

Experts recreate Harappan-era smelting process at IIT-Gn

US Prof Builds Furnace To Extract Copper And Iron

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Ahmedabad: Metals played an important part in evolution of civilizations across the globe as the 'ages' such as bronze and iron denote the technological prowess to extract the metals for making tools and weapons. Harappan civilization was no different as the archaeologists have found a number of copper, bronze and iron artifact during excavations.

How did they smelt the ores and why different regions had different processing techniques? - It were the questions that drove Professor Jonathan Mark Kenoyer from University of Wisconsin-Madison for recreating a furnace at IIT-Gandhinagar with the institute's faculties and students from Monday. Professor Kenoyer is known as pioneer in experimental archaeology and has



Professor Kenoyer showing extracted copper to IIT-Gn students

conducted similar experiments earlier:

“Sites such as Dholavira have copper artifact whose isotope signature matches with the copper ore found from near Ambaji. We are using a similar ore for the experiment. Gujarat was one of the early regions to have seen use of copper and bronze during Harappan era. The ancient artisans used other metals to strengthen copper. While one finds zinc and lead in artifact from a few sites in Gujarat, they are not present in some other,” said Kenoyer. He added that the metal was used to make ornaments and tools.

The team prepared a furna-



ce and started the process with small granules of copper ore which was heated at a high temperature with wind-blown mechanism to extract the metal. Kenoyer said that they have got very encouraging results in past two days. The team is also trying to replicate the 1,000-year-old method to make Wootz Steel with a group of iron smiths from Rajasthan.