

Discovered an Early Iron Age Settlements & Iron Smelting furnaces near Kanchipuram, Tamilnadu

Archaeological excavations were conducted during the month of March 2013 at Vadamangalam, near Sriperambatur, Kanchipuram district by the SCSVMV University team under the direction of S. Rama Krishna Pisipaty. Early Iron Age settlements and iron smelting areas were traced at Kariamankalani village, near Vadamangalam.

The earliest smelting method, known as bloomery smelting or the 'direct method', was used from around the 8th century BCE, is reported for the first time in the region. Bloomery smelting took place in a furnace may be built from clay in round shape. The walls of furnaces are not intact, so the original height of the walls is difficult to determine. A flat boulder and terracotta pipe are noticed near the furnace which may be for bellows to blow air into the furnace through blowing holes in the side. Iron slag and blocks in cubical and cylindrical shapes along with pipes are unearthed from the site. Hundred of Slag and blocks in square (15 X 15 X 15) and cylindrical (15 (in diameter) & 20 cm) shapes, have appeared from the area. Pipes (for wind blowing & to cool the molten iron) in different sizes are also noticed.

At Palnerllur in 2010, same university archaeology team has discovered an early iron smelting in Crucible method and workshop. It seems, the settlements at present site were much earlier than the Palnerllur. Pre-Industrial iron smelting (more than 2000 years ago) at surrounding Kanchipuram region is not only important discovery but also reported for the first time.



TC pipe
to blow air
at the bottom of the furnace

**Bloomery smelting furnace
From Kariamankalani, Vadamangalam**



Slag & Blocks in cubical & cylindrical shape



**Boulders in circular alignment
(may be dwelling with perishable materials roof)**



**Elevated areas with flat surface top & slag on the ground
(may be dwelling area)**



Bloemery furnace

**Discovered Earliest Iron Smelting furnace
at Kariamankalani village, near Vadamangalam**



Wind pipe & hole

Bloomery furnace

Slag & blocks

Bloomery Smelting furnace

Kariamankalani village, near Vadamangalam