operations, 297 p., paper, free upon request to Committee, Washington 25, D. C.

SCIENCE CAN BE FUN—Munro Leaf—*Lippincott*, 48 p., illus., with pen drawings by the author, \$2.75. Explains with the help of amusing drawings simple science for children.

SCIENCE STUDENTS' GUIDE TO THE GERMAN LANGUAGE—A. F. Cunningham—*Oxford Univ. Press*, 186 p., \$2. An experienced teacher's method, using current scientific reading matter.

SELLING TO AEC—Atomic Energy Commission—*Govt. Printing Office*, rev. ed., 34 p., paper, 25¢. Discusses organization and procurement program, lists purchasing officers and products purchased, gives Atoms for Peace information.

SHOOTING STARS—Herbert S. Zim—*Morrow*, 64 p., illus. by Gustav Schrotter, \$2.50. Tells the story of meteors and meteorites, their composition and orbits.

TEACHING ARITHMETIC FOR UNDERSTANDING—John L. Marks, C. Richard Purdy and Lucien B. Kinney—*McGraw-Hill*, 429 p., \$6. A program for the first eight years of school, to develop the students' ability to compute, reason and communicate with numbers.

TECHNICAL EDITING—B. H. Weil, Ed.—*Reinhold*, 278 p., illus., \$5.75. Gives basic concepts and operating practices in internal communications, journal editing and book publishing for all technical fields.

WONDERS OF YOUR SENSES—Margaret Cosgrove—*Dodd*, 64 p., illus. by author, \$2.95. Explains in simple language and with drawings what our senses are and how they function.

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NUCLEAR ENERGY by Alexander Efron, E.E., Ph.D.

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