

# Books of the Week

For the editorial information of our readers, books received for review are listed. For convenience purchase of any U. S. Book in print, priced at 95¢ or over, 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.

**ALASKA'S RAILROAD BUILDERS:** Mike Heney—Edward A. Heron—*Messner*, 192 p., \$2.95. Juvenile biography.

**APPLICATIONS OF THERMOELECTRICITY—**H. J. Goldsmid—*Wiley*, 118 p., \$2.25. Introduction to the subject written by specialist.

**ARTHRITIS AND YOU—**James W. Brooke—*Harper*, 150 p., \$3. Written by physician for the arthritic and his family.

**BANGKHUAD:** A Community Study in Thailand—Howard Keva Kaufman—*Augustin*, 235 p., illus., \$5.50. Monograph of the Association of Asian Studies, about the function of the wat (Buddhist church) in a small rural village.

**BASIC ULTRASONICS—**Cyrus Glickstein—*Rider*, 137 p., illus., \$4.60; paper, \$3.50. General theory and basic types of ultrasonic equipment.

**BIOLOGY—**Alfred M. Elliott and Charles Ray, Jr.—*Appleton*, 723 p., illus., \$8. For the beginning college student.

**THE BIRDS—**Oskar and Katharina Heinroth—*Univ. of Mich. Press*, 181 p., illus., paper, \$1.95. About bird habits and bird senses, originally published in Germany.

**CASSELL'S SPANISH DICTIONARY:** Spanish-English, English-Spanish—Edgar Allison Peers and others, Eds.—*Funk*, 1477 p., \$7; thumb-indexed \$7.75. Comprehensive new dictionary, incorporating Latin-American usage.

**CAVES OF ADVENTURE—**Haroun Tazieff, transl. from French by Alan Hodge—*Viking*, 222 p., photographs, paper, \$1.45. Expedition into the labyrinth of caves 2,000 feet underground in the Pyrenees.

**THE CHANGING MIDDLE EAST—**Emil Lengyel—*Day*, 376 p., \$5.75. Deals mainly with events in the decade 1950-60, and covers the region from Libya to Iran.

**COMMUNICATION: From Stone Age to Space Age—**Harry Edward Neal—*Messner*, 192 p., photographs, \$3.50. A non-technical survey from sign language to radio signals via satellite.

**CONQUEROR OF SMALLPOX: Dr. Edward Jenner—**I. E. Levine—*Messner*, 190 p., \$2.95. Juvenile biography.

**COSMETIC SCIENCE—**A. W. Middleton, Ed.—*Butterworths (Canada)*, 327 p., illus., \$12. Papers and discussions of the First British Congress on Cosmetic Science, London, 1959.

**THE CRAFT OF TECHNICAL WRITING—**Daniel Marder—*Macmillan*, 400 p., \$5. Textbook on techniques of organization, structure and style.

**CRYSTAL GROWTH: Discussions of the Faraday Society, 1949—**N. F. Mott and others, introd. by W. E. Garner—*Butterworths (Canada)*, 366

p., illus., \$12. Nucleation and normal crystal growth, abnormal and modified growth, and technical aspects of mineral synthesis.

**DIVE! The Story of an Atomic Submarine—**Commander H. B. Harris-Warren—*Harper*, 130 p., photographs, \$2.95. Young reader's introduction to life and work on an atomic submarine.

**ENERGY AND MAN: A Symposium—**Allan Nevins and others, introd. by Courtney C. Brown—*Appleton*, 113 p., \$3.75. Other participants were Robert G. Dunlop, Edward Teller, Edward S. Mason, and Herbert Hoover, Jr.

**FLUIDIZATION AND FLUID-PARTICLE SYSTEMS—**Frederick A. Zenz and Donald F. Othmer—*Reinhold*, 513 p., illus., \$15. Reference work for the practicing engineer, covering developments in fluid-solids processing, including the moving bed techniques, fluidization, and transport reactors.

**FROM ENGINES TO AUTOS: Five Pioneers in Engine Development and Their Contributions to the Automotive Industry—**Eugen Diesel, Gustav Goldbeck and Friedrich Schildberger—*Regnery*, 302 p., illus., \$6. Story of the five German inventors: Otto, Daimler, Benz, Bosch and Diesel.

**FUN WITH SCIENTIFIC EXPERIMENTS—**Mae and Ira Freeman—*Random House*, 59 p., photographs, \$1.50. Gives boys and girls directions for simple experiments which explain basic scientific laws.

**THE GEOLOGICAL EVOLUTION OF NORTH AMERICA: A Regional Approach to Historical Geology—**Thomas H. Clark and Colin W. Stearn—*Ronald*, 434 p., illus., \$7.50. Presents historical development of the continent in terms of the bordering geosynclines, the stable interior and the Canadian Shield.

**GERMAN-ENGLISH MATHEMATICS DICTIONARY—**Charles Hyman—*Interlanguage Dictionaries*, 131 p., \$8. More than 8500 entries with subtitles and synonyms.

**THE GERMAN VEST POCKET DICTIONARY: German-English and English-German—**Jenni Karding Moulton, William G. Moulton, Ed.—*Random House*, 400 p., \$1.65. 40,000 entries, based on American usage.

**HELPING YOUR GIFTED CHILD—**Ruth Strang, introd. by Cyril William Woolcock—*Dutton*, 270 p., \$4.50. Deals with very bright children, IQ's of 145 or higher, and their developmental growth through various age levels.

**HEMOPHILIA AND OTHER HEMORRHAGIC STATES: International Symposium, Rome—**Kenneth M. Brinkhous and Pietro de Nicola, Eds.—*Univ. of N.C. Press*, 266 p., illus., \$7.50. Papers on recent advances in the field.

**AN INTRODUCTION TO CHEMICAL NOMENCLATURE—**R. S. Cahn—*Butterworths (Canada)*, 96 p., paper, \$2.25. Describes principles of modern

systematic nomenclature and treats both inorganic and organic chemistry.

**LIGHT: Visible and Invisible—**Eduard Ruedhardt—*Univ. of Mich. Press*, 201 p., illus., paper, \$1.95. Introduction to the study of optics, for the general reader.

**MAGNESIUM AND ITS ALLOYS—**C. Sheldon Roberts—*Wiley*, 230 p., illus., \$9. Reference work of value to chemists, physicists, metallurgists and engineers.

**MATTER, ENERGY AND CHANGE: Explorations in Chemistry for Elementary School Children—**Harry Milgrom—*Manuf. Chemists Assn*, 50 p., illus., paper, 50¢. Booklet of experiments emphasizing chemical principles, to aid elementary school teachers.

**MEASURING THE INVISIBLE WORLD: The Life and Works of Antoni van Leeuwenhoek—**A. Schierbeck, biog. chapter by Maria Rooseboom—*Abelard-Schuman*, 223 p., illus., \$5. Short history of the life work of the 17th century scientist who was the first to measure microscopic objects.

**MECHANICAL RADIATION—**Robert Bruce Lindsay—*McGraw*, 415 p., \$10. Textbook for unified course in radiation physics, with discussion of recent advances.

**MEN OF MEDICINE—**Katherine B. Shippen—*Viking*, 220 p., illus. by Anthony Ravielli, paper, \$1.25. Five thousand years of the art of healing.

**THE MERCK INDEX of Chemicals and Drugs—**Paul G. Stecher, Ed.—*Merck & Co.*, 7th ed., 1641 p., \$12. Expanded encyclopedia for chemists, pharmacists, physicians, and allied professions.

**THE MODERN ASPECT OF MATHEMATICS—**Lucienne Felix, transl. from French by J. H. and F. H. Hlavaty—*Basic Bks*, 194 p., \$5. Exposition of recent mathematical developments of the French Bourbakist group which seeks to merge the traditional compartments of mathematics into one interrelated system.

**MOLECULES IN MOTION—**T. G. Cowling—*Harper*, 183 p., paper, \$1.35. An introduction to the kinetic theory of gases.

**MOST-OFTEN-NEEDED 1960 TELEVISION SERVING INFORMATION—**M. N. Beitman, Ed.—*Supreme Publications*, 192 p., illus., paper, \$3. Diagram, alignment facts, voltage values, wave forms and other service data.

**MOTION AND TIME STUDY: Principles and Practice—**Marvin E. Mundel—*Prentice-Hall*, 3rd ed., 690 p., illus., \$11.95. Authoritative guide brought up to date, reflecting industrial applications during the past five years.

**THE NATURAL HISTORY OF THE SOUTHWEST—**William A. Burns, Ed.—*Watts, F.*, 144 p., photographs, \$4.95. Illustrated story of wild-life in desert and forest.

**NUCLEAR FUSION—**William P. Allis, Ed.—*Van Nostrand*, 488 p., illus., \$12.50. Up-to-date world wide information on nuclear fusion collected from important papers presented at the Second Geneva Conference.

**NUCLEAR POLICY FOR WAR AND PEACE—**Thomas E. Murray—*World Pub. Co.*, 241 p., \$4. Long-time Atomic Energy Commissioner (1950-1957) gives his analysis and views on U.S. nuclear strategy, including nuclear weapons control and peaceful uses of atomic energy.

**THE OSCILLATING UNIVERSE—**Ernst J. Opik—*New Am. Lib.*, 144 p., paper, 50¢. Original

**Chemical Predictor**  
... the calculator used by chemists everywhere. Instantly predicts and illustrates 10,000 oxidation-reduction equations. **\$3.25**

**Solution Concentration & Gas Law Slide Rule**  
... instantly solves problems involving MOL FRACTION MOLALITY LIQUID-VAPOR EQUILIBRIUM VOL FRACTION MOLALITY P-T-V RELATIONSHIPS **\$10.00**  
Answers are given to correct decimal place. Includes standard scales for multiplication and division. Saves time—reduces errors. Complete with instructions and case.

**pH Slide Rule**  
... will solve the equation  $pH = pK + \log \frac{base}{acid}$  in one setting. **\$4.85**  
Complex buffer solutions can be solved immediately and accurately without time-consuming log calculations. Complete with instructions and case.

All items made of lifetime plastic—Satisfaction Guaranteed  
Enclose check or money order with order  
**Dyna-Slide Company, Dept. 4A**  
600 South Michigan Ave., Chicago 5, Ill.

**GOLD • SILVER • URANIUM**  
LEARN How to Know and Identify Ores and Minerals. This Prospector's Set of 24 Ores and Minerals, including Gold, Silver, Uranium, Copper, Lead, Zinc, Nickel and 17 others—PLUS a 192 page, fully illustrated book, with easy to follow—step by step instructions; shows you how to identify hundreds of minerals.—Complete with magnifying glass—\$4.95  
**MERRITT MINERALS**  
2112-L Fort Dearborn Sta., Dearborn, Michigan

**FREE CATALOGUES OF SCIENCE BOOKS**  
State your interest! Mathematics, physics, history of science, general science, biology, social sciences, earth sciences, chemistry, languages, philosophy, engineering. Dover publishes over 100 books per year; quality production standards, priced for your budget. Dept. SNL. DOVER, 180 Varick St., N. Y. 14, N. Y.

edition of leading astronomer's introduction to our cosmic surroundings, for general reader.

**PARAMAGNETIC RESONANCE IN SOLIDS**, Supplement 2 to SOLID STATE PHYSICS—William Low—*Academic*, 212 p., \$7.50. Theoretical aspects treated in detail, covers the field for the advanced graduate student, the physicist, chemist, and electronic engineer.

**PHYSICS AND MICROPHYSICS**—Louis de Broglie, transl. by Martin Davidson, foreword by A. Einstein—*Harper*, 286 p., paper, \$1.50. Expositions on physics and the history and the philosophy of science.

**PLANT LIFE THROUGH THE AGES: A Geological and Botanical Retrospect**—A. C. Seward, includ. 9 reconstructions of ancient landscapes by Edward Vulliamy—*Hajner Pub. Co.*, 603 p., illus., \$12.50. Reprint of second edition, 1933. Paleobotany for the non-specialist.

**PLANT PATHOLOGY: An Advanced Treatise, Vol. II: The Pathogen**—J. G. Horsfall and A. E. Dimond, Eds.—*Academic*, 715 p., illus., \$22. Specialists discuss the antecedents of plant diseases and how disease originates.

**PRINCIPLES OF UNIT OPERATIONS**—Alan S. Foust and others—*Wiley*, 578 p., illus., \$15. For junior students in chemical engineering, text emphasizes the general principles underlying groups of operations.

**THE PSYCHOLOGY OF PERCEPTION**—William N. Dember—*Holt*, 402 p., illus., \$6.50. One-semester laboratory course in perception with emphasis on problems of measurement, visual psychophysics, and the effects of learning on perception.

**QUANTUM ELECTRONICS: A Symposium**—Charles H. Townes, Ed.—*Columbia Univ. Press*, 606 p., illus., \$15. Among topics discussed are molecular beam masers, atomic clocks, and use of very low noise amplifiers for radio astronomy.

**RADIOISOTOPES IN SCIENCE AND INDUSTRY: A Special Report**—Atomic Energy Commission—*GPO*, 176 p., illus., paper, \$1.25. Summarizes AEC's research developments on peaceful uses of radiation and reactor byproducts.

**SCIENCE IN PROGRESS**—Armand J. Eardley and others, Hugh Taylor, Ed.—*Yale Univ. Press*, 11th ed., 379 p., illus., \$7.50. On the cause of mountain building, on radio astronomy, chemical anthropology, viruses as cause of cancer, and other recent research.

**SCIENCE TODAY for the Elementary-School Teacher**—John Gabriel Navarra and Joseph Zaffaroni—*Row*, 470 p., illus., \$6.40. More than 200 experiments integrated with text.

**SIMPLIFIED DESIGN OF REINFORCED CONCRETE**—Harry Parker—*Wiley*, 2nd ed., 303 p., \$6.50. Standard introductory text.

**SOLID STATE PHYSICS: Advances in Research and Applications, Vol. 10**—Frederick Seitz and David Turnbull, Eds.—*Academic*, 516 p., \$14.50. Positron annihilation studies, interpretation of intermetallic diffusion phenomena, and other studies.

**SUNSET LAWN AND GROUND COVER BOOK**—Joseph F. Williamson, Ed.—*Lane Pub. Co.*, 2nd ed., 95 p., illus., paper, \$1.75. How to choose, plant and care for lawn. Evaluation chart of cool-season grasses and vital statistics chart on 100 ground covers.

**THEORIES OF SCIENTIFIC METHOD: The Renaissance through the Nineteenth Century**—Ralph M. Blake, Curt J. Ducasse and Edward H. Madden, Ed.—*Univ. of Wash. Press*, 346 p., \$6.50. Investigates scientific concepts through five centuries of Western thought.

**THERE'S ADVENTURE IN MARINE SCIENCE**—Julian May—*Pop. Mechanics*, 160 p., illus. by Richard Potts, \$2.95. Teenager finds out about careers in the field of oceanography.

You are cordially invited to attend the

# 11th National Science Fair-International

Butler University Fieldhouse, Indianapolis, Indiana

About 370 exhibits from 200 regional, state and nation-wide science fairs will be shown, including participants from Canada, Puerto Rico, Germany, Japan, and Thailand.

**THURSDAY and FRIDAY, MAY 12 and 13**

9:00 a.m. to 10:00 p.m.

Finalists will be present on

Thursday, 9:00 to 10:45 a.m.—Friday, 1:30 to 5:00 p.m.

11th National Science Fair-International closes Friday, 10:00 p.m.

### SCIENCE COLOR FILM PROCESSING SERVICE

Fast, convenient service that guarantees you finest quality, genuine Kodak laboratory processing right here in Rochester. For Kodachrome, Ektachrome, Kodacolor. All sizes, including 35 mm. Movie, stereos, slides, prints, enlargements. Ansco color films handled too. Special customer services. Security Processing for Classified Films brings slides or prints direct from Kodak labs. Special quantity discounts on fresh, factory-packed color film. Write for complete catalog or send exposed film for quick test of our service.

**FASCOLOR • Rm 64 Fulmar Bldg. BOX 86—ROCHESTER 1, N. Y.**

## STEREOSCOPIC MICROSCOPE

### for the budget-minded!

Designed and sturdily built for educational or industrial use, UNITRON Model MSL has the same optical and mechanical features found in higher priced instruments.

- Erect, three-dimensional image
- Coated optics and prisms
- Achromatic 2X paired objectives, paired wide field eyepieces
- Working distance 75mm.
- Vertical binocular body with interpupillary and diopter adjustments
- Total focusing excursion 70mm.
- Heavy base, removable glass stage plate, stage clips
- Choice of one magnification 10X, 20X or 30X, extra eyepieces available

Complete in fitted hardwood cabinet . . .

**FREE 10 DAY TRIAL**

ALSO AVAILABLE

Model MSL-A with magnifications—  
 5X or 10X or 15X . . . . . \$120.00  
 Extra eyepieces . . . . . Pair \$19.50  
 Model LS Stereoscopic Microscope Lamp . . . . . \$14.75

**UNITRON**

INSTRUMENT DIVISION OF UNITED SCIENTIFIC CO.  
 204-206 MILK STREET • BOSTON 9, MASS.

Please rush to me, UNITRON's Microscope Catalog. 5B-5

Name \_\_\_\_\_  
 Company \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_

### SAFEGUARD YOUR EYES!

Don't use your binoculars in glaring sunlight without this **Filtrol**. Raw unfiltered, uncontrolled, bright sunshine on desert, mountain or sea will strain your eyes. This Variable Density Filtrol (Polaroid) varies the amount of light (without glare) you need for best viewing. You alone adjust exactly how much light reaches your eyes. U. S. Gov. surplus. Cost over nine times what we ask. Filtrol to fit over the eyepieces of any binocular: Only \$1.00 postpaid, includes instructions.

**HARRY ROSS, Scientific & Laboratory Apparatus**  
 61-L Reade Street, N. Y. 7, N. Y.

## GIANT 30 FOOTERS \$2



Inflate to Giant 20 to 30 ft. diameter with air or Gas. Flying Advt. visible for miles. Terrific for attracting crowds at Openings, Fairs, Roadside Stands, Gas Stations, Sports Events. Used as Water Markers and Buoys. Made of genuine Neoprene Rubber for extra durability. Never used. Orig. cost U.S. Govt. \$20.00. Limited quantity. Special offer only \$2.00 each plus 50c each postage & handling charge (5 for \$10.00) complete. 8 ft. size 59c ea. (2 for \$1.00). 10 ft. size \$1.00 ea. (6 for \$5.00). No C.O.D's.

**NOVEL MFG.** 33 2nd Ave., Dept. G-3219  
 New York 3, New York

## NOW! New Low Price . . . on SWISS-MADE POCKET-SIZE REMINDER TIMER

**YOUR PERSONAL ALARM FULLY GUARANTEED WITH ATTACHED KEY RING**

Ideal for doctors, businessmen, chefs, housewives, etc. Accurately times anything from baking cakes to public speaking.

No larger than a man's wrist watch; you carry it wherever you go. Timer reminds you of appointments with a gentle buzz. Covers any period from 2 minutes to a full hour. Can't overwind. Quality-made for years of service by expert Swiss Craftsmen. It's the perfect answer to avoid overtime parking tickets, late appointments, etc. Invaluable for getting children off to school. Ideal for commuters, executives, salesmen and busy people everywhere. One dial sets alarm and winds fine Swiss movement simultaneously. Attractively finished and attached to handy key ring. Reg. \$12.95 **OUR PRICE \$4.95**

**TERMS:** Send check or money order. Extra fee for C.O.D. Open account to physicians, hospitals and firms.

**Arista Surgical Company**  
 DEPT. SNA-30, 37 LEXINGTON AVE.  
 NEW YORK 10, N. Y.