

# New Books

## Analytical Chemistry, The Working Tools

Edited by C. R. N. STROUTS, J. H. GILFILLAN, and H. N. WILSON, The Clarendon Press, Oxford, England, 1955. Vol. I, xxiv + 494 pages; Vol. II, xii + 570 pages. Five pounds five shillings, net. Reviewed by F. A. GUNTHER, University of California Citrus Experiment Station, Riverside, Calif.

THESE TWO VOLUMES are based upon 25 years' collective experience in the laboratories of Imperial Chemical Industries, Ltd., and were planned to guide practical analyses as well as to assist the achievement of accurate and reliable standards of uniformity in the many laboratories of ICI. This reviewer is unable to assess the latter objective, but feels that the former objective has been admirably handled; these two volumes contain much useful, practical information for the average analyst interested in improving the quality and the quantity of his efforts.

Volume I is concerned with accuracy, manipulation, sampling, weighing, and descriptions of physical measurements as well as ultimate organic and gas analysis. Volume II is concerned with potentiometry, conductometry, polarography, electro-deposition, colorimetry and spectrophotometry, spectrography, x-ray analyses, chromatography, and the application of statistical methods to chemical analysis. Throughout both volumes emphasis has been maintained in descriptions and critical evaluations of the tools available and of their practical utilization with typical, illustrative procedures.

The several chapters on colorimetry and spectrophotometry are exceptionally interesting and well-organized, although the terminology employed is slightly different from that commonly used in this country. Few references are as recent as 1950, however, as illustrated by the brief mention without indexing of photomultiplier tubes. There are 32 pages of an excellent discussion of correlations of absorption spectra with molecular structure, and the brief section on the purification of solvents for ultraviolet work is good.

These volumes will be very useful in helping analysts select methods and techniques and they will often help in the choice of ancillary equipment available commercially.

## Animal Diseases, Subject of Agriculture Yearbook

The 1956 Yearbook of Agriculture, published in August by USDA, takes up the subject of animal diseases. Its 134 chapters, written by veterinarians from USDA, state colleges, and other organizations, describe diseases and parasites of cattle, swine, sheep, poultry, and many other animals. Causes, symptoms, treatment, management, and modes of transmission are described in detail.

"Animal Diseases" is available only from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. at \$2.00 each. Previous yearbooks are also available from the same address. Among them are: "Science in Farming," "Grass," "Trees," and "Water" (\$2.00 each); and "Crops in Peace and War," "Insects," and "Plant Diseases" (2.50 each).

## LITERATURE AVAILABLE

**Agricultural and Food Research.** Brochure describes agricultural and food research services available from chemical consulting laboratory. Dept. A&F, FLORIDA CHEMISTS & ENGINEERS, INC., 1709 N. Mills St., Orlando, Fla.

**BHT.** Folder discusses advantages of butylated hydroxyanisole in extra-fine form for use as antioxidant in animal feed. Dept. A&F, KOPPERS CO., INC., Pittsburgh 19, Pa.

**Coffee Literature.** "A Survey of World Literature on Coffee" reviews important scientific literature of 1954 on coffee cultivation, pests and diseases, cleaning and processing, and on roasted, brewed, and powdered coffee and coffee extracts. Dept. A&F, THE COFFEE BREWING INSTITUTE, INC., 551 Fifth Ave., New York 17, N. Y.

**Dispersant for Wettable Powder.** Technical bulletin (No. 306) on use of Polyfon, sodium lignosulfonate, as dispersant in wettable insecticide powders. Formulations are given for DDT, dieldrin, aramite, heptachlor, toxaphene, and malathion wettable powders. Dept. A&F, POLYCHEMICALS DIVISION, WEST VIRGINIA PULP & PAPER CO., Charleston A, S. C.

**Environmental Equipment.** Environmental and low temperature equipment to simulate atmospheric conditions is described in eight pages. Also four pages on weather labs, which provide temperatures from 35° to 200°

F. and relative humidities from 20 to 95%. Dept. A&F, HUDSON BAY CO., DIVISION OF LABLINE, INC., 3070-82 W. Grand Ave., Chicago 22, Ill.

**Nitrogen Solutions.** A 48-page handbook in color and with photographs gives technical data on nitrogen solutions. Included is information on their chemical and physical properties and on how to store, handle, and use them. Data on granulating and formulating fertilizers are included, along with formulas and conversion factors. Dept. A&F, Public Relations, NITROGEN DIVISION, ALLIED CHEMICAL & DYE CORP., 40 Rector St., New York 6, N. Y.

**Organic Chemicals.** Twelve-page catalog of 77 commercially available synthetic organic chemicals, 22 semi-commercial ones, and 17 experimental ones. Listed are formulas, product descriptions, and suggested uses. Dept. A&F, PENNSALT CHEMICALS (S), 3 Penn Center Plaza, Philadelphia 2, Pa.

**Pesticide Carrier Data.** Bulletins in Spanish and Portuguese describe Attaclay and granular Attaclay for use as carriers and diluents for pesticide dusts, wettable powders, and granular forms. Dept. A&F, MINERALS & CHEMICAL CORP. OF AMERICA, Menlo Park, N. J.

**Pre-Emergence Herbicides.** Technical bulletin on Randox and two experimental herbicides, derivatives of  $\alpha$ -chloracetamides and dithiocarbamic acid. Dept. A&F, MONSANTO CHEMICAL CO., 800 North 12th Blvd., St. Louis 1, Mo.

**Reducing Evaporation.** Catalog sheet illustrates use of polyethylene pillows which are said to reduce evaporation of liquids in open vessels up to 70%. Dept. A&F, AMERICAN AGILE CORP., P. O. Box 168, Bedford, Ohio.

**Soil Fumigation.** Eight pages tell how fumigation with Vapam increases yields of many crops. Also outlines methods of using the soil sterilant. Dept. A&F, Stauffer Chemical Co., 380 Madison Ave., New York, N. Y.

**Spectrochemical Analysis.** Color brochure illustrates the science of spectroscopy and the steps involved in the spectrographic laboratory—from sample preparation through the recording and subsequent interpretation of line spectra on film. Address: Dept. A&F, NATIONAL SPECTROGRAPHIC LABORATORIES, INC., 6300 Euclid Ave., Cleveland 3, Ohio.