[JJ] Evening Poster | S (Solid Earth Sciences) | S-CG Complex & General

[S-CG60]Petrology, Mineralogy and Resource Geology

convener:Koichi Momma(National Museum of Nature and Science), Tatsuo Nozaki(Research and Development Center for Submarine Resources, Japan Agency for Marine-Earth Science and Technology), Satoshi SAITO(愛媛大学大学院理工学研究科, 共同), Nobutaka Tsuchiya(Department of Geology, Faculty of Education, Iwate University)

Wed. May 23, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

We widely invite presentations in the fields of petrology, mineralogy and resource geology. Especially description of minerals and rocks, investigation of their origin and evolution by field investigation and/or laboratory experiments, and development of new methods are accepted.

[SCG60-P11]Estimation of emplacement depth of the Kaikomagatake granitoid pluton using hornblende geobarometry

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Keywords:Kaikomagatake pluton, Granodiorite, Hornblende geobarometer

The Miocene Kaikomagatake pluton is one of the Neogene granitoid plutons exposed in the Izu Collision Zone. The pluton intrudes into the Cretaceous to Paleogene Shimanto accretionary complex of the Honshu arc along the Itoigawa-Shizuoka Tectonic Line. The pluton consists of hornblende– and biotite-bearing granodiorite, monzogranite and granite (*sensu stricto*). In order to constrain the emplacement depth of the pluton, we applied the Al-in-hornblende barometry. We used samples with mineral assemblage of hornblende + biotite + plagioclase + quartz - K-feldspar + Fe-Ti oxides. Rim compositions of hornblende were used for barometry. Applying the barometry for 6 samples yielded ~2.3 - 3.4 kbar showing relatively low pressures in northern area of the pluton. The estimated pressures correspond to ~9 - 13 km for the emplacement depth of the Kaikomagatake pluton.