

## **Petrology of dioritic rocks from the Pemanggil Island, Johore**

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The three types of dioritic rocks occurring in the Pemanggil Island are pyroxene hornblende diorite, porphyritic pyroxene hornblende diorite and microdiorite. The rock intruded into the volcanic rock probably of Permian age. Geochemical data shows that the SiO<sub>2</sub> content increases from pyroxene hornblende diorite to porphyritic pyroxene hornblende diorite to microdiorite. LIL log-log plot suggests that crystal fractionation plays an important role in the magmatic evolution of the Pemanggil dioritic magmas and plagioclase, hornblende and biotite are the major precipitating phases.