

English abstract

Granulites of Moldanubian Zone are usually characterized by the presence of HP/UHP rocks of mafic and ultramafic compositions. The relationships between UHP rocks and granulites and their metamorphic history are subjects of many discussions. The Blanský Les Granulite Massif is the largest body of this type and includes numerous bodies and bodies of serpentized garnet peridotites, pyroxenites and amphibolic eclogites.

PT conditions of granulites and garnet peridotites were estimated using different thermobarometric calculations. Temperatures 850-1050°C and pressures 15-20 kbar were calculated for granulites and 800-1000°C/25-40 kbar were estimated for garnet peridotites. Similar to other granulite bodies in the Moldanubian zone, the Blanský Les Granulite Massif is interpreted either as a segment of orogenic root, which was exhumed by viscous flow from low crust or the rocks reached eclogite facies conditions in the subduction channel first and then were overprinted by granulite facies metamorphism. Maximum depths of emplacement of garnet peridotites and other UHP rocks into granulites are limited by their pressure conditions. For these granulites the pressure is 22 kbar.