

**THE BIMODAL NATURE OF NONGPOH GRANITE,
EAST KHASI HILLS, MEGHALAYA, INDIA :
GEOCHEMICAL EVIDENCE**

**ACHARJEE, SWAPNA.
DEPARTMENT OF GEOLOGY, COTTON COLLEGE,
GUWAHATI, ASSAM, INDIA.**

The chemical compositions, indicates a bimodal nature for Nongpoh Granite. It contains both, hornblende bearing basic igneous and metasedimentary enclaves. This Granite has a significant range in the ASI values, hence attributing a metaluminous to peraluminous variation within the suite. A high, major (K,Ca,Na) and trace (Sr) element content, and a evolved isotopic composition ($^{87}\text{Sr} / ^{86}\text{Sr}_{\text{initial}} = 0.71$), reflects mixing of mantle derived and sedimentary source components. A linear variation of MgO and P_2O_5 against increasing silica suggests that the governing process was partial melting of a minimum melt, composition.