concerns or research organizations, where price is not important. It contains summaries of a very large field of literature, much of which will be found only in large and specialized libraries, and maintains its high standard, the articles being by experts.

Fundamentals of Physical Chemistry

By Prof. H. D. Crockford and Prof. Samuel B. Knight. Pp. xvii+463. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1959.) 56*s*. net.

THIS book is based on an earlier one intended for pre-medical and other students with a limited knowledge of mathematics. It continues this plan, although the treatment is enlarged by additional topics, including three chapters on thermodynamics. The equations are deduced so far as possible, and special emphasis is given to units. Each chapter begins with a brief statement of its contents, and sub-headings and sections are titled, so that the reader knows just what is being discussed. Fully worked problems are given in the text and review questions and problems at the end of each chapter. Answers to problems are given. The treatment, especially in the part on electrolytes, is modern. The subjects covered are well selected, and the text is concise, carefully written, and clear, the authors having obviously taken great trouble with it. In future editions the conventions of sign of electrode potentials will doubtless be revised in accordance with recent recommendations, which will make the subject much clearer.

This is an excellent introductory book on physical chemistry which can be recommended to those teaching and learning the subject at this stage.

The Chemical Elements

By Helen Miles Davis. Second edition, revised. Pp. viii+198. (Washington, D.C.: Science Service, Inc.; New York: Ballantine Books, Inc., 1959.) 50 cents.

THIS is a very unusual and interesting little book. It was written by Helen Miles Davis, who died in 1957 when the second edition was in preparation. The revision was completed by Dr. Seaborg, the authority on transuranium elements. There is a survey of each element, including the history of its discovery, the whole based on the Periodic Table, and each group has a table of the atomic structure of the elements contained in it. Much of the information is in the actual words of the discoverers, taken from original papers, and this makes the book particularly interesting. The sources, isotopes and properties of each element are given concisely and some characteristic compounds are mentioned. There is nothing superfluous in the book, and its contents are of high standard.

Chemistry for Engineers

An Introductory Course. By Edward Cartmell. Pp. vii+172. (London: Butterworths Scientific Publications, 1959.) 25*s*.

THIS small book deals with a number of topics of interest to students of engineering which do not usually find a place in the ordinary elementary courses provided for science students. Even if engineering students attend such courses the book will provide a useful supplement to them. Previous knowledge is limited to such as would be available in schools, and the treatment is restricted to a selection of the more important applications of chemistry of interest to engineers. It includes such topics as fuels, metals and corrosion, water treatment, lubrication and nuclear power. The amount of space devoted to atomic and molecular structure and of valency bonds is rather large, but the treatment is intelligible and interesting. There is a good balance between general theory and practical applications, and the book should be very useful to lecturers called on to cater for the requirements of engineers who have only a limited time to devote to chemistry.

J. R. PARTINGTON

Water Treatment Handbook

Compiled by R. Leviel. Second English edition, revised. Pp. 561. (Suresnes (Seine): Degrement Acfi S.A., 1960. Distributed by Hugh K. Elliott, Ltd., 199 Piccadilly, London, W.1.) 60*s*. net; 8.40 dollars.

THE first English edition of this book was published in 1955, and there have been four French editions since 1950. After a section on methods of analysis of water and of materials used in water-works practice, the bulk of the work deals systematically and in considerable detail with the various processes used in treating water for domestic and industrial supply. The author is the technical manager of a French company which supplies water-works equipment, and many of the numerous photographs and diagrams refer to the products marketed by the firm. Thus, although methods of treating water do not differ widely in different countries, the present account is of particular value in describing the methods used in France.

Since the last edition, a new and useful section has been added on French legislation governing water supplies and the discharge to streams of sewage and industrial wastes, and containing also the recently published "International Standards for Drinking Water" put forward by the World Health Organization in 1958. There is a substantial section, more than 100 pages in length, of formulæ, tables of constants, and the like, which are used in the design of distribution networks and in the treatment of water by physical and chemical methods. There is also a chapter on the treatment of sewage and industrial wastes, but the standard of this, both as regards material and translation, is much below that of the rest of the book.

Atmospheric Diffusion and Air Pollution

Proceedings of a Symposium held at Oxford, August 24–29, 1958. Edited by F. N. Frenkiel and P. A. Sheppard. (Advances in Geophysics, Vol. 6.) Pp. xvii+471. (New York: Academic Press, Inc.; London: Academic Press, Inc. (London), Ltd., 1960.) 12 dollars.

IN order to bring together scientists from the various fields in which atmospheric diffusion is important, an international symposium was arranged jointly by the International Union of Theoretical and Applied Mechanics and the International Union of Geodesy and Geophysics. The symposium was held at Oxford in August 1958, with Dr. F. N. Frenkiel and Prof. P. A. Sheppard as joint secretaries. Seven