

$K\alpha_1$, $K\alpha_2$, and $K\beta$ are contained in vol. 1. Vol. 2 deals with Mo, Co, and W radiations, whilst charts for Fe and Cr radiations make up vol. 3. In the first edition all this information was contained in one volume and no data for W radiation were given. The charts claim to be sufficiently accurate for modern requirements and each page covers an angular range of 2.5° (2θ). The pale-blue millimetre grid seems to be very faint and of poor definition on a number of pages compared with the well-defined grid used in the first edition. Sheets of thick, black paper supplied to be placed under the page to be read, so as to reduce transparency, do not seem to make much difference, and since usually a large number of d -spacings have to be obtained, using these tables may prove to be very tiring. A table converting degrees and minutes into degrees and decimals, found at the beginning of each volume, will probably prove very useful. In addition to the charts, d -spacings are listed against degrees of 2θ in 'short-tables' for each radiation. The accuracies of d -spacings and wavelengths used are also discussed.

R. J. D.

SINDEEVA (N. D.). *Mineralogy and Types of Deposits of Selenium and Tellurium*. (Translated from the Russian.) New York, London, and Sydney (Interscience Publishers), 1964. xv+363 pp., 86 figs., 23 tabs., 41 ref. tabs. Price: 102s.

This translation has been published on behalf of the Geochemical Society, with financial assistance provided by a grant from the National Science Foundation. The book is divided into four chapters:

General Information (32 pp.) is devoted to a general discussion of the physical and chemical properties of selenium and tellurium, together with data on the application, utilization, and production of the two elements. Brief descriptions of analytical methods are also included.

Mineralogy of Selenium and Tellurium (136 pp.) gives a detailed account of the properties of the known minerals of both elements, together with some brief generalizations concerning their crystal structures and physico-chemical properties.

Selenium and Tellurium Deposits (85 pp.) outlines the regional distribution of selenium and tellurium deposits, and proceeds to describe the geology and occurrence of the elements in 17 types of deposits, divided into four main groups: magmatic, volcanic, hydrothermal, and exogenic.

Physical Characteristics of the Geochemistry of Selenium and Tellurium (45 pp.) discusses the distribution of the two elements in cosmic bodies and the earth's crust, and goes on to examine the behaviour of the

elements during the various geochemical processes. There is a brief note on the applications of their geochemistry to prospecting.

The remainder of the volume contains 6 pages of general conclusions, 41 reference tables, mostly of interplanar spacings in selenides and tellurides, a bibliography containing 285 references, an index of minerals of the two elements, and an author and subject index.

The book is very well illustrated and provides a detailed account of the mineralogy, geochemistry, and economic geology of the two elements that should prove to be of very great value to students of the geological sciences engaged on work in this or similar topics.

The standard of translation is high, and the text, in comparison with many translations, is written in an unusually lucid fashion. The Geochemical Society is to be congratulated on sponsoring a volume which is almost certainly destined to become a standard work. C. H. J.

VAN STRAATEN (L. M. J. U.), editor. *Deltaic and Shallow Marine Deposits*. Amsterdam (Elsevier Publishing Company), 1964. xvi+464 pp. Price: 130s.

This book, the first of a series entitled 'Developments in Sedimentology' to be published by Elsevier, is a record of the proceedings of the Sixth International Sedimentological Congress held in the Netherlands and Belgium in 1963. The underlying theme of the 59 contributions included in the book is the investigation and understanding of processes of sedimentation in the deltaic and shallow marine regions of the present oceans and the application of this knowledge to ancient sediments. In fact the papers represent a roughly equal interest in Recent with Pleistocene (24) and ancient (30) sediments and the opening article, by F. P. Shepard, rightly reflects this relationship in discussing some of the criteria found in modern sediments that prove useful in recognizing ancient sedimentary environments. Within the general framework of the title the papers included in this book display a great diversity of topic, ranging from a discussion of the classification and genesis of sedimentary basins to a statistical analysis of the various shape-indices devised for studying the abrasion of sand-grains.

Consecutive review of contributions varying so widely in subject, scope, and significance would serve no useful purpose and only a selection of papers of specific mineralogical or geochemical interest will be mentioned here.

Two contributions deal with clay minerals. One by A. Klingebiel and C. Letouche, provides a description of clay mineral facies in Palaeogene