

its popularity. The new edition contains 120 pages more than the preceding one, but this is not due so much to an increase in the contents as to the use of larger and more legible type. Revisions have been made in the values of many physical constants, the chapter on atomic nucleus has been completely rewritten and other minor changes have been made. In the appendix, two little used tables have been dropped and replaced by tables on the structure of molecules and ions and on the co-valent bond energies and atomic radii. The book is recommended as being useful as a handy reference on inorganic chemistry.—A. G. D.

Qualitative Analysis and Chemical Equilibrium, by T. R. HOGNESS and WARREN C. JOHNSON. xii + 417 pages. $5\frac{1}{2} \times 8\frac{3}{8}$. 1937. New York: Henry Holt & Co. \$2.75.

This book, intended as a textbook of qualitative analysis, aims to teach the underlying reasons of the reactions involved as well as methods of qualitative testing. Part I of the books deals with the general properties of solids, liquids and solutions, velocity of reaction and equilibrium, solubility product, colloids, ionization of water, hydrolysis, amphoteric substances, oxidation and reduction and sulfide precipitations. Part II deals with group precipitations in the usual order, except that the alkali metals are studied first, then the silver group, etc.—A. G. D.

The Chemistry and Toxicology of Insecticides, by HAROLD H. SHEPARD. iii + 383 pages. $8\frac{3}{8} \times 10\frac{3}{4}$. 1940. Minneapolis: Burgess Pub. Co. \$4.00.

This volume is intended as a textbook for students of economic entomology, but in reality, it is a compilation of a great deal of practical information on insecticides and should, therefore, become of increasing value to pharmacists whose business in this field is increasing. The contents are divided into chapters dealing with arsenical stomach poisons and non-arsenical stomach poisons such as fluorides, thallium, lead, mercury, copper and zinc salts, tartar emetic and borax. Contact poisons are also dealt with. Among these are sulfur, selenium and copper compounds, and substances used to increase their effectiveness, plant derivatives, insect fumigants, attractants and repellants and methods of testing fly sprays.—A. G. D.

The Badianus Manuscript (Codex Barberini, Latin 241—Vatican Library—An Aztec Herbal of 1552). Translated and annotated by EMILY WALCOTT EMMART. xxiv + 341 pages. $9\frac{1}{2} \times 12\frac{1}{4}$ in. 1940. Baltimore: The Johns Hopkins Press. \$7.50.

The Badianus Manuscript is a work on the medical lore of the Central American Indians. It was originally inscribed by an Indian physician in Aztec and translated by another Indian into Latin. The

Aztec portion from which the present translation was made was written by Martinus de la Cruz, a native medical teacher, and the botanical portion was translated by Joannes Badianus. The present volume is an English translation of the latter with annotations by the author. It gives a good picture of certain aspects of Aztec medicine practiced in the days of the Conquistadores. The book contains 117 color plates which reproduce in full size the illustrations in the original book. This is followed by a translation of the Latin chapter and descriptions of drugs and plants with accompanying translations. Explanatory comments by the author add to the value of the work. There is a comprehensive Aztec index followed by interesting botanical, materia medica and disease indexes.—A. G. D.

Chemistry and Medicine. Papers Presented at the Fiftieth Anniversary of the Founding of the Medical School of the University of Minnesota. Edited by MAURICE B. VISSCHER. 296 pages. The University of Minnesota Press, Minneapolis, Minn., 1940. Price, \$4.50.

This volume is a compilation of papers presented at the fiftieth anniversary of the founding of the Medical School of the University of Minnesota. The papers are arranged in four groups and deal with the progress in the application of physical chemistry to medicine, recent investigations in metabolism, some aspects of immunity in chemotherapy and some approaches to the nervous control of the organism. In the first section, there are papers dealing with the colloid structure of membranes, osmotic work in living systems and the function of the kidney in concentrated solutes. The second part deals with the more important subjects of vitamin research, the importance of fats in the diet and heparin. Papers on immunity and chemotherapy constitute the third part and the last part of the book presents the essential facts relating to nervous control in animals and the methods by which nervous action may be analyzed. All of the papers are supplemented by extensive bibliographies.—A. G. D.

Mineral Metabolism, by ALFRED T. SHOHL, M.D., Research Associate in Pediatrics, Harvard University. Published by Reinhold Publishing Corporation, New York. Price \$5.00. American Chemical Society series of Scientific and Technologic Monographs.

It is stated that the main purpose of the book is to describe the role of the minerals in the structure and function of the human body. The author has given much study to the subjects which is shown by the extensive bibliography appended to the discussions. Chapter I deals with the scope of mineral metabolism; the elements which occur in biological material are classed in five groups—Definition of Mineral Metabolism, Relations of Minerals to Water; Relation to Various Fields of Biology, to Animal Nutrition, etc. References under the