

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.

AEROSPACE HIGHLIGHTS: Facts and Figures from the Aerospace World—Jane N. Marshall, Ed.—*Nat. Aviation Educ. Council*, 54 p., illus., paper, 50¢. Some striking facts about modern aeronautics and astronautics.

AMERICA ON THE MOON: The Enterprise of the Sixties—Jay Holmes, preface by E. C. Welsh—*Lippincott*, 272 p., illus., \$4.50. Gives a broad picture of the why and how of American activities in space, with emphasis on the civilian portion.

ANIMALS IN SCIENCE: Saving Lives Through Research—Margaret O. Hyde—*McGraw*, 143 p., illus., by P. A. Hutchison, \$3.25. For young experimenters in biology.

APPLIED MATHEMATICS FOR RADIO AND COMMUNICATION ENGINEERS—Carl E. Smith—*Dover*, 349 p., illus., paper, \$1.75. Reprint (1945).

BIBLIOGRAPHY OF THE IONOSPHERE: An Annotated Survey Through 1960—Laurence A. Manning—*Stanford Univ. Press*, 613 p., \$15. Contains abstracts describing nearly 4,000 papers dealing with ionospheric radio propagation, radio studies of the ionosphere, and physics of the ionosphere.

THE COMPLETE BOOK OF NATURE PHOTOGRAPHY—Russ Kinne, introd. by Roger Tory Peterson—*Barnes (Ziff-Davis)*, 191 p., photographs by author, \$7.50. Features detailed discussion of the ideal equipment and its care, then deals with special problems of plant, bird, insect, zoo and underwater photography.

ELECTRONIC MUSICAL INSTRUMENT BOOK—Norman H. Crowhurst—*Sams*, 128 p., illus., paper, \$2.50. Explains the principles and operation of electronic sound production reinforcement by microphone, and purely electronic musical instruments.

FAMILY ENVIRONMENT AND DELINQUENCY—Sheldon and Eleanor Glueck, with statistical assistance of Rose W. Kneznek—*Houghton*, 328 p., \$6.50. Analysis of five-year study focusing on certain sociocultural influences involved in the development of traits, and providing insight into the sources of juvenile delinquency.

GUIDE TO SPECIAL ISSUES AND INDEXES OF PERIODICALS—Doris B. Katz, Charlotte Madison and Mary Margaret Regan, Eds.—*Special Libraries Assn.*, 125 p., paper, \$5.75. Helpful for locating journal issues that contain indexes, special directories and convention data.

THE HIDDEN YOU: Psychology in Your Life—Arthur Alexander—*Prentice-Hall*, 63 p., illus., by Zenowii Onyskewych, \$2.95. Juvenile literature, tells the story of the mind and how it works.

HOW PLANTS GROW—Marie Neurath—*Sterling*, 36 p., illus., \$2.50. Facts about plant life in simple language with colorful diagrams.

HOW TO GET MORE DONE IN LESS TIME—Joseph D. Cooper—*Doubleday*, 346 p., \$4.95. About greater efficiency in business and industry, and applied psychology hints for increasing personal efficiency.

IDEAS FOR SCIENCE PROJECTS—Victor Showalter and Irwin Slesnick—*Nat. Science Teachers Assn.*, 53 p., illus., paper, \$1. Asks many questions that might give students ideas for investigation, and shows how three students set up different projects to probe the same phenomenon.

IDENTIFICATION OF ENTEROBACTERIACEAE—P. R. Edwards and W. H. Ewing—*Burgess*, 2nd ed., 258 p., paper, \$5.75. Deals chiefly with the

isolation and recognition of the genera and groups with which the medical bacteriologist is concerned.

INTRODUCTION TO HYDRAULIC FLUIDS—Roger E. Hatton—*Reinhold*, 363 p., illus., \$12.95. Presents a common ground for understanding the relationship between the chemical and physical properties and the mechanical aspects of the hydraulic system, for chemists and engineers.

LABORATORY STUDIES IN GEOLOGY 201-208—James C. Brice—*Freeman*, 7 separate worksheet manuals, illus., 25¢ each. Manuals cover crystal growth, identification of minerals, crystalline structure, gem minerals, classification of rocks, igneous rocks, streams, and landscape evolution.

LABORATORY STUDIES IN GEOLOGY, 213-227—John P. Miller and Robert Scholten—*Freeman*, 15 separate worksheet leaflets, illus., paper, 25¢ each. Manuals cover minerals, igneous, sedimentary, metamorphic rocks, topographic maps, geologic structure, aerial mapping, streams, landscapes, ground water, wind, glaciers, shoreline features, vulcanism, and earth.

LOUD SPEAKERS: Theory, Performance, Testing, and Design—N. W. McLachlan—*Dover*, 399 p., illus., paper, \$2.25. Unabridged and corrected version of the first edition (1934).

MARINE SCIENCES INSTRUMENTATION, Vol. I—Roy D. Gaul and others, Eds.—*Plenum Press*, 354 p., illus., \$12.50. Collection of instrumentation papers presented at the Marine Sciences Conference, 1961, at Woods Hole, Mass.

MATHEMATICS MANUAL—Frederick S. Merritt—*McGraw*, 378 p., illus., \$9.50. Methods and principles of the various branches of mathematics for reference, problem solving and review.

MICROBES IN ACTION: A Laboratory Manual of Microbiology—Harry W. Seeley, Jr. and Paul J. Vandermark—*Freeman*, 449 p., illus., \$3.90. Based on current laboratory work in elementary bacteriology at Cornell University.

MOLECULAR BIOCHEMISTRY—Edward M. Kosower—*McGraw*, 304 p., diagrams, \$12.50. For graduate students and research workers, this book surveys and classifies reactions of intermediary metabolism, discussing mechanisms of these reactions and relationship to the enzymatic reaction.

THE NEW AMERICAN GUIDE TO COLLEGES—Gene R. Hawes, introd. by Virgil M. Hancher—*Columbia Univ. Press*, 2nd ed., 376 p., \$5.95. Up-to-date key information on 2,675 undergraduate institutions of all types and in all parts of North America.

NURSE: Careers Within a Career in Professional Nursing—Edith Patton Lewis—*Macmillan*, 178 p., \$3.50. Replaces an outmoded picture of nursing by describing the many and varied activities that make up a professional nurse's day.

PHOTOELECTRIC CONTROL—Harvey Pollack—*Rider J. F.*, 136 p., illus., paper, \$3.50. Deals with classes and principles of phototubes, basic phototube relays and light-sensitive semiconductor devices.

PICTURE BOOK OF PIONEERS IN SCIENCE—Dale Cunningham—*Sterling*, 64 p., illus., paper, \$1. Quick review of outstanding scientists and their works, from Thales of Greece (500 B.C.) to Albert Einstein.

PICTURE BOOK OF TODAY'S SCIENTISTS—Walter E. Gourlay—*Sterling*, 64 p., photographs, paper, \$1. Introduces the general reader to the work

of outstanding living scientists who are exploring new frontiers in various fields.

RECENT PROGRESS IN HORMONE RESEARCH: The Proceedings of the 1961 Laurentian Hormone Conference—Gregory Pincus, Ed.—*Academic Press*, 535 p., illus., \$15.00. Deals mainly with hormonal polypeptides and their functional activities, and thyroid, parathyroid and steroid hormones.

THE SCIENTIFIC BASIS OF ILLUMINATING ENGINEERING—Patty Moon—*Dover*, rev. ed., 605 p., illus., paper, \$2.85. Deals mainly with basic principles.

SOLID-STATE COMPUTER CIRCUITS: Computer Basics, Vol. 6—Technical Education and Management, Inc.—*Sams*, 224 p., illus., paper, \$4.95. Practical treatment of transistorized logic arithmetic circuits and magnetic-core devices.

SOME ASPECTS OF NEUROANATOMY—V. N. Ternovskii, Ed., transl. from Russian—*Consultants*, 181 p., illus., \$15.00. Collection of articles devoted to the study of the anatomy of the central and peripheral nervous system.

TAKE SHAPES, LINES AND LETTERS: New Horizons in Mathematics—Jeanne Bendick and Marcia Levin—*Whittlesey House*, 79 p., illus., by Jeanne Bendick, \$2.75. Introduces youngsters to mathematics, without numbers, and to shapes, lines, angles and letters.

TECHNOLOGICAL PLANNING ON THE CORPORATE LEVEL—James R. Bright, Ed.—*Harvard Univ. Grad. School of Business*, 253 p., paper, \$3.50. Proceedings of 1961 conference which evaluated the effects of technological innovation on industrial management.

TELEVISION SIMPLIFIED—Milton S. Kiver—*Van Nostrand*, 6th ed., 637 p., illus., \$9.95. Completely revised to incorporate the important advances in TV receivers since 1955, including new chapter on remote-control systems.

TRANSISTOR MANUAL—J. E. Cleary, Ed.—*General Electric, Syracuse*, 6th ed., 440 p., illus., paper, \$2. Comprehensive handbook, includes signal diodes, covers basic semiconductor theory, applications, circuits and specifications.

USES OF INFINITY—Leo Zippin—*Random House*, 151 p., diagrams, paper, \$1.95. Written by a mathematician for high school student and layman, emphasizing the process of thinking through and solving problems.

WATER-SOLUBLE RESINS—Robert L. Davidson and Marshall Sittig, Eds.—*Reinhold*, 209 p., \$7.50. Essential data and information on the many diverse polymeric materials having the common property of water solubility.

THE WAYS OF THE AIR—Roger Pilkington—*Criterion Bks*, 192 p., photographs, diagrams, \$3.95. Readable account of the scientific concepts of the atmosphere and weather phenomena, for the general reader.

WHAT RUSSIAN SCIENTISTS SAY ABOUT FALLOUT—A. V. Lebedinsky, Ed., transl. from Russian, new introd. by James F. Crow—*Collier Bks*, 124 p., paper, 95¢. Includes technical papers as well as opinions of Soviet scientists.

WORKSHOPS FOR THE WORLD: The United Nations Family of Agencies—Graham Beckel with Felice Lee—*Abelard-Schuman*, rev. ed., 285 p., illus., \$4.95. Discusses in some detail the functions of the specialized agencies of the U.N.

YOUNG PEOPLE'S SCIENCE ENCYCLOPEDIA, Vols. 1 to 20—W. Ray Rucker, Ed.—*Childrens Press*, 2,070 p., illus. in color, set of 20 vols. \$59.95. All-science encyclopedia, edited especially for elementary grade pupils by the Staff of the National College of Education, with special feature "Things to Do", and each entry with graduated vocabulary starting at 3rd grade reading level through 8th grade. Parents' and teachers' guide, bibliography, thoroughly cross-indexed.

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