



**INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
SHORT ABSTRACT OF THESIS**

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SHORT ABSTRACT

This study is undertaken in Sikkim-Darjeeling Himalayas. The archaeological evidences investigated are Megaliths and Pottery. The central objective of the thesis is to explore the material remains and anthropogenic markers of the past found in the study region. The study hypothesises that Sikkim had a megalithic culture and the existence of a pottery tradition in Sikkim and Darjeeling. In order to investigate the objectives of the study, the methodology opted is desk based assessment along with archaeological and ethnographic investigation for the recording and documentation of the archaeological evidences. For the analysis of the evidences, two different approaches were used.

The megaliths of Sikkim-Darjeeling Himalayas were discussed against the wider context of megalithic cultures of the neighbouring regions. The pottery samples were analysed using the scientific analytical methods to understand the provenance, manufacturing techniques of the pottery and the chronological placements of charcoal found in association with the pottery. The

methods used are powder X-Ray Diffraction (pXRD), Energy Dispersive X-Ray Spectroscopy (EDX), Fourier Transform Infrared Spectroscopy (FTIR), Thermogravimetric Analysis – Differential Scanning Calorimetry (TGA-DSC) and ¹⁴C dating using Accelerator Mass Spectrometry (AMS).

The findings however indicate that in Sikkim-Darjeeling Himalaya, the megaliths served different functions like landscape indicators and commemorative stones but were conspicuous by their absence as funerary monuments, where a single monument holds much power and command over the landscape as well as the memory of the people that folktales, legends and narratives are weaved around it. There is continuity of material evidence amidst changes in the narratives, beliefs and customs around it have undergone transformation.

With regard to pottery sherds documented from Daramdin and analysed using scientific techniques, this study strikes through the notion that Sikkim did not have a tradition of manufacturing pottery. The analysis further suggests that in West Sikkim, pottery was produced in the same region as there was a match in the elemental and mineralogical composition of the soil of the region and the pottery sherds. Furthermore, the charcoal found in association with the pottery sherds, on analyzing with ¹⁴C (using AMS) analysis provided a time frame ranging from 199 BCE to 1640 CE.

Therefore, a major contribution in the region's archaeology is that the AMS dates of charcoal samples provide us with a chronological framework that has not been previously established. The findings indicate that human activities were present in the region as early as 199 B.C.E., thereby contributing significant insights into the prehistoric timeline of the area while also stressing on the aspects of crafts like pottery production which were categorically denied by previous studies.