

magnificent specimen of uvarovite crystals embedded in a quartz matrix (Sahama)—the colour printing can hardly be doing the specimen justice. A 'coffee-table' book, perhaps, but one which any mineralogist would be glad to have. R. A. H.

ANGINO (E. E.) and BILLINGS (G. K.). *Atomic absorption spectrometry in geology* (Methods in Geochemistry and Geophysics: 7). Second edition. Amsterdam, London, and New York (Elsevier), x+191 pp., 14 figs., 1972. Price Dfl. 32.20 (\$10.25).

This revised edition of the book, which first appeared in 1967, is an attempt to cover the rapid developments in the field of atomic absorption analysis from 1967 to 1971. This has been done by adding a large appendix to the original edition, taking up 44 of the 191 pages, and in its present form it is essentially two books in one. The book brings together a large amount of information that, although readily available in the literature, is valuable to geochemists to have in a single volume. It includes chapters on theory, instrumentation, and interferences with specific references to most analysable elements, and a substantial section on applications, which are most useful. However, the format adopted, of having the recent developments in a separate section, is more for the convenience of the author than the user.

Inevitably in a book of this size some aspects of the subject are not fully covered. In particular, the section on commercially available instruments is rather thin and of little relevance to the British market. The question of detection limits for the various elements is well covered, but little is said about the excellent precision and accuracy that can be achieved. This could have been more fully considered, perhaps at the expense of the chapter on the rather esoteric applications of atomic absorption to isotopic and noble gases analysis.

These criticisms aside, the book does cover an important and expanding analytical method. It will be of value not only to geochemists actively using atomic absorption but to geologists wanting a general introduction to the method and its potentialities.

J. N. WALSH

WOOD (D. N.), Editor. *Use of Earth Science Literature*. London (Butterworths), 1973. x+459 pp., 23 figs. Price £7.50.

The increasing volume of literature is making it more and more difficult to discover previously published information, and an urgent need has developed for up-to-date guides to primary and secondary sources of knowledge. Dr. Wood, of the National Lending Library, at Boston Spa, has written most of the fundamental chapters himself (Primary literature, Secondary literature—reference and review publications, Secondary literature—bibliographies, abstracts and indexes, Translations, and Foreign literature), and has gathered a formidable team of experts for chapters on various sections of the subject. In the chapter on Primary literature, Wood analyses the references in twenty publications and finds that 82 % were to periodicals; the *Mineralogical*

Magazine ranks fifth in the number of times it is cited (47 % being self-citation). Reference and review publications covering encyclopedias, dictionaries, handbooks, yearbooks, directories, textbooks and monographs, and review articles are all introduced as secondary sources. Bibliographies, and abstracting and indexing publications are considered in depth, with examples and details of coverage, coverage overlap, and speed of coverage (*Mineralogical Abstracts* is quoted as having 59 % of its abstracts for papers published in the previous year, *Referativnyi zhurnal (Geologiya)* 80 %, *Chemical Abstracts* 43 % with 45 % current year). More specialist chapters include those on Stratigraphy and regional geology by W. A. S. Sarjeant and A. P. Harvey, with 63 pages of references to fundamental books, reviews, and bibliographies on regional geology arranged alphabetically by country within each continent. Mineralogy, petrology, geochemistry, and crystallography are covered by Olive R. Bradley, with sections for introductory textbooks, advanced textbooks and reference books, periodicals, and abstracting services. Structural geology and tectonics are dealt with by P. W. G. Tanner, and Applied geology, including metalliferous ore deposits and their exploration, industrial minerals, and engineering geology, is covered by C. H. James. Clay and soil minerals are partly covered under mineralogy but also in the chapter on Soil science by D. A. Jenkins and R. I. J. Tully. Finally, sections on mineralogy, crystallography, petrology, and geochemistry are included in the chapter on the History of geology by D. A. Bassett, and the book concludes with an interesting series of practical exercises.

This will be an invaluable reference work for librarians and all Earth scientists and deserves a place in personal as well as departmental and all sectional and main libraries.

R. A. HOWIE

TATSCH (L. H.). *Mineral deposits*. Sudbury, Massachusetts (Tatsch Associates), 1973. iii+264 pp., 8 figs. Price \$64.00.

In this unconventional volume the purpose is to analyse the mineral deposits on a global scale in terms of geometrical, mechanical, thermal, and chemical aspects of the Earth's evolution. The starting-point is the occurrence of seismotectonic belts, elongate in form, characterized by varying degrees of tectonic, seismic, and magmatic activity, and the existence of similar belts in various regions of the Earth throughout its 4600 Myr of history. It is claimed that regional metallogenic zones are constituted similarly in all parts of the world, thus gold and copper are associated with eugeosynclines, tin and tungsten with terrigenous miogeosynclines, lead and zinc with geanticlines of limestone. The present circum-Pacific belt can be separated into inner and outer megazones; the former, characterized by Neogene andesites and 'femic' mineralization (Cr, Ni, Cu, Au), originated close to oceanic crust; and the latter, carrying Sn, W, and other 'sialic' mineralization, is related to continental crust. Among other North American examples quoted is a 3500 km long segment of a Pre-Cambrian orogenic belt carrying gold deposits across the Canadian Shield from Great Slave Lake to Eastern Quebec. For South America there are equally clear belts, and this