

A Note on Metallurgy at Khanak: An Indus Site in Tosham Mining Area, Haryana

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Abstract : Recent discoveries of Bronze Age artefacts, tin slag, furnaces and crucibles, together with new geological evidence on tin deposits in Tosham area of Bhiwani district in Haryana (India) provide the opportunity to survey the evidence for possible sources of tin and the use of bronze in the Harappan sites of north western India. Earlier, Afghanistan emerged as the most promising eastern source of tin utilized by Indus Civilization copper-smiths. Our excavations conducted at Khanak near Tosham mining area during 2014 and 2016 revealed ample evidence of metallurgical activities as attested by the occurrence of slag, ores and evidences of ashes and fragments of furnaces in addition to the bronze objects. We have conducted petrological, XRD, EDAX, TEM, SEM and metallography on the slag, ores, crucible fragments and bronze objects samples recovered from Khanak excavations. This has given positive indication of mining and metallurgy of poly-metallurgical Tin at the site; however, it can only be ascertained after the detailed scientific examination of the materials which is underway. In view of the importance of site, we intend to excavate the site horizontally in future so as to obtain more samples for scientific studies.

Keywords : archaeometallurgy, problem of tin, metallography, indus civilization

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