CHEMISTRY

(1) Dyeing with Coal-Tar Dyestuffs

The Principles Involved and the Methods Employed. By C. M. Whittaker and C. C. Wilcock. Third edition. Pp. vii+326. (London: Baillière, Tindall and Cox, 1939.) 12*s*. 6*d*.

(2) Hair-Dyes and Hair-Dyeing Chemistry and Technique

By H. Stanley Redgrove and the late Gilbert A. Foan. A new edition completely revised by H. Stanley Redgrove and J. Bari-Woollss. Pp. xiv+214+8 plates. (London: William Heinemann (Medical Books), Ltd., 1939.) 10*s*. 6*d*. net.

THESE two books on dyes and dyeing are in such striking contrast to one another as to justify their inclusion in the same notice.

(1) The first is a succinct account of the general processes of dyeing with the so-called coal tar dyestuffs—a term better indeed than 'aniline' dyestuffs, but nevertheless redundant since there are nowadays no dyestuffs of importance that are not derived from coal tar intermediates.

The book is divided into fifteen sections each dealing with some group of dyestuffs and giving information of value to the users of dyes. Section xi on the dyeing of rayons, and Section xii on the dyeing of synthetic fibres with an affinity for wool dyestuffs, are particularly well written. The book will be of interest to all concerned with the subject of dyeing.

(2) The second is a most amazing book which will be found of great interest to a wide circle of readers. To the uninitiated it is a revelation by which one can recognize a host of friends. The dreadful devices to which the female of the species subjects herself in order, in her opinion, to make herself pleasing to the male, are set out here in all their terrible entirety. The illustrations alone give one a glimpse into the beauty parlour which must make every male shudder with horror. But so be it! Women have done it since the beginning and will do it to the end. J. F. T.

Inorganic Chemistry

By F. A. Philbrick. Pp. viii+396. (London: G. Bell and Sons, Ltd., 1939.) 6*s*.

THIS book provides a course in inorganic chemistry up to the standard of the Higher Certificate, Inter B.Sc. and First M.B. examinations. The author has wisely devoted the introductory chapters to a brief sketch of chemical principles such as the atomic and molecular theories, electrolytic dissociation and electronic theory of valency, which should prove of value to students who have little knowledge of physical chemistry.

The elements are classified and discussed in the order in which they occur in the Mendeléeff table; for example, copper and silver are described in the same chapter as the alkali metals, and manganese, a steel-forming metal, finds its way into the end of the chapter on the halogens. This old-fashioned and clumsy arrangement is not in keeping with the modern and up-to-date factual matter which is given in the text, and is partly responsible for the too brief inter-comparison of the elements. The omission, however, of detailed descriptions of unimportant compounds is a welcome feature, as is also the emphasis which has been laid on the practical applications of inorganic chemistry. The numerous photographic illustrations, collected from many different countries, are an additional attraction. Questions are given at the ends of the chapters, and a selection of revision papers is provided at the end of the book, together with answers to the numerical problems. The omission of logarithm tables is to be regretted, and the index is certainly too brief for a work of this calibre.

Apart from these criticisms, the book is a welcome addition to existing text-books of intermediate standard, and can be recommended to both teachers and students of chemistry. A. C. C.

Intermediate Chemical Calculations

By Prof. J. R. Partington and Kathleen Stratton. Pp. x+240. (London: Macmillan and Co., Ltd., 1939.) 6*s*. 6*d*.

IN accordance with its title, this book provides a complete course of numerical examples, intermediate in standard between the General School Certificate and B.Sc. examinations. A concise but clear account of the fundamental principles underlying the calculations is given at the beginning of each chapter or section, and then suitable examples are worked out in detail for the guidance of the student before he tackles the numerous problems. The latter are chosen in part from former Higher Certificate, M.B. and University Scholarship examinations, and answers are provided at the end of the book.

The subject-matter throughout is accurate and up to date; for example, problems are not set which imply that the extent of ionization of a strong electrolyte can be obtained from molecular weights in solution or from conductivities. It is gratifying, too, to find a clear distinction between the density and relative density of a gas. In the opinion of the reviewer, a copy of this book should be possessed by all teachers and university students, and should be available for the 'Science Sixths' of all schools. A. C. C.

Wood Pulp

By Dr. Julius Grant. Pp. xi+209. (Leiden: Chronica Botanica Co.; London: Wm. Dawson and Sons, Ltd., 1938.) 7 guilders; 15*s*.

THIS is one of the "New Series of Plant Science Books" edited by Dr. Frans Verdorn and printed and published in Holland. It is a comprehensive treatise and contains everything worth knowing on the subject of wood pulp. The multitude of uses to which this material is now put makes it at the present day one of the most valuable natural products that exist. Although the supply is enormous, especially in our jungles and forests, the cost of collection must be almost prohibitive except in places that are supplied with water-transport or other such facilities. Those who have been so fortunate as to visit Shawinigan will realize the speed with which forests in