

## **GEOCHEMICAL STUDIES OF THE KOPILI SHALES OF KOPILI FORMATION OF JAINTIA HILLS DISTRICT, MEGHALAYA**

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### **Abstract**

Geochemical studies of shales of Kopili Formation (Jaintia Group) occurring in and around Tongseng, South Jaintia Hills, Meghalaya have been carried out. Major, minor and trace element geochemistry of shales shows significant results in deciphering provenance and source rock composition, tectonic setting, palaeoweathering, chemical maturity and palaeoclimate. The studies indicate their derivation from felsic source rock of granitic in composition which represents the upper continental crust at the time of deposition of these sediments. In the CaO-K<sub>2</sub>O-Na<sub>2</sub>O ternary diagram these shales plot in active continental margin. The CIA values ranging from 68.97 to 76.74 indicate moderate degree of chemical weathering. These shales exhibit moderate chemical maturity and are formed under arid climatic conditions.

**Keywords:** Geochemistry, Kopili Shales, South Jaintia Hills, Meghalaya.

