

a half-cylinder, the vertical axis of which is the refractive index, the diameter birefringence and the circumference $2V$. Methods for the determination of refractive index, birefringence, and $2V$ are discussed; the latter based on Kamb's (1958) equations. T.W.B.

Book Notices

BRANCAZIO (P. J.) and CAMERON (A. G. W.), editors. *The origin and evolution of atmospheres and oceans*. New York (Wiley), 1965, ix+314 pp. Price: 94s.

OSBORNE (F. Fitz), editor. *Geochronology in Canada*. Toronto (Univ. Toronto Press), 1965, 156 pp. Price: 48s.

RAGUIN (E.). *Geology of granite*. London (Interscience), 1965, xxi+314 pp. Price: 68s.

WINKLER (H. G. F.). *Die Genese der metamorphen Gesteine*. Berlin (Springer-Verlag), 1965, viii+218 pp. Price: DM 19,80.

MEGAW (H. D.), editor. *Crystallographic book list*. Utrecht (Oosthoek's Uitgevers Mij, Domstraat 11-13, Utrecht), 1965, xii+83 pp. Price: 20s.

VARLEY (E. R.). *Sillimanite*. London (H.M.S.O.), 1965, v+165 pp. Price: 15s.

This publication is the latest in the series on economic minerals and metals prepared by the Mineral Resources Division of the Overseas Geological Surveys. The first part of the book (38 pp.) provides a general description of the minerals, origin, mode of occurrence, mining, calcination, commercial uses, and prices. Later parts of the book deal with production in 19 Commonwealth and 27 foreign countries. There is a comprehensive bibliography (29 pp.) and an index.

IMBRIE (J.) and NEWELL (N.), editors. *Approaches to palaeoecology*. New York (Wiley), 1964, viii+432 pp. Price: 94s.

While intended primarily for palaeontologists, the latter part of the book (from p. 238) consists of contributions on the subjects of sedimentary petrology, structure, diagenesis, geochemistry of sediments, and fossil shell material. The book presents ecology and palaeoecology as an interdisciplinary subject and attempts to co-ordinate overlapping geological and geochemical fields of interest.

RICH (C. I.) and KUNZE (G. W.), editors. *Soil clay mineralogy, a symposium*. North Carolina (Univ. of North Carolina Press), 1965, xvi+330 pp. Price: 64s. T.W.B.