

something more than the kind of information on optics that accompanies the popular texts on optical determinative mineralogy. The book includes references to literature published up to and including 1965. The contents of the book are:

1. Preparation of material for microscopic examination;
2. Morphological measurements (shape, particle-size, etc.);
3. Determination of refractive index;
4. Absorption and pleochroism;
5. Extinction and birefringence;
6. Quantitative conoscopy and the determination of the optic axial angle;
7. Dispersion;
8. Spindle stage methods;
9. Universal stage methods;
10. Hot stage microscopy;
11. Phase-contrast microscopy.

The chapter on universal-stage methods is rather inadequate since no attempt is made to illustrate the various operations in terms of stereographic projections. Indeed, the general application of stereographic projection to many other problems in optical crystallography is not discussed in the book. The text is well illustrated but unfortunately the quality of many illustrations is poor.

T. W. B.

STRAKOV (N. M.). *Principles of lithogenesis*. Vol. 1. Edinburgh (Oliver & Boyd), vii + 245 pp., 57 figs., 31 tables. Price £6. [Translated from the Russian by J. Paul Fitzsimmons, S. I. Tomkeieff, and J. E. Hemingway.]

This is the first volume of a three-volume study of sedimentary rocks; volumes two and three will deal with sedimentation in humid and arid zones. The book was first published in 1962 [M.A.15-329]. Like many Soviet geological works, the scope is wide with the accent on physical-chemical aspects, Ch. 1 starting with a map of the major types of weathering in the world. Mechanical and chemical erosion are described, together with the effect of organic material on the mobility of the chemical elements; hydrodynamic and hydrochemical features of marine basins; processes of sedimentation in marine basins and later diagenetic changes. Ch. 2 deals with humid sedimentary complexes and paragenetic rock associations, together with controls of the thickness of sedimentary formations and relationships between sedimentation rate and crustal movements. The loss by reworking of facies types associated with the original peripheral zones of the natural sedimentary region is stressed. Ch. 3 describes the features of humid rock formations on platforms and in geosynclines, and Ch. 4 deals with the glacial and arid types of lithogenesis and their relationships to the humid types. Volcanic-sedimentary lithogenesis is also discussed. Ch. 5 is an account of the distribution of

climatic types of lithogenesis on the earth's surface during Phanerozoic times during which three stages in the evolution of climatic conditions are recognized; each corresponding to general stages in the tectonic development of the earth. Tectonic deformations of the lithosphere are regarded as taking place against a background of constant shifting of both the earth's rotational axis and the position of the equatorial plane.

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*Mineralium Deposita*, vol. 1, no. 1, 1966 (Springer-Verlag, Berlin).

This new quarterly bears the same relationship to the recently formed Society for Geology Applied to Mineral Deposits as Economic Geology does to the Society of Economic Geologists. That is, subscription to the Journal is not restricted to members of the society. The publication is intended to be international and has some thirty regional editors under the leadership of Prof. Amstutz of Heidelberg. Articles are published in either English, French, or German, and, regardless of the language used, each has an English abstract. The first copy contains an introduction on the scope and aims of the journal in both English and German and, also, notes for intending authors in all three languages.

Issue no. 1 contains papers ranging from isotopic sulphur in stratiform lead-zinc ore bodies to the more regional aspects of ore occurrence in southern Turkey. Also included is a more general article by P. Routhier pleading for more method in scientific communication and asking, rather optimistically, for more concise writing to achieve a reduction in bulk of information without reduction in content.

The journal is well produced and printed although illustrations in many cases appear rather cramped and mixed with text. This is partly due to trying to place them within one column of a double-column page. The editors do not, however, appear to be afraid of using half-tone illustrations of high quality. This journal is a very welcome addition to the very limited periodical literature on economic geology.

J. W. BARNES