

BOOK REVIEWS

Gallagher, M. J., Ixer, R. A., Neary, C. R., and Prichard, H. M., eds. *Metallogeny of Basic and Ultrabasic Rocks*. London (Institution of Mining and Metallurgy), 1986. viii + 522 pp. Price £24.00.

This volume presents 35 papers drawn from a symposium on the metallogeny of basic and ultrabasic rocks held in Edinburgh, 9–12 April 1985 and organized by the British Geological Society, the University of Edinburgh, the Open University, the Institution of Mining and Metallurgy, the Royal Society's National Committee for the IGCP, the Applied Mineralogy Group of the Mineralogical Society and the Geological Society of London. The papers are predominantly the results of original research work, although a number of review contributions are included.

The volume is divided into 6 sections, termed sessions following the format of the meeting. Session 1 comprises 4 papers dealing with aspects of mineralization associated with ocean-floor processes. In this session is a review of volcanism and mineralization on the East Pacific Rise by Hekinian and Bideau. Session 2 comprises 7 papers concerned with aspects of gold and base metal mineral deposits; these papers are essentially concerned with particular deposits. Sessions 3 and 4 are a collection of 15 papers describing chromite mineral deposits, again principally related to particular deposits, although also included are papers which give account of a structural classification of ophiolitic chromite deposits, constraints offered by mineral chemistry on ophiolitic mantle sequences and their evolution, and factors affecting the distribution of chromite deposits in folded belts. Six papers on platinum group minerals comprise Session 5 and deal more with theoretical aspects than with description of particular deposits. A review paper on the distribution, transport and concentration of platinum group elements by Stumpfl is included in this session. Session 6 reports on three exploration case histories.

Each paper has its own bibliography (much more satisfactory than a single bibliography at the end of the volume), and at the end of each session is a record of discussion from the Edinburgh meeting. At the end of the volume is an extensive subject index and separate name index.

The volume has an A4 page format, is limp bound and has been produced from camera-ready copy. This has the obvious advantage of speeding

up the process of publication which is of necessity when conference proceedings are involved. The editors have done a good job to get the volume produced in reasonable time (indeed extremely rapidly when compared with certain other conference volumes published in recent years). However, one unfortunate consequence of using this method of production is that the text-figures have suffered to varying degrees. Well drafted figures are all reproduced with good clarity. However poorly presented figures are sometimes of rather limited use, whilst virtually all photographs and photomicrographs are of a poor quality. In addition in the review copy forwarded to me one text page appeared blank (p. 334), whilst two pages (pp. 305–6) appeared twice, so best to check your personal copy!

Nevertheless the disappointing quality of the photographs and photomicrographs should not be allowed to detract too much from the fact that the volume has appeared relatively quickly, and this will no doubt ensure that the volume is of interest to workers involved in the field of metallogeny associated with basic and ultrabasic rocks. At the price of £28.00 it represents good value for money.

R. E. BEVINS

Nesse, W. D. *Introduction to Optical Mineralogy*. New York, Oxford (Oxford University Press), 1986. x + 325 pp., 192 figs., fold-out Interference Colour Chart. Price: £30.00.

This text covers, in one volume, the principles of optical mineralogy, basic techniques, and descriptions of common rock-forming minerals. The book is similar in scope and depth to texts by Shelley (M.M. 50–184), and the now rather dated Kerr (M.M. 42–166). It is more advanced and comprehensive than Gribble and Hall (M.M. 50–355). The book assumes a basic training in mineralogy, and a knowledge of crystallography.

The first two chapters introduce light and the petrographic microscope. Throughout the next five chapters the author intersperses the treatments of principles and techniques, starting with refractometry, then progressing successively through isotropic, uniaxial, and biaxial optics. The text is very lucid and well set out. Particularly clear lists of instructions on technical procedures are given, and