

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.

CHEMICAL PROPERTIES OF ORGANIC COMPOUNDS: An Introduction—Elliot N. Marvell and Albert V. Logan—Wiley, 326 p., illus., \$4.75. Presenting the college student with an understandable approach to the fundamental principles of organic chemistry.

DILECTRIC BEHAVIOR AND STRUCTURE: Dielectric Constant and Loss, Dipole Moment and Molecular Structure—Charles Phelps Smyth—McGraw-Hill, 441 p., illus., \$9.00. Discussing the relations between dipole moment and molecular structure.

EVERYTHING AND THE KITCHEN SINK: How the First Century of Industry Created Our First Century of Good Living—Farrar, Straus and Cudahy, 160 p., illus., \$4.00. The story of recent industrial development published in commemoration of the centennial of the Crane Company.

THE FORD FOUNDATION REPORT FOR 1954—H. Rowan Gaither Jr., president—Ford Foundation, 114 p., illus., paper, free upon request direct to publisher, 477 Madison Ave., New York 22, N. Y. Research supported by the Foundation includes some on psychology and the social sciences. Since the Foundation's fiscal year has been changed to end on September 30, this report covers the nine months ending on that date.

GENERAL ENDOCRINOLOGY—C. Donnell Turner—Saunders, 2d ed., 553 p., illus., \$8.00. Internal secretion is here treated as an over-all

phenomenon extending throughout the whole range of animal and plant life, not just in the higher vertebrates.

A GUIDE TO THE ORGANIZATION OF WOMEN'S AUXILIARIES IN HOSPITALS—United Hospital Fund of New York, 67 p., illus., paper, \$1.00. Based on the Fund's 76 years of experience.

AN INTRODUCTION TO NATURE: Birds, Wild Flowers, Trees—John Kieran—Hanover House, 223 p., illus., \$6.00. Combining in a single large volume the three popular Kieran books. With beautiful illustrations in full color. For children and other nature lovers.

A LABORATORY MANUAL OF GENERAL CHEMISTRY—Saverio Zuffanti, Arthur A. Vernon and W. F. Luder—Saunders, 310 p., illus., paper, \$3.75. Although written with one textbook in mind, the "General Chemistry" of the same authors, it is possible to use it with any first-year textbook and various kinds of laboratory courses.

THE MANAGEMENT OF MENTAL DEFICIENCY IN CHILDREN—I. Newton Kugelmass—Grune & Stratton, 312 p., illus., \$6.75. Early diagnosis and proper treatment of mental defect can result in the salvage of lives that otherwise are largely wasted.

THE MEGACHILINE BEES OF CALIFORNIA (HYMENOPTERA: Megachilidae)—Paul D. Hurd Jr., and Charles D. Michener—University of California Press, Bulletin of the California Insect Survey, Volume 3, 247 p., illus., paper, \$3.50. Providing usable keys, descriptive comments and data on distribution and floral visits.

MIRACLES BY THE DOZEN—Mercer Publishing Co., 15 p., illus., paper, 9 cents. Telling the story of the chemical industry.

MORPHOLOGY AND BIOLOGY OF STURMIA HARRISINAE COQUILLETT (DIPTERA), A PARASITE OF THE WESTERN GRAPE LEAF SKELETONIZER—Owen J. Smith, Paul H. Dunn and John H. Rosenberger—University of California Press, 37 p., illus., paper, 50 cents. On an important parasite introduced into southern California to combat the western grape leaf skeletonizer.

REPORT ON THE INVESTIGATION OF TRAVEL OF POLLUTION—California State Water Pollution Control Board, 220 p., illus., paper, limited number free upon request direct to publisher, Room 610, 721 Capitol Ave., Sacramento 14, Calif. Information pertinent to the question of whether a water supply can be replenished with reclaimed waste water.

SEARCH FOR PURPOSE—Arthur E. Morgan—Antioch Press, 197 p., \$3.00. Autobiography of the man who is generally known as the first Chairman of the TVA.

THE STRUCTURAL RELATIONS OF NATURAL PRODUCTS: Being the First Weizmann Memorial Lectures, December, 1953—Robert Robinson—Oxford University Press, 150 p., \$4.00. Surveying the molecular structure of several of the chief groups of plant products in order to find common features that may be relevant to the problems of biogenesis.

A TEXTBOOK OF MEDICINE—Russell L. Cecil and Robert F. Loeb, Eds.—Saunders, 9th ed., 1786 p., illus., \$15.00. In this new edition, an attempt has been made to reflect the many strides in medicine during the past four years. Contains the work of a distinguished group of contributors.

VOLUNTEERS IN MENTAL HOSPITALS—Part One, Marjorie H. Frank, Ed., Part Two, O. Arnold Kilpatrick—National Association for Mental Health, 16 p., paper, 25 cents. Directed to administrators and staffs of mental hospitals and to community groups.

WALT DISNEY'S VANISHING PRAIRIE: A True-Life Adventure—Jane Werner and the Staff of the Walt Disney Studio—Simon and Schuster, 124 p., illus., \$2.95. The story of the wildlife in America's West, illustrated with breath-taking color stills made in the course of shooting the motion picture.

THE WHY OF THE TEXTILE STANDARDS—Jules Labarthe—Mellon Institute, 4 p., paper, free upon request direct to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa. A series of three short articles on why textiles sometimes disappoint consumers.

THE YEARBOOK OF THE INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS 1955—The Secretary General of ICSU, 69 p., paper, 5s. Containing a directory of members.

Science News Letter, July 9, 1955

MEDICINE

See Humans Smoking Radioactive Tobacco

► FUTURE TESTS of tobacco smoke may be made with human volunteers smoking radioactive tobacco. This possibility was hinted in a report from the American Tobacco Company, Richmond, Va.

Such tests would show where different constituents of tobacco go when the smoke is inhaled.

The company is now making tests with tobacco plants that have had various radioactive compounds introduced into the living plant. The compounds are selected to tag different constituents of the tobacco.

One such study traces the disposition of sugars in tobacco. It is described in a report from the company as follows:

Sugar from radioactive tobacco is extracted and added to tobacco grown in the normal way. Then tobacco with radioactive sugar is burned and the smoke introduced into an experimental animal. Trace elements among combustion products of the radioactive sugar are rapidly absorbed and dispersed throughout the animal's body.

The animal's organs are then checked for activity with a Geiger-type anti-coincidence counter that detects the faintest traces of radioactivity.

The levels of activity at various points indicate just where the combustion products go and the time required for them to reach these organs. Similarly, the amount and rate of elimination can be ascertained.

The label also serves as an aid to precise identification, for it provides a means of "tracking down" all of the products of this single compound on their journey from tobacco to smoke, from smoke to the animal organism and finally to its elimination.

The radioactive elements being used give off soft beta rays which are relatively harmless, in contrast to hard gamma rays. For this reason, the company's report states, "it may be practical to use humans in future experiments."

Science News Letter, July 9, 1955

DO PEOPLE "EXPLODE" IN YOUR OFFICE?

ARE you, as a business executive, a skilled "human chemist"—good at handling your fellow-workers and in getting them to work well with each other? Or do people "explode" in your office—or in their contacts with some of their associates?

In working with people, there is nothing you do which does not involve "human chemistry." Your job is not merely to prevent "explosions," but also to use all the different "human chemicals" which comprise your organization in a manner that will produce the best work, the most profits, and the greatest progress for the business.

Today chemists can mix oil and water. And you, as an executive, can mix acid-type and alkali-type people, the coolers-off, the heaters-up, and the difficult but capable "trouble-makers." You can "emulsify" their diverse abilities and temperaments into a harmonious, highly efficient, profit-earning Team.

How to do this is told in the 37 idea-packed pages of *The Executive as a Human Chemist*, by Thomas Dreier, a brochure which can be read at one sitting, but which will serve you usefully all the rest of your life. (One large firm purchased 1,700 copies for its officers, department heads and sales agents.)

Simply clip this ad, attach it to your letterhead or a sheet of paper with your name and address, and enclose \$1. Your copy of *The Executive as a Human Chemist* will be mailed you promptly. (Special offer: 10 copies for \$7.50.) THE UPDEGRAFF PRESS, LTD., 319 Harwood Bldg., Scarsdale, New York.