

Hornblende Chemistry and its Application to Geobarometry of the Noring Pluton, Stong Complex, Kelantan

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One of the main mafic silicates in the Noring pluton is hornblende. It is euhedral to subhedral with grain size ranging from 1 to 4 mm across. Electron microprobe results show that the hornblende from the Noring granite have high MgO contents compared to other calc alkaline plutons and can be classified as magnesio-hornblende. The deduced magmatic crystallisation interval for the hornblende using the T-sensitive cations Ti and Al⁴⁺ gave values from 660 to 780°C ($\pm 70^\circ\text{C}$). The pressure of crystallisation of hornblende was estimated using the Al¹⁰¹ pressure calibrations to give a mean value ranging from 1.89 to 3.08 kbar.
