

is not suspected and we therefore classify the mineral as a columbite, rather than ixiolite (Nickel *et al.*, 1963).

Gunheath Pit is the third locality recorded for columbite in the British Isles. von Knorring (1951) reported it in the Meldon aplite, Devonshire, and later, in the Chiapaval pegmatite, South Harris, Outer Hebrides (von Knorring and Dearnley, 1960). The St. Austell occurrence shows some similarities with other pegmatitic columbites in that the area is considerably enriched in Li. At Meldon, however, the mineralization is considered by von Knorring to be possibly of pneumatolytic origin, whereas at Gunheath Pit it is clearly pegmatitic, as are relatively rare occurrences of cassiterite and sulphides in the same area.

A specimen from this find is preserved at the British Museum (Natural History) as BM. 1975. 548.

*Acknowledgements.* I. P. H. is grateful to English Clays, Lovering Pochin and Co. Ltd. for permission to visit the site and to publish this note, and to P. J. Hill for assistance and encouragement.

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[Manuscript received 20 May 1976]

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MINERALOGICAL MAGAZINE, MARCH 1977, VOL. 41, PP. 132–3

## Columbite from Mashad Pegmatites, a first record in Iran

COLUMBITE has been found for the first time in Iran in the pegmatites of the Mashad area of Khorassan. The approximate coordinates for the locality are: 36° 09' N, 59° 49' E. In this area the main rock formation is a large granitic intrusion with an outcrop of more than 100 km<sup>2</sup>. Numerous aplite veins and pegmatite bodies are observed penetrating the granite, some of them with sharp boundaries to the host rock and forming a more or less dense network of veins and veinlets. Others pass gradually into the granite.

The pegmatites contain mostly pink-coloured microcline, quartz, albite, some muscovite, and in places schorlrite. Beryl has also been found by the writer in two locations, the first in the form of crystals attached to the wall of a miarolitic cavity and the second as large crystal aggregates associated paragenetically with the above-mentioned minerals. Columbite was

found in the second location, which is situated on the road recently cut for a microwave station. Several crystal aggregates of columbite were found here; each measures about one cm in length and 0.5 cm in diameter. The chemical composition of this columbite is: Nb<sub>2</sub>O<sub>5</sub> 51.61 %, Ta<sub>2</sub>O<sub>5</sub> 28.24 %, FeO 12.24 %, MnO 5.60 %, TiO<sub>2</sub> 0.85 %, SnO<sub>2</sub> 0.60 %, insoluble 0.93 %, total 100.07 %. Sp. gr. 6.136.

*Acknowledgements.* The laboratory work was carried out in the Department of Earth Sciences, University of Leeds, and I am greatly indebted to Dr. O. von Knorring for his guidance. Field work was facilitated by Ferdousi University, Iran.

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[Manuscript received 22 March 1976]

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