

Mineral characterisation of ancient brick well at patteraiperumbudur, Tamil nadu, India

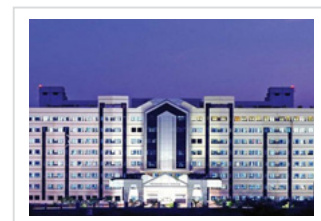


Alby Sara Mathew, Minnoo Grasa Abraham, S Thirumalini and J Basker

Vellore Institute Of Technology, India

Biography

Alby Sara Mathew has completed her Ph.D from Vellore Institute Of Technology, India



Abstract

This paper is about characterisation of brick sample obtained from the brick well at Patteraiperumbudur, a recently excavated site in Tiruvallur, Tamil Nadu. The results of excavated sites have given valuable information about the Palaeolithic culture of Tamil Nadu. Physical tests such as water absorption, Porosity and bulk density is carried out to find the durability of brick sample. Morphology of the sample is studied with the aid of FE-SEM, XRD gives the mineral composition, TGA gives the thermal changes happening at various temperatures. The combined results of TGA and XRD suggest that the firing of brick had taken place in the range between 700-900 °C in an oxidising atmosphere. The chemical composition reveals the presence of Quartz, Feldspar, Anorthite, Boromuscovite.

Keywords: XRD, FE-SEM , Thermal Properties, Physical Properties.

[3rd International Conference on Materials Science and Research](#) | November 18-19, 2020

Citation: Alby Sara Mathew, Mineral characterisation of ancient brick well at patteraiperumbudur, Tamilnadu, India, Materials Research 2020, 3rd International Conference on Materials Science and Research, November 18-19, 2020, 02