

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.

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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.

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