

SMP055-06

Room: Function Room B

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Petrographical studies on calc-silicate rocks at the lithological boundaries between khondalite and dolomitic marble

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Calc-silicate rocks developing at the lithological boundaries between khondalite (Grt-Sil gneiss) and dolomitic marble consist of Zone 1 (Phl+Carb), Zone 2 (Cpx+Spl+Carb), Zone 3 (Cpx+Pl+Carb) and Zone 4 (Cpx+Pl+Sph) from the side of dolomitic marble to khondalite. Khondalite in the vicinity of calc-silicate rocks shows mineral textures indicative of partial melting.

We will discuss the possibility that the calc-silicate rocks formed by the reaction between dolomitic marble and the partial melt of khondalite, based on mineral textures, chemical compositions and the mobility of some elements (Zr, Al).

Phl: Phlogopite, Cpx: Clinopyroxene, Spl: Spinel, Pl: Plagioclase, Carb: Carbonate minerals, Sph: Sphene.

Keywords: calc-silicate rock, khondalite, dolomitic marble, skarn, metasomatism, partial melting