

BOOKS, PAMPHLETS AND NOTICES

- 176 Handbook of Toxicology. Vol. 1. Acute Toxicities. William S. Spector, editor.
W. B. Saunders Co., West Washington Square, Philadelphia 5, Pa. 408 pp. (1956). \$7.00.

This book was prepared under the direction of the Committee on the Handbook of Biological Data, Division of Biology and Agriculture, The National Academy of Sciences and The National Research Council. W. F. von Oettingen is the principal contributor but a number of others assisted in the preparation of the volume. The material is presented in two extensive tables. Table 1 gives information on lethal doses of 2120 solid and liquid compounds to laboratory animals. Under the heading of each substance, listed alphabetically, are separate entries for each species, route of administration, method of estimating toxicity (LD₅₀, MLD etc.) and literature reference from which additional information can be obtained. Table 2 lists lethal concentrations of 243 gases, vapors, and fumes in respired air for laboratory animals. Each entry includes: animal, method of estimating toxicity, lethal concentration in mg. per liter and parts per million, exposure time, and time of death, when given, and reference. It is emphasized that the values presented in these tables are not absolute, and should be interpreted only as a "yardstick" of toxicity for the compounds listed. An index is provided so that materials having more than one name can be easily located. This volume is limited to acute toxicities. At least four more volumes, giving fuller coverage of particular classes of materials and including chronic toxicities, will appear later. The scope of this publication and the thoroughness with which the data have been assembled will make it a valuable reference work for the toxicologist and others concerned. -- FFR

- 177 Organic Insecticides: Their Chemistry and Mode of Action. Robert L. Metcalf.
Interscience Publishers, Inc., 250 Fifth Ave., New York 1, N. Y. 392 pp. (1955). \$8.50.

Despite the amazing growth of the manufacture and use of insecticides, much remains to be learned regarding their chemistry and mode of action, their metabolism in plants and animals, and their toxic hazards to higher animals. This book summarizes most of the available information on these topics into a coherent pattern dealing with the organic insecticides. Both the older and newer insecticides are included, as indicated in the list of chapters: nicotine, cornicotine, and anabasine; rotenoids; pyrethroids; organic thiocyanates; dinitrophenols; DDT; acaricides; benzene hexachloride; cyclodiene insecticides; organic phosphorus insecticides; carbamates; and miscellaneous. The chapter on each of these materials includes information on chemistry, relation of structure to activity, mode of action, and mammalian toxicology the last of which is important in the industrial hygiene field. Two other chapters deal respectively with joint action of insecticides and insecticide resistance. -- FFR

- 178 Particle Size Determination. R. D. Cadle. Interscience Manual No. 7.
Interscience Publishers, Inc., 250 Fifth Ave., New York 1, N. Y. 303 pp. (1955). \$5.50.

There are many methods for determining particle size, and there is a wealth of literature on these methods. This manual has been written primarily as a guide for a scientist or engineer who is faced with the task of particle size determination in a particular problem or field and is confused by the multitudes of methods. Considerable emphasis is placed on the criteria for choosing a method. The theoretical basis of each method is described, and basic equations are included. The theoretical and practical limitations of the methods are indicated. In the introduction, specific applications are discussed, including the industrial hygiene field. The topics of the chapters include: sampling methods; choice of technique for particle size determination; sieve analysis; sedimentation and elutriation; optical microscopy; electron microscopy; surface area measurements; optical methods for particles in suspension; miscellaneous methods; and treatment of data. The attention to the various types of electron microscopes, and to electronic scanning and other recent developments