

Asbestos crystallization in serpentinite subjected to contact metamorphism

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We examined the reaction history of serpentinite and temperature condition of asbestos around the Mt. Perari-yama area, Kamuikotan belt, Hokkaido, northern Japan. The reaction history of the serpentinite is divided into three stages.

Stage1 (Serpentinization) : Chrysotile - Lizardite

Stage2 (Contact metamorphism) : Antigorite - Brucite - Olivine - Diopside - Anthophyllite - Tremolite - Talc

Stage3 (Retrograde metamorphism) : Chrysotile - Lizardite

And, rodingitization (occurs at Stage3) : Andradite - Chlorite

Asbestos is formed by Stage3. Details are reported in Japanese.