

# Albitite within the Chhotanagpur Granite Gneissic Complex: insights from Patratu Valley, Ranchi, India

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The present study shows the initial finding of albitite rock within the Chhotanagpur Granite Gneissic Complex located in the Patratu Valley region of the Ranchi district, Jharkhand, India, at coordinates  $23^{\circ}32'36.6''$  N and  $85^{\circ}17'46.0''$  E. The albitite rock has been analysed through petrography, mineral chemistry, and whole rock geochemistry (including major, trace, and rare earth elements). This albitite consists of 80%–90% albite and biotite, with apatite and zircon as accessory minerals. A small amount of K-feldspar is also found within this rock. The relationships in texture and geochemical data suggest its igneous origin.

**Keywords:** Albitite, CGGC, Patratu Valley albitite, uranium-REE potential