

BOOK REVIEWS

ALLER (Lawrence H.). *The Abundance of the Elements*. New York and London (Interscience Publishers), 1961. xi+282 pp. Price \$10.00.

This clearly written text provides an authoritative and up-to-date review of the abundance of the elements in several distinct assemblages: the earth's crust, the earth as a whole (mean composition), meteorites (the several classes separately and as a whole), meteors, gaseous nebulae, stellar atmospheres, cosmic rays. The abundances of the individual isotopes are discussed, and theories of the origin of the elements are considered and reviewed. While a large part of the book deals with stellar and cosmic problems, the subject is of direct importance to geologists, petrologists, and meteoriticists.

M. H. H.

COORAY (P. G.). *Geology of the Country around Rangala*. Geol. Surv. Ceylon, 1961, Mem. 2.

The report covers an area of 500 square miles in central Ceylon. The whole area consists of PreCambrian rocks. These have been divided, on the basis of their petrographical characters, into two main groups—the Vijayan group (mainly banded and granite gneisses) and the Highland Series (mainly meta-sediments with intrusive charnockites). The relationship of the two groups is obscure.

The Highland Series typically form parallel, regular folds having a NNW.-SSE. trend. The Vijayan Series, by contrast, show no regular fold system, although a dominant N.-S. trend can be distinguished.

P. M. G.

HENGLEIN (Martin). *Lötrohrprobierkunde. Mineraldiagnose mit Lötrohr und Tüpfelreaktion*. 4th edn, Berlin (Walter de Gruyter & Co.), 1962. Sammlung Göschen Bd. 483. 108 pp. Price DM 3.60.

The ancient art of blowpipe analysis is greatly neglected nowadays, but can still be very useful, and has the advantage of requiring little apparatus (and that portable) and few reagents. Prof. Henglein gives a sound account of the method and its applications. It is unfortunate that his choice of supplementary micro-crystal tests is far from ideal (though his title speaks of Tüpfelreaktion, these are not the Spot Tests of Feigl, but the older microchemical reactions of Behrens). So while

this little book is useful so far as it goes, the authoritative synthesis of blowpipe reactions, micro-crystal reactions, and spot-tests that its title suggests remains only a hope for the future.

M. H. H.

WERNER (A. G.). *On the External Characters of Minerals*. A translation by CAROZZI (A. V.). Urbana (University of Illinois Press), 1962. xxxii+118 pp. \$4.50.

This book is a new English translation of A. G. Werner's treatise on descriptive mineralogy (oryctognosy) entitled 'Von den äusserlichen Kennzeichen der Fossilien' and published in 1774. It is the third English translation, the first being Thomas Weaver's in 1805, and the second that of the Wernerian Club in 1849-50. Werner's book consists of 5 chapters (217 sections) and deals first with the characters of minerals in general, the history of the external characters, and the accuracy with which these characters can be described. This is followed by an explanation of each of these characters, e.g. colour, cohesion, smell, taste (166 sections), and finally by three general rules for recording the characters determined. The value of the new translation lies in the fact that it is really the second Wernerian edition, made possible by the purchase by the Library of the University of Illinois of Werner's personal copy, which incorporated those changes and additions he would presumably have made if he had had the time and inclination to prepare the second edition.

In contrast to the previous English translations, that of Mr. Carozzi follows faithfully the original; the sections are given the same numbers, and Werner's page numbers are given in parenthesis in the text. Mr. Carozzi has carried out his task in a most scholarly manner.

A. A. Moss

CAMERON (Eugene N.). *Ore Microscopy*. New York and London (John Wiley & Sons, Inc.), 1961. 293 pp., 79s.

This volume fills one of the most deplorable gaps in geologic literature, and it will be appreciated by everyone interested in ore minerals and ore deposits. There are nine main chapters: (1) Introduction. (2) The ore microscope. This provides a concise and objective survey of various makes of ore microscopes. Special emphasis is put on accessory equipment required for quantitative work. (3) The preparation of polished surfaces. The detailed addresses of manufacturers of various items will