
Aplite-pegmatite complexes of the Kuala Lumpur granite, Peninsular Malaysia

NG THAM FATT

Institute for Advanced Studies

University of Malaya, 59100 Kuala Lumpur

The Kuala Lumpur Granite is cut by widespread late magmatic aplite-pegmatite complexes. The aplite-pegmatite complexes occur as gently to moderately dipping and weakly curved composite sill-like bodies. They display prominent grain size layering defined by alternating layers of pegmatite and aplite. Mineral zoning is conspicuous in the pegmatites. The aplites commonly exhibit a fine scale, 5 to 100 mm thick, internal rhythmic layering. The rhythmic layering is defined by modal differences in tourmaline, muscovite, quartz and feldspars.

The aplite-pegmatite complexes are formed by multiple injection of volatile-rich granitic magma, each injection is initially homogenous and subsequently segregated into pegmatite and aplite. The rhythmic layering of the aplite is originated from *in-situ* local fractionation of granitic magma. Volatile pressures played an important role in the development of rhythmic layering.