

of the Academy on 5 February 1919 commissioned A. E. Fersman to take 'necessary measures'. 'However to have accomplished any such measures at that time was not possible on account of foreign military intervention'. The expedition to Saratov was eventually mounted in 1922.

'The central scientific institution in the field of meteoritics in the U.S.S.R. is the Committee on Meteorites of the Academy of Sciences of the U.S.S.R. The committee engages in the collecting, study and conservation of meteorites and also assists and supervises the study of meteorites in other scientific institutes of the U.S.S.R.' and Krinov outlined the history and work of the committee including the investigation of the Tunguska event of 1908, the War-time safeguarding of the Moscow collection and the 1947 infall of the huge shower of meteoritic iron at Sikhote Alin.

The current volume follows the pattern established in recent years. The last twenty-four pages are devoted to the publication of a 'Catalogue of the meteorite collection of the Leningrad mining museum on 1 January 1979' and, in my copy, the photographic plates illustrating the earlier papers have got separated from their legends and are bound within the 'catalogue' section. Of the 130 remaining pages approximately half are devoted to the formation, evolution, geophysical, petrological, and chemical aspects of meteorite craters and impactite structures while the other half covers a range of topics involving the chemical analysis of the iron meteorites Yudoma, IVA; Aliskerovo, IIIA; Repeev Khutor, Anom; Norin Sibir, Anom; and the eucrite Vetluga and the L-chondrite Kuleshovka. There are also chemical and petrological studies of the chondrites Raguli, H3-4 and Andreevka, L3 with reports of the discovery of the new meteorites Tsarev, Kutais, and Bakhardok, and an investigation of the enstatite chondrite Pillistfer which fell in 1863. Work on the silicate inclusions in iron meteorites is reviewed and there is an account of daubreelite in the Sikhote Alin and Boguslavka irons. Finally, in a sense bridging the themes of shock damage to the target Earth and the condition of the projectile, there is an account of the magnetic peculiarities of ureilites and shocked chondrites.

It would appear appropriate to offer congratulations to *Метеоритика* and to hope for continued publication. Its sister, *Meteoritics*, the Journal of the Meteoritical Society has, in 1982, reached volume 17 and contains, on p. 303, an interesting breakdown of the membership, involving 456 from the USA, 41 from Japan, 38 from the UK and 2 each from the People's Republic of China and the USSR out of a grand total of 780.

H. AXON

Fleischer, M. *Glossary of Mineral Species 1983*. Tucson (Mineral Record), 1983. vi+202 pp. Price \$8.00 (plus 50c. per copy, postage and handling; available from Mineralogical Record, PO Box 35565, Tucson, Arizona 85740, USA).

The fourth edition of this now indispensable listing of mineral species gives alphabetically the names, crystal system, and chemical compositions of mineral species as of 1 October 1982. Only the most commonly used synonyms and obsolete names are included. Since the 1980 edition, there are 230 new entries, more than 600 of the former entries have been changed, and the recommendations of the International Clay Minerals Association on the nomenclature of clay minerals have been incorporated. Professional and amateur mineralogists alike are once again in the author's debt for providing an updated version of this essential reference work.

R. A. HOWIE

Long, F. W. *Lapidary Carving: Design and Technique*. New York and London (Van Nostrand Reinhold), 1982. x+132 pp. Price £21.70.

This book introduces the reader to the techniques and skills necessary for the making of such delightful things as intaglio, cameo, chevet engravings, low and high relief carvings, small figures and a variety of jewellery.

Soft materials such as amber, coral, ivory, and talc are briefly discussed but this book is really about the technique for working materials of medium hardness (e.g. lapis lazuli H. 5½, malachite H. 3½-4) and of high hardness (e.g. beryl H. 7½-8, jadeite H. 6½-7, nephrite H. 6-6½, turquoise H. 5-6, corundum H. 9). About one-third of the book is devoted to tools and equipment and sufficient detail is given so that a novice could get well and truly started.

The author stresses that the actual carving is a creative art but quite a substantial section is included on methods and techniques which is essential for the beginner and probably helpful to the experienced worker. The book in fact is a complete introduction to this fascinating art and apparently the only one available which covers all aspects in one volume. One of the surprising conclusions reached in the book is that the artistic quality of modern carvings, despite modern technology and materials, is in no way comparable to the work of older cultures. Apparently modern advances are no replacement for patience.

The book contains many excellent black and white photographs but would have been enhanced with at least a few coloured ones.

D. L. HAMILTON