## Deltaic and Shallow-Marine Deposits

Proceedings of the Sixth International Sedimentological Congress, The Netherlands and Belgium, 1963. Edited by L. M. J. U. van Straaten. (Developments in Sedimentology, Vol. 1.) Pp. xvi+464. (Amsterdam, London and New York: Elsevier Publishing Company, 1964.) 130*s*.

## Deltaic and Shallow-water Littoral Marine Deposits

Edited by V. S. Yablokov and others. Pp. 263. (Moscow: Academy of Sciences, 1963.) 1r. 67k.

*DELTAIC and Shallow-Marine Deposits* is a compilation of 58 short papers presented to the Sixth International Sedimentological Congress held in 1963. Other than the thought-provoking presidential address by Dr. F. P. Shepard on "Criteria in Modern Sediments useful in Recognizing Ancient Sedimentary Environments", the contributions (in English, French or German) are all research reports, more or less related to the general theme of marine sedimentation under deltaic or shallow-water conditions in Phanerozoic, Recent and modern times. They describe deposits in 20 different countries and are almost as diverse in the nationalities of the authors. In connexion with the same Congress, the Commission on Sedimentary Rocks of the U.S.S.R. Academy of Sciences (Division of Geological and Geographical Sciences) has published the second-mentioned volume of articles, which begins with a useful review by Dr. G. F. Krasheninnikov on "Fossil Deltas of the U.S.S.R.". Unfortunately, only 7 of the 40 Russian contributions appear in translation in the official *Proceedings*, and the small edition (800 copies) of the Moscow publication will make it difficult to procure. However, the high price of the official record will certainly not facilitate a widespread circulation even of the papers printed in Western languages, distinguished though many of them are.

In both books the recent growth of interest in these shallow-water sediments is attributed to the belief that, since such deposits form the host-rocks for many useful minerals, a knowledge of the laws that govern the formation of the strata will be useful in interpreting the genesis of ores and in planning prospecting work. This, however, presupposes that ancient sediments have remained a closed chemical system throughout their history and that pay metals have not been introduced or redistributed by ground-waters. Perhaps the most useful outcome of the actualistic approach to sedimentology, followed by the papers in these symposia, will be a wider recognition of the nature and extent of the post-depositional chemical changes which many older sedimentary rocks have undergone; but this will not come about until more sedimentologists have entered into alliance with geochemists, the assistance of whom they seem at present inclined to eschew.

C. F. Davidson

## Advances in Inorganic Chemistry and Radiochemistry

Edited by H. J. Emeléus and A. G. Sharpe. Vol. 5. Pp. ix+429. (London and New York: Academic Press Inc., Ltd., 1963.) 103*s*. 6*d*.

EACH of the volumes in this series has provided articles of general interest to all inorganic chemists—articles which have been, and are, of very great use to research workers in the fields covered. The subjects dealt with in the present volume again range widely over inorganic chemistry and are of general, and particular, interest. R. S. Nyholm and M. L. Tobe discuss the stabilization of oxidation states of the transition metals. The treatment is simple and the chapter could well be required reading for any honours course in chemistry. Another general review is "The Structure and Reactivity of Organophosphorus Compounds" by R. F. Hudson, an article which considers the reactivity of these derivatives in terms of the properties of the phosphorus atom. Of a far more specific nature are the exhaustive reviews on the "Oxides and Oxyfluorides of the Halogens" by M. Schmeisser and K. Brändle, on "The Borazines" by E. K. Mellon, jun., and J. J. Lagowski, and on "Decaborane-14 and its Derivatives" by M. F. Hawthorne. The last-named is a particularly clear and lucid discussion of a subject which is undergoing rapid development at the moment. N. N. Greenwood reviews "The Chemistry of Gallium" with specific reference to the developments made in the chemistry of this element during the past ten years, while O. Glemser and H. G. Wendlandt write on "Gaseous Hydroxides", giving particular emphasis to the transition metal hydroxides. The only article on radiochemistry is "Chemical Effects of Nuclear Activation in Gases and Liquids" by I. G. Cambell. It does not fit in too well with the other articles in this book, as most of the molecules considered are organic in nature.

D. W. A. Sharp

## Master Equations and Tables for Symmetrical Component Fault Studies

By S. Austen Stigant. Pp. x+78. (London: Macdonald and Co. (Publishers), Ltd., 1964.) 25*s*. net.

THERE are many similarities between the various conditions of unbalance which can occur in three phase systems, and Mr. Stigant demonstrates the manipulation of the symmetrical component equations in each case to reduce as many problems as possible to basic equations which can then be applied to a given case, by means of tables, in a routine manner. It is of interest to examine this book with regard to its claim "to be of considerable value to H.N.C. students and teachers of electrical system theory, and to system engineers concerned with fault analysis".

There is much more to the application of symmetrical component theory than the manipulation of equations, as the author himself states, and the electrical engineering Higher National Certificate student would do well to achieve a full understanding of the method, from such sources as the adequate list of references given, before turning to the material of this book. Teachers, of course, will be interested in the approach, but practising systems engineers with problems of such complexity that the tables of equations are needed should to-day have access to, or be thinking of, digital computer programmes in which such routine manipulation is included. Simple connexion matrix techniques are described and provide a link with the author's other well-known books, but the possibility of computer application is not introduced. This is disappointing, because I feel that the book could have been valuable in introducing Higher National Certificate students, or the engineer as yet unaware of computers, to the means by which the drudgery of routine calculation is being eliminated in this field as in others, leaving the modern engineer more free for creative effort.

M. N. John

## Personnel and Industrial Psychology

By Prof. Edwin E. Ghiselli and Prof. Clarence W. Brown. Second edition. (McGraw-Hill Series in Psychology.) Pp. ix+492. 1955. 45*s*.

## Heat and Thermodynamics

An Intermediate Textbook for Students of Physics, Chemistry, and Engineering. By Prof. Mark W. Zemansky. Fourth edition. Pp. xi+484. 1957. 36*s*. (New York and London: McGraw-Hill Book Company, Inc.; Tokyo: Kogakusha Company, Ltd.) International Student Edition.

THE paper-back text-book resolves, to a large extent, the dilemma of the bound science treatise. The binding of a book may cost more than the printing of it, and science books become out of date so quickly. For decades, the French have been aware of this, and book production has been separate from binding. It is not surprising that more publishers are producing solid, academic works in paperback form. The latest examples are the McGraw-Hill International Student Editions, originally American, and published in England in Maidenhead. They are warmly