

Mineralogical study of REE-bearing minerals in Ohro granitic pegmatite of Mineyama, Kyoto, Japan.

Akane Sugimoto [1], Mitsuyoshi Kimata [2]

[1] Division of Earth Science, Natural Sciences, the Univ. of Tsukuba, [2] Inst. Geosci., Univ. Tsukuba

Of REE-bearing minerals to occur in Ohro granitic Pegmatite of the Miyazu Granitic belt, Mineyama, Kyoto Prefecture, Japan, the present study by EPMA, XRD, XPS, MPMS and other methods is targeted at silica-poor and non-silicate minerals. Sc- and Nb-bearing pseudorutile, [HREE + radioelements]- and P-bearing zircon, and Sn-bearing thortveitite indicative of chemical zoning have been found out as unique REE minerals occurring in the pegmatite, Japanese island arc. This thortveitite exhibits two kinds of chemical domains and has remarkably high-paramagnetic susceptibility (0.074emu at 11K) for silicate minerals. Analysis of the present and previous observation data for muscovite concludes that the rich fluorine and phosphate in the silicate melt play significant role for transport of REE.