## Books of the Week

Listing is for readers' information, not advertising. For convenient purchase of any book listed or any U.S. book in print, remit retail price (we pay postage) plus  $25_{\ell}$  handling charge if price is less than \$2 to Book Department, Science Service, 1719 N St., N.W., Washington, D. C. 20036.

ACUTE PSYCHOTIC REACTION—Werner M. Mendel and Leon J. Epstein, Eds.—Psychiatric Res. Reports, 104 p., paper, \$2. Discussion and critical review of ideas and methods presented with formal papers ranging from acute syndrome in geriatric patients to acute psychosis as a manifestation of growth experience.

ADVANCES IN MARINE BIOLOGY, Vol. 1—F. S. Russell, Ed.—Academic Press, 410 p., illus., \$13.50. Among research covered are the rearing of bivalve mollusks, the breeding of North Atlantic freshwater cels, the biology of coral reefs, and the behavior and physiology of herring and other clupeids.

ANIMAL ECOLOGY: Aims and Methods—A. Maefayden—Pitman, 2nd ed., 344 p., illus., \$10. Offers comprehensive treatment of how animal ecologists determine why a given organism is found where and when it is, and how they learn to predict the future behavior of populations.

A BOOK OF MATHEMATICAL AND REASON-ING PROBLEMS: Fifty Brain Twisters—D. St. P. Barnard—Van Nostrand, 109 p., diagrams, \$2.50. Special feature is insertion of "Leads" between the problems and their solutions, intended to aid the baffled solver to think along the right lines.

CAREERS IN SPACE—Otto O. Binder—Walker & Co., 308 p., illus., \$6.50. A comprehensive guide to job opportunities and training for participation in the U.S. space program. Includes profiles of space industries, educational requirements, salaries and sources for career information.

CLINICAL BIOCHEMISTRY OF DOMESTIC ANIMALS—Charles E. Cornelius and Jiro J. Kaneko, Eds.—Academic Press, 678 p., illus., \$20. Covers comparative clinical pathology for research workers in biology and veterinary clinicians, includes chapter on the use of radioisotopes in veterinary clinical biochemistry. chemistry.

COLLOIDAL SURFACTANTS: Some Physiochemical Properties—Kozo Shinoda and others—Academic Press, 310 p., diagrams, \$11.50. Reports on research work with surface active agents carried out in Japan, in particular concerning micelle formation, nonionic urface active agents, adsorption, and monomolecular

EMERGING TECHNIQUES IN POPULATION RESEARCH—Arthur A. Campbell and others, foreword by Clyde V. Kiser and Alexander Robertson—Milbank Memorial Fund, 306 p., paper, \$2. Proceedings of Round Table at 1962 Conference, discussing aspects of fertility, family size, family planning, mortality and the significance of computers in population research. population research.

ENJOYING BIRDS IN UPSTATE NEW YORK
—Olin Sewall Pettingill Jr. and Sally F. Hoyt—
Cornell Laboratory of Ornithology, 89 p., illus. by
Orville W. Rice and Jane F. Pearsall, paper, \$2.10
direct to publisher, Ithaca, N. Y. An aid to recognizing, watching, finding and attracting birds in New
York State of Orange and Putnam Counties.

THE ENZYMES, Vol. 7: Oxidation and Reduction (Part A), Nictinamide Nucleotide-Linked Enzymes, Flavin Nucleotide-Linked Enzymes—Paul D. Boyer, Henry Lardy and Karl Myrback, Eds.—Academic Press, 2nd rev. ed., 726 p., diagrams, \$21. Complete revision of the earlier work.

50 MATHEMATICAL PUZZLES AND ODDI-TIES—Nicholas E. Scripture—Van Nostrand, 83 p., illus. by John Fowler, \$2.50. Collection of entertaining mathematical problems to help teachers of mathematics to enliven their lessons.

GENETIC EFFECTS OF RADIATIONS—C. E. Purdom—Academic Press, 173 p., illus., \$7. Scientist presents essential features of radiation genetics in a form understandable by the interested layman and students in other fields of scientific research.

GUIDE TO HOME AIR CONDITIONERS AND REFRIGERATION EQUIPMENT—Bernard Lamere—Rider, J. F., 122 p., illus., paper, \$2.95. Written primarily for the owner-user.

HUNGARIAN PROBLEM BOOK I and II: Based on the Eotvos Competitions, 1894-1905 and 1906-1928—Jozsef Kurschak, rev. by G. Hajos, G. Neukomm and J. Suranyi, Eds., transl. from Hungarian by Elvira Rapaport—Random House, 111 p., 120 p., paper, \$1.95 each. The Eotvos Contests in elementary mathematics, famous for their simplicity of concepts employed and mathematical depth, have been open to students in their last year of high school, among the winners were T. von Karman and E. Teller.

IDEAS AND INTEGRITIES: A Spontaneous Autobiographical Disclosure—Buckminster Fuller; Robert W. Marks, Ed.—Prentice-Hall, 318 p., photographs, \$6.95. Presents the ideas and personal thoughts of the originator of geodesic dome structures.

INFORMATION STORAGE AND RETRIEVAL: INFORMATION STORAGE AND RETRIEVAL:
Tools, Elements, Theories—Joseph Becker and Robert
M. Hayes—Wiley, 448 p., illus., \$11.95. Graduatelevel textbook stressing the interdisciplinary character
of the field of information storage and retrieval, providing an overview of all related aspects of the field.

INFORMATIONAL MACROMOLECULES—Henry J. Vogel, Vernon Bryson and J. Oliver Lampen, Eds.

—Academic Press, 542 p., illus., \$16.50. Papers presented at symposium held at the Institute of Microbiology of Rutgers University, dealing with the synthesis and properties of polynucleotides, protein synthesis, and the genetic code.

INORGANIC ADDUCT MOLECULES OF OXOCOMPOUNDS—Ingvar Lindqvist—Academic Press, 129 p., illus., \$6.50. Attempts review of past experimental work and presents theoretical treatment as a separate part of the work.

INSECT PATHOLOGY: An Advanced Treatise, Vol. 2—Edward A. Steinhaus, Ed.—Academic Press, 689 p., illus., \$20 till Oct. 31, 1963, \$23 thereafter. This second of authoritative two-volume work covering both infectious and noninfectious diseases in insects, treats among others the milky diseases, diseases caused by hyphomycetus fungi, and microbial control

INTRODUCTION TO MODERN BIOCHEMISTRY—P. Karlson, transl. from German by Charles H. Doering—Academic Press, 433 p., diagrams, \$10. Textbook presents facts to form a coherent set of principles, from the most modern substantiated viewpoint, often indicating current research interests.

IS THERE LIFE ON OTHER WORLDS?-Poul Anderson, introduction by Isaac Asimov—Crowe Collier Press, 223 p., diagrams, \$4.95. This bot is not science fiction, but a summary by a well-know science fiction writer who is also a scientist, of far well as speculation concernig planets and life

JOURNAL OF DATA MANAGEMENT, Vol. I. No. 1, June 1963—R. Calvin Elliott, Ed.—Data Processing Management Assn., 74 p., illus., paper, monthly, annual subscription \$5. Informs on developments in the data processing industry.

THE KINGDOM OF THE SUN—Isaac Asimov—Abelard-Schuman, rev. ed., 160 p., diagrams, \$3.50. Takes the reader through the history of man's growing comprehension of the universe.

LET'S FIND OUT ABOUT AIR—Martha and narles Shapp—Watts, F., 42 p., illus, by Laszlo Charles Shapp—Watts, F., 42 p., ill Roth, \$1.95. For the youngest readers. illus.

MALNUTRITION AND THE EYE—Donald Stewart McLaren—Academic Press, 390 p., illus., \$15.50. Critical and fully documented account of the evidence available from both experimental studies and clinical experience, covers subject for each group of nutrients for both man and animal.

MAN AND THE DESERT—Dan Q. Posin—Lyons (Meredith), 128 p., illus. by David Burnside, \$2.95. The dramatic story of the adaptation of animals and men to desert living, for boys and girls.

MAN AND THE EARTH—Dan Q. Posin—Lyons (Meredith), 127 p., illus. by David Burnside, \$2.95. An informative book for boys and girls about geologic eras and the ages of man.

MAN AND THE JUNGLE—Dan Q. Posin—Lyons (Meredith), 127 p., illus. by David Burnside, \$2.95. A story of plant and animal life in the jungles of South America, Africa and Malaysia.

MAN AND THE SEA—Dan Q. Posin—Lyons (Meredith), 127 p., illus. by David Burnside, \$2.95. Tells how the seas were formed, describes some of the inhabitants of the seas, and man's navigation and exploration feats.

METABOLIC INHIBITORS: A Comprehensive Treatise, Vol. I.—R. M. Hochster and J. H. Quastel, Eds.—Academic Press, 669 p., diagrams, \$26. Provides authoritative and multi-disciplinary presentation of the properties of inhibitors of metabolic and enzymic processes.

NARCOTICS: Nature's Dangerous Gifts—Norman Taylor—Dell Pub. Co., rev. ed., 212 p., paper, \$1.65. Revised edition of "Flight from Reality," botanist's very readable story of marihuana, kava, peyote, tobacco and other habit-forming plants.

NATURE RECREATION: Group Guidance for the Out-of-Doors—William ("Cap'n Bill") Gould Vinal—Dover, 2nd ed., 310 p., illus., paper, \$1.75. Revised version of book first published in 1940, presents collection of nature activities, woodcraft, home and camp observation projects and field lore.

NEWER METHODS OF PREPARATIVE ORGANIC CHEMISTRY, Vol. II—Wilhelm Foerst, Ed., transl. from German by F. K. Kirchner—Academic

Press, 417 p., \$14.50. Authoritative review articles on preparation of peptides and ureas, long-chain car-bolic acids, amidomethylation and other selected areas of preparative organic chemistry.

NICKEL: An Historical Review—F. B. Howard-White—Van Nostrand, 350 p., illus., \$6.95. An account of the development of nickel, combining scientific and economic facts with incidental portraits of the men who built the industry.

NINTH SYMPOSIUM (INTERNATIONAL) ON COMBUSTION—Walter G. Berl, Ed.—Academic Press, 1091 p., illus, \$42. Contains more than 100 papers presented at symposium organized by the Combustion Institute at Cornell University in 1962, dealing with the most recent research results in the fields of combustion, propulsion, flame processes and reaction kinetics. reaction kinetics.

NUCLEAR RESEARCH EMULSION, Part I: Techniques and Theory—Walter H. Barkas—Academic Press, 518 p., illus., \$18. Presents information of a practical nature to advanced students in the physical sciences, earth sciences and biosciences.

physical sciences, earth sciences and biosciences.

THE PAINTER'S SECRET GEOMETRY: A
Study of Composition in Art—Charles Bouleau,
transl. from French by Jonathan Griffin, preface by
Jacques Villon—Harcourt, 268 p., illus., \$12. A
study of the internal construction of works of art,
a search for the changing formulae that have guided,
over the centuries, the distribution of the various
plastic elements.

PALEONTOLOGY AND NONMARINE STRA-TIGRAPHY OF THE CUYAMA VALLEY BAD-LANDS, CALIFORNIA, Part I: Geology, Faunal Interpretations and Systematic Descriptions of Chiroptera, Insectivora and Rodentia—Gideon T. James— Univ. of Calif. Press, 154 p., 8 plates, illus., paper, \$3.50

THE PLANT WORLD: A Text in College Botany—Harry J. Fuller and Zane B. Carothers—Holt, 4th ed., 564 p., illus, \$7.50. Represents a broad approach to the study of plants, primarily for undergraduates who are not majoring in botany.

A PRELIMINARY EVALUATION OF FAST OXIDE BREEDER REACTORS FOR SEA WATER CONVERSION—Alexander Sesonske and R. Philip Hammond—Los Alamos Scientific Lab. (OTS), 80 p., illus, paper, \$2. For story see SNL Aug. 10, 1963, p. 82.

PRIMATE SOCIAL BEHAVIOR: An Enduring Problem—Charles H. Southwick, Ed.—Van Nostrand, 191 p., diagrams, paper, \$1.95. Selected readings giving insight into basic problems of group dynamics and other behavior patterns based on field and laboratory observations.

PROGRESS IN NUCLEIC ACID RESEARCH. PROGRESS IN NUCLEIC ACID RESEARCH, Vol. 1—J. N. Davidson and Waldo E. Cohn—Academic Press, 424 p., diagrams, \$13. Provides medium for the presentation of new theories and techniques, ranging from discussion of "primer" in DNA polymerase reactions to molecular mechanisms of radiation

QUANTUM MECHANICS, Vols. I and II—Albert Messiah, transl. from French by G. M. Temmer (I) and J. Potter (II)—Wiley, 504 p., 632 p., paper, \$8, \$8.50. Vol. I treats the formalism, its interpretation and simple systems; Vol. II deals with symmetries and invariance, methods of approximation, and elements of relativistic quantum mathematics.

THE ROLE OF SCIENCE IN CIVILIZATION—
Robert Bruce Lindsay—Harper, 318 p., \$6.50. Defines the fundamentals of scientific purpose and method, examines the differences between science and the humanities, and shows the role and influence of science in history, communication, the state and human behavior. human behavior.

SHONTO: A Study of the Role of the Trader in a Modern Navaho Community—William Y. Adams—Smithsonian Inst. (GPO), 329 p., illus, maps, \$2. This study based upon field investigations carried out between 1954 and 1956 presents the trading post as a fixed point in the shifting spectrum of Navahowhite relations.

SOCIAL STRUCTURE AND LEARNING CLIMATE: The First Year at the Harvard Business School—Charles D. Orth 3rd with Esta-Lee Stone and Robert J. Lemer—Harvard Grad. School of Business Admin., 236 p., paper, \$3.50. Behavioral study of student adaptation to the pressure of the first-year program, and the development and function of norms.

STRATEGY FOR SURVIVAL—Thomas L. Martin and Donald S. Latham—Univ. of Ariz. Press, 389 p., illus., \$6. A comprehensive summary of available facts on civil defense and nuclear war, includes technical appendices for specialists.

THE SYSTEM OF MINOR PLANETS—Gunter D. Roth, transl. from German by Alex Helm.—Van Nostrand, 128 p., illus., \$4.50. Concise book dealing exclusively with the asteroids, for the amateur

WHAT HAPPENS IN THE SKY?—Ray Bethers—St Martins, 48 p., illus. by author, \$2.95. A nonfiction book for the youngest readers.

• Science News Letter, 84:140 Aug. 31, 1963