

NOTES

TIN IN ANCIENT INDIA

The earliest references to metal tin has been made in the Yajur Vedic Rudra Camaka Prasna, as 'Trapu'. This would suggest that by the time of the text the Vedic people were acquainted with the metallurgy of tin from its chief ore cassiterite, the term possibly derived from Sanskrit 'Kastira'. When tin has been mentioned by the Vedic people it stands to reason that they were well aware of its ore and its metallurgy. The metallurgical activity of the Vedic people has been underplayed in literature ; hence the true picture of the state of metallurgy or ore-geology cannot be easily deciphered.

The original habitation of the Vedic people referred to as 'Brahmavarta' is identified to be the present area of Ambala district. In view of the non-availability of any tin deposits in this region, it was earlier suggested (Murthy and Nagesha Rao, 1990) that the Vedic people perhaps had access to the Malayan tin sources. However, in the context of the recent report of occurrence of tin ore in Tosham, Haryana (Pareek, 1986), there is every possibility that the Vedic people had access to this occurrence of tin and also nearby deposits and made advancement in tin metallurgy.

The Tosham hill is constituted by potassic rhyolites and dacites with tin up to 180 ppm. Significant economic concentration of the metal at depth is predicted. It has been described as potential source of copper and tin (Seetharam, 1986). Euhedral to subhedral, short stumpy crystals of cassiterite ranging in size from about 2 to 3000 micron are reported to have been disseminated in the metasedimentary rocks (Seetharam, *ibid*). Along with copper and tin minerals, mineral of Indium (Roquesite, CuInS_2) is reported which is argentiferous possibly accounting for silver also. Probably these and other related rock bodies were the source of placer cassiterite (Srivastava, 1986). This emphasizes the need for intensification of search for placers in the Himalayan region.

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References

- MURTHY, S. R. N. and NAGESH RAO, K. (1990) Tin in Ancient India. Minerals and Metals Review, no. 12, pp. 17-19.
- PAREEK, H. S. (1986) Petrography and Geochemistry of the Tosham hill felsite volcanics, Haryana. Jour. Geol. Soc. India, v. 27(3), pp. 254-262.
- SEETHARAM, R. (1986) Argentiferous Roquesite (CuInS_2) from the Tosham Tin prospect, Bhiwani District, Haryana. Jour. Geol. Soc. India, v. 28(7), pp. 21-28.
- SRIVASTAVA, B. S. (1986) Fossil Placers of North-Western Himalaya—A source of cassiterite deposits. Geol. Surv. India. Misc. Pub., v. 41 (6), pp. 179-185.