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**K-Ar DATING OF MICAS FROM GRANITOIDS IN THE  
KUALA LUMPUR – SEREMBAN AREA**

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The granitoids in the area represent the southern component of the N-S trending Main Range Batholith, with the Kuala Lumpur pluton predominating in the western half of the area. This pluton consists mainly of a medium to coarse-grained megacrystic muscovite-biotite granite. It is an important source of tin deposits in the vicinity of Kuala Lumpur and Seremban, and is commonly genetically related to pegmatites. Cobbing and Mallick (1987) divided the other granitoids present based on their textural and mineralogical characteristics. These granitoids include the Tampin, Chembong, Jelebu, Kuala Kelawang, Genting Sempah, Bukit Tinggi and Manhis plutons. Besides these, small satellite ultrabasic intrusives occur in the northeast. They are believed to predate the granitoids.

Metasedimentary rocks, Silurian to Carboniferous in age, are the dominant country rocks. The presence of Permian to Triassic sequences is restricted to the northeast.

The major faults in the area strike SE and show left-lateral displacements. They are commonly filled with vein quartz to form occasional topographically prominent features such as the Klang Gates ridge. Gobbett and Tjia (1973) and Hutchison (1986) suggested a post-early Cretaceous age for these faults.

K-Ar dates of biotites from the granitoids varied between  $82 \pm 3$  Ma and  $214 \pm 6$  Ma. Muscovites from the Kuala Lumpur pluton gave apparent ages ranging from  $160 \pm 5$  Ma to  $212 \pm 6$  Ma while those from their associated pegmatites yielded values varying between  $164 \pm 5$  Ma and  $218 \pm 7$  Ma. The older mica dates for the Kuala Lumpur pluton are considered to represent its emplacement age. The U-Pb zircon ages of  $211 \pm 5$  Ma and  $215 \pm 2$  Ma established by T.C. Liew (1983) support this. Resetting of K-Ar ages is evident in the rest of the micas and their patterns of distribution indicated relatively higher retentivity of radiogenic argon for samples in the northwestern part of this pluton. Muscovites from the pegmatites displayed a somewhat similar pattern that is interpreted to be a result of a superimposed thermal effect on their cooling trend.

The U-Pb age of  $219 \pm 5$  Ma for the Genting Sempah pluton (T.C. Liew, 1983) is concordant with a K-Ar biotite age of Bignell and Snelling (1977) and their Rb-Sr isochron age for the Jelevu pluton, thus suggesting the probability that these granitoids were emplaced during a single episode. However, their K-Ar biotite ages indicated a greater influence of the Cretaceous event known further southeast.