Davies (G. M.). A French-English Vocabulary in Geology and Physical Geography (reprint of 1st edition (1932)). John Mann. Pp. 140+ix. Price 18s.

This glossary of some 5,000 terms, being a reprint of the first (1932) edition, is to some extent out of date. Allowing for this, it gives a reasonably comprehensive vocabulary in physical geography and general geology. In stratigraphy it is more than comprehensive, many terms familiar in English geological literature with the same usage as in French being included both in the list and in the stratigraphical tables (Appendix I). It is, however, less complete and accurate in mineralogy and petrology in which the author's policy of extreme brevity has led him to give definitions which are sometimes misleading and occasionally quite inaccurate. For example, gieseckite and gigantolite are described as varieties of nepheline and cordierite respectively, whereas they are pinite pseudomorphs after those minerals. In French, as in English, it may be difficult to decide what the usage of a rock name really is, and it is usual to quote an authority for it; nevertheless no such references are given. They would be particularly useful in support of definitions such as 'gneiss without mica' for leptynite and 'zircon-syenite' for miascite. There are also notable omissions in this field: e.g. the abbreviations Np, Nm, and Ng for  $\alpha$ ,  $\beta$ , and  $\gamma$ , although many abbreviations in the general field are quoted (e.g. A to G for major subdivisions of the Lower Palaeozoic) that are internationally current. One last, perhaps unfair, criticism is that the price is rather high for a book of this size and scope.

S. E. E.

GLEASON (Sterling). Ultraviolet Guide to Minerals. A Complete Working Manual for the Use of Ultraviolet Light in Locating and Recognizing Minerals including Field Identification Charts. Princeton, New Jersey; New York, Toronto, London (D. Van Nostrand Company, Inc.), 1960. 244 pp., 9 figs., 16 col. pls. with 61 figs. Price \$6.95, 52s. 6d.

This is a book that will satisfy a long-felt want in an age in which the study of the fluorescence of minerals has become fashionable. As the preface claims, it is written to suit all types of readers. Introductory chapters dealing with fluorescent properties and use of ultraviolet lamps in the field are followed by useful charts to aid the identification of minerals by the colour of their fluorescence. Chapter VI deals with grading of gemstones by this method and chapter VII gives an

alphabetical list of minerals with localities and details of their fluorescence and phosphorescence under short-wave and long-wave ultraviolet light. Sections are also devoted to radioactive minerals, the uses of fluorescence in industry and mineral testing, and a résumé of its history and probable future. The book is illustrated by a number of coloured plates and has an adequate index.

Jessie M. Sweet

Kukuk (Paul). Geologie, Mineralogie und Lagerstättenlehre. Berlin (Springer Verlag), 1960. 354 pp., 433 figs. Price 28.50 DM.

This book is meant as an introduction to geology, mineralogy, and economic geology for students of mining schools and others who need the above-mentioned sciences as ancillary subjects. Special emphasis is put on practical aspects with regard to coal mining.

The first part (Geology) is subdivided into two main chapters: General Geology (105 pp.) deals briefly with the main rock types, some principles of structural geology, and a survey of exogenic and endogenic forces. For the sake of brevity, aspects of microscopic investigation of thin sections are omitted. Forty excellent drawings and photographs illustrate the survey of structural features. In stratigraphy the space devoted to the kainozoic period (considerably more than to the mesozoic) seems slightly exaggerated.

In the second part (Mineralogy) general aspects cover 20 pp., the systematic discussion of minerals 60 pp. The whole approach in the chapter on general mineralogy seems to be based on the old descriptive outlook and no justice is done to the fundamental facts of modern crystallography. The terminology, too, is often unsuitable or even incorrect. The systematic survey of minerals, arranged according to chemical principles, is a most welcome account. It is illustrated by 68 excellent photographs and drawings, which many more specialized textbooks do not provide in such quality and quantity. Physical properties, occurrence, and use of minerals are discussed. Many data of production and prices are given. A special feature, which even the more experienced geologist will appreciate, is that most mineral names are explained etymologically.

The third part of the book (pp. 240-340) deals with economic geology. Aspects of systematic subdivision are briefly mentioned and the importance of geophysical methods for prospecting is underlined. The systematic discussion of deposits is confined to those of Germany. The author devotes special interest to the Ruhr coal mining area (40 pp.) and some space to ore, salt, oil, and gas deposits.

E. F. S.