

apparent to the reader. It would have been a great help, if the descriptions accompanying such photographs had included labelled key sketches. The other criticism which needs to be made is more concerned with the FAMOUS project as a whole than this particular book. If this was truly an international enterprise, why must all the publications be so assiduously confined to either the French or the American sub-section of the area? The impact of this atlas would have been increased greatly, if it had been combined with its American counterpart into a single comprehensive volume. As it is, the potential buyer must decide whether to invest in the northern or southern part of FAMOUS. Only those with limitless budgets will afford both.

R. N. THOMPSON

Reeves (R. D.) and Brooks (R. R.). *Trace Element Analysis of Geological Materials*. New York (J. Wiley & Sons) 1979. x + 421 pp., 70 figs. Price £19.50.

Several books have appeared within the last decade in the field of analytical geochemistry, and this most recent addition must therefore compete with previous works. It does, however, specifically cover trace element analysis and it seeks to 'be of use not only to those with formal training in analytical chemistry and geochemistry, but also to those who are being drawn into this field from many other branches of science'.

After a short introductory chapter, a chapter is devoted to 'sampling and storage techniques'. This contains many platitudes including, for example, an exhortation to use plastic containers for the storage of solid samples 'because they are unbreakable and much less likely to contaminate the material'! The book continues in the same vein, with chapters on physical and chemical methods of sample pretreatment. Generalities abound, but specific information is lacking, although there are extensive collections of references.

The main part of the book is taken up with an account of various analytical methods, including those which are currently most widely used for trace element analysis. These chapters include some valuable accounts of the theoretical background to the analytical methods, which are most welcome. However, no attempt is made to provide detailed information on analytical methods. A reader seeking information on how to analyse a sample for a particular element would be little wiser from reading this book, nor would he receive advice on which method to use. There is also some lack of balance in the attention devoted to the different methods,

molecular fluorimetry rates almost as much space as X-ray fluorescence, and the suggestion made that the *precision* achieved by X-ray fluorescence is only 5-10% leaves the impression that practising analysts have not been involved in the preparation of the text.

The book concludes with chapters on 'Uses of data on trace elements in geological materials' (which is of little geological value) and a chapter on 'statistical interpretation of geochemical data' which is of use.

Overall it is difficult to recommend this book, the lack of specific information on the analytical methods is a serious handicap, although the accounts of the theoretical background and the considerable collection of references may assist some readers.

J. N. WALSH

Pies (W.) and Weiss (A.). *Crystal Structure Data of Inorganic Compounds. Part c. Key Elements: N, P, As, Sb, Bi, C. Key Element N (Substance Numbers c1 . . . c1133)*. (Landolt-Börnstein: Numerical Data and Functional Relationships in Science and Technology, New Series. Group III: Crystal and Solid State Physics. Vol. 7. Springer-Verlag. Berlin, Heidelberg, and New York, 1978. xxv + 260 pp., 35 figs. Price DM 290 (\$145).

This is a further volume in the series of comprehensive crystal structure data compilations for inorganic compounds (*Mineral. Mag.* (1979), **43**, 187). The key element is nitrogen, thereby covering ammonia and its derivatives, azides, and oxy-compounds of nitrogen. Mineral species under these headings are few and far between but include osbornite, sinoite, kleinite, nitratine, nitre, nitramite, nitrobarite, nitrocalcite, buttggenbachite, darapskite, and humberstonite. The data are clearly presented and, again, the series can be recommended to laboratories specializing in inorganic crystal-structure studies.

A. M. CLARK

Journal (A. G.) and Huijbregts (Ch. J.). *Mining Geostatistics*. London & New York (Academic Press), 1978. x + 600 pp., 267 figs. Price £32.00.

Geostatistics is a relatively young branch of statistical estimation theory pioneered by Professor G. Matheron, founder of the Centre de Géostatistique, Fontainebleau, in the mid 60s. Both the authors were members of his research group since its