

THE PRESSURE-TEMPERATURE PATH AND MINERAL ASSEMBLAGE OF THE KHONICHIIN OVOO AREA, SOUTHEASTERN MONGOLIA.

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The Khonichiin ovoo area is located in the southeastern part of Mongolia of the Central Asian Orogenic belt, which is largest amalgamation history of during Phanerozoic time. The Khonichiin ovoo area mainly consists of the Khutaguul, the Norovzeeg metamorphic complexes that underwent high grade facies metamorphism, with rare igneous rocks. The Khutaguul metamorphic complex is composed of garnet-biotite, amphibolite-biotite, two mica gneiss, amphibolite schist, quartzite, marble, granite-gneiss, granulite and migmatites. The Norovzeeg metamorphic complex is composed of metasedimentary and metavolcanic rocks. P-T condition and mineral assemblage data/information for these metamorphic complexes are extremely limited. This is because international and local researchers had focused on investigations on Paleozoic igneous, volcanic and sedimentary rocks, which are somehow related to the porphyry copper deposits (Tsagaan suvarga Cu-Mo, Kharmagtai Cu-Au) in the south of Mongolia in the last two-decade years.

We will show new age dating and P-T conditions of the Khutaguul and the Norovzeeg metamorphic rocks.

Keywords: P-T path, Petrology, Southeastern Mongolia

