of the diffraction pattern are of interest to the investigator, e.g. $\bar{2}01$ measurements or microcline obliquity measurements. No mention is made of single-crystal techniques for the study of two-phase feldspars except where the author questions whether those who have claimed that certain complexities in the diffraction pattern can only be detected in single-crystal photographs have tried the Guinier-type camera. Certainly the identification of a peristerite is readily achieved by single-crystal X-ray methods whereas by powder methods it is difficult or impossible. The final chapter is a discussion of the identification of feldspars in clastic rocks, and this incorporates a flow sheet for the investigation of the feldspars in a crushed rock sample.

The book is written in an easily readable manner and the author has done a considerable service in bringing together in one place much of the information on the feldspars. It is doubtful if the book will be used to its full potential by sedimentologists attempting to obtain the maximum amount of information about feldspars because of the time-consuming nature of some of the techniques that have to be used. On the other hand it seems likely that mineralogists and petrologists will find this a useful text. W. S. MacKenzie

Hey (M. H.). *Catalogue of meteorites.* 3rd edition. London (British Museum (Nat. Hist.)), 1966, lxviii+637 pp. Price £6.

The sub-title of this third edition reads 'With special reference to those represented in the collection the British Museum (Natural History)'. This should not mislead the reader into thinking that the catalogue is thereby restricted. All essential information about meteorites is given up to December 1965 and some of the new sections in this edition greatly help workers in the subject. Thus there is now a list of named meteorites by class and another list arranged topographically. Tektites and natural glasses in the British Museum are also listed. A most important addition is the 47-page table of minor and trace element data listing in a single column results of determinations on many elements for each meteorite, mean values being quoted where several determinations have been made, or if these do not agree too well then individual values are listed in footnotes. Though each result is not directly referenced, the list of papers from which the data have been culled is given. This table of trace element data is a tremendous boon to meteoriticists and all will be grateful to Hey for the work involved in its compilation.

The whole volume is an outstanding reference work that many individuals and all libraries with any interest in meteorites will wish to have available.

A. A. SMALES

CHIZHIKOV (D. M.) and SHCHASTLIVYI (V. P.). *Selenium and selenides.* Translated from the Russian by E. M. Elkin. London (Collet), xvi+403 pp., 223 figs., 76 tables. Price 152*s.* 6*d.*

This monograph presents results of the authors' research, and reviews (with extensive bibliography) the properties and production of selenium, including single crystals, and selenides. Crystallographic and experimental data will be of interest to mineralogists. The main source of selenium is the anode slimes of electrolytic copper and nickel refineries; it is also obtained from selenium-bearing pyrite.

R. A. H.

VLASOV (K. A.), KUZ'MENKO (M. Z.), and ES'KOVA (E. M.). *The Lovozero alkali massif.* (English edition translated from the 1959 publication of the Academy of Sciences, Moscow, U.S.S.R., by D. G. Fry and K. Syers and edited by S. I. Tomkeieff and M. H. Battey.) Edinburgh and London (Oliver and Boyd), 1966, xvi+627 pp., 257 figs., 201 tables. Price £12. 12*s.*

The sub-title in the original edition of this monumental work makes it clear that the emphasis is on rock types and notably the pegmatites, their mineralogy, geochemistry, and genesis. The structure, petrography, and chemical and mineralogical constitution of the massif as a whole are treated in the first 67 pages; these are described in a brief, but effective form, since they were subjects of earlier accounts, chiefly by O. A. Vorob'eva, V. I. Gerasimovskii, and N. A. Eliseev, between 1938 and 1950.

The alkali massif consists essentially of a differentiated layered complex over 1000 m. in thickness, with more or less well-defined rhythms of foyaite, lujavrite, and urtite bands, surmounted by a eudialytic lujavrite complex up to 500 m. thick. A third but much subordinate member forms numerous small bodies, which collectively constitute the poikilitic syenite complex. The relations among the complexes are complicated and have led to disagreement as to their relative ages among various workers. The present authors, however, infer that the eudialytic