

Assimilation and fractional crystallization processes of Niobetsu Complex in the Nozuka-dake area, Hidaka metamorphic belt

Toru Yamasaki[1], Masaaki Owada[2], Yasuhito Osanai[3]

[1] Earth Sci., Yamaguchi Univ, [2] Dept. Earth Sci., Yamaguchi Univ., [3] Earth Sci., Okayama Univ.

The Niobetsu Complex is dominated by Nozuka-dake area in the Hidaka metamorphic belt. Various size of tonalitic xenoliths occur in the complex. Anatexis of the xenoliths took place in the complex and produced peraluminous melt. The peraluminous melt interacted with surrounding basic magma. Orthopyroxene and hornblende crystallized from the interacted magma. The Niobetsu Complex solidified as the layered intrusion through the processes of assimilation and fractional crystallization.