

Kempe's Engineers Year-Book for 1966

Edited by C. E. Prockter under the direction of B. W. Pendred. 71st edition. Vol. 1: Pp. xiv + 1356. Vol. 2: Pp. 1399. (London: Morgan Brothers (Publishers), Ltd., 1966.) 95s. net the two volumes.

A NEW edition of *Kempe's Engineers Year-Book* is an annual event, though recent editions differ only slightly one from another in their content of data and descriptive matter relating to most branches of engineering, with references to original sources.

This seventy-first edition has one new chapter on rubber as an engineering material. The chapters on legal notes for engineers, nuclear energy and grinding and abrasive processes, respectively, have been rewritten; otherwise there are additions and minor modifications to a number of chapters. Noteworthy among the additions are rocket engines, including theory and fuels; details of positive displacement rotary flow meters and density metering; theory of detonation and explosive forming and electric instruments for linear measurement (surveying). Mention of the design criterion afforded by the plastic theory of ultimate load-carrying capacity of structures, in the chapter on design of steel structures, is a significant though minor improvement. Further revision of the chapters on theory and design of structures in respect of modern criteria and data, including flexibility and stiffness coefficients of structural members, would improve future editions.

The chapter on mining engineering will presumably require revision soon to take account of advances in automation in coal-mining and the re-organization of the National Coal Board which is taking place this year.

Useful as they are, these volumes could, it is believed, be improved substantially in respect of design charts and data. For example, tables of hyperbolic functions would improve the mathematical data provided, and water hammer and surge charts would be useful additions to the chapter on water engineering. Such additions could be made at the expense of descriptive material relating to obsolescent plant and equipment and theoretical matter which is readily available in elementary textbooks.

T. M. CHARLTON

Physics of Nuclear Fission

Edited by N. A. Perfilov and V. P. Eismont. Translated from the Russian. Pp. vi + 210. (Jerusalem: Israel Program for Scientific Translations; London: Oldbourne Press, 1964.) 63s.

THIS book consists of twenty chapters on various aspects of fission, varying from general topics like "Asymmetry in the Mass Distribution of Fission Fragments" to highly specialized ones like "Radiochemical Study of the Isotopes of the Rare-earth Elements formed in the Photofission of Uranium". Some chapters are short review articles, while others are accounts of single experiments. However, the original Russian edition, of which this book is a translation, appeared in 1962, and the latest references are (inevitably) to work published in 1961.

If this work had appeared in translation in a review journal in 1962 or 1963 it could have been recommended, but its present appearance in hard covers seems entirely pointless.

B. ROSE

Mechanisms of Hormone Action

Edited by P. Karlson. (A NATO Advanced Study Institute, Meersburg/Bodensee, 20-26 Mai, 1964.) Pp. xii + 275. (Stuttgart: Georg Thieme Verlag; New York and London: Academic Press, 1965.) 49.80 D.M.

MECHANISMS of *Hormone Action* records the proceedings of the North Atlantic Treaty Organization advanced study institute held in Meersburg, Bodensee, in May 1964. At this conference there were twenty-five participants from Germany and thirty-one

from other European countries and the United States. The intention of the conference was to invite experienced researchers to present results and discuss their ideas in detail and so to stimulate their younger colleagues in the development of new and independent research. Altogether twenty-one papers were presented, in English, French and German, under three main headings: "Hormone Action by Control of Enzyme Activity"; "Enzyme Action by Changes in Permeability"; and "Hormone Action by Gene Regulation and Enzyme Induction". A synopsis of the discussion is also included.

The idea of considering the mechanism of action of hormones under a number of headings is a useful one. It is perhaps not only a reflexion of the interests of those devising the programme of the conference but also an indication of the volume of published work and of general tendencies of thought that forty pages of the text are concerned with hormone action by control of enzyme activity, while ninety-eight pages are devoted to the subject of hormone action by changes in permeability; hormone action by gene regulation and enzyme induction takes up 137 pages of text. Of course some overlap between the subject-matter in these three sections is inevitable, but the relative weight of the sections is almost certainly significant.

To me, the absence of an index to this book is a definite disadvantage. Although the argument might be put forward that the preparation of an index could delay seriously the production of the volume, the extra time involved is surely less serious than the diminished usefulness of the book for purposes of reference which inevitably results from the absence of an index. If a scientific book is worth printing and publishing at all it is, in my view, worth indexing even at the expense of a little delay in publication. Apart from this blemish the book is well produced and the diagrams and photographs (numbering 115 altogether) are excellent.

F. G. YOUNG

Libraries in the Modern World

By George Chandler. (The Commonwealth and International Library of Science, Technology, Engineering and Liberal Studies: Library and Technical Information Division.) Pp. vii + 164. (London and New York: Pergamon Press, Ltd., 1965.) 17s. 6d. net.

IT is a valid criticism of some books that the author has never made up his mind as to the type of reader he is addressing. When an author frankly admits that he is aiming at several levels of readership and disclaims satisfying any single level, the critic can be disarmed. Nevertheless, Dr. Chandler is fully justified in his hope that the various levels of readership will be sufficiently repaid for purchasing *Libraries in the Modern World*. The skill with which he contrives to display a balanced but accurate picture of all types of libraries, their activities and inter-relationships matches his candour, and the chief criticism that can be made of his effort is that he includes no reference to the various, more detailed accounts of particular classes of libraries which would enable the reader to pursue a particular interest further.

Dr. Chandler describes first the international function of libraries. This chapter alone contributes something towards the formation of the informed public opinion on the whole subject of the library service which is needed in Britain. Chapters follow on local public libraries, on academic libraries, private libraries, industrial libraries and on national special libraries, while finally there are two chapters on international libraries and documentation services and on international and national library associations. The chapters are not all of equal merit and that on industrial libraries is rather patchy and has some surprising omissions. None the less, if due regard is paid to such limitations, Dr. Chandler has provided what could be a useful introduction to a wide range of readers interested in one aspect or another of the use and management of libraries.

R. BRIGHTMAN