Chemical characteristics of some granitic bodies from Terengganu, Peninsular Malaysia

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The study involves some granitic rocks of the eastern granitic belt in Terengganu consisting of four granitic bodies. They are the Maras Jong pluton, Jerong batholith, Perhentian granite pluton and Kapal batholith. The range of SiO_2 in each granitic body is: Maras Jong (65.67 - 6.34 wt%), Jerong (66.7 - 76.9 wt%), Perhentian (70.9 - 75.4 wt%) and Kapal (63.03 - 76 wt%). All the granites are high K calcalkaline. They also have high total alkali content ($Na_2O + K_2O$ = 5.9 to 9.8 wt%) and are mildly metaluminous to peraluminous (ACNK values: Maras Jong = 1.01 - 1.27 ; Jerong = 0.98 - 1.05 ; Perhentian = 0.92 - 1.03 and Kapal = 0.89 - 1.07). LIL elements and TiO_2 vs Zr plots of all the granites indicate that K-feldspar, biotite, plagioclase, zircon, biotite, hornblende and sphene play an important role in determining the variation during fractionation process. The geochemistry of the granites shows that each granitic body has a specific character and probably is made up of individual batches of melt.

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