

Granitization mechanisms of rocks of Broken massive (Hartz, Germany)

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For granitoids of Broken massive the following mechanisms are observed: there is a direct relationship between alkalization, degree of potassium metasomatism and structural changes of granites, from porphyritic through xenomorphic to porphyroblast and poikiloblast. Xenomorphic structures with marginal myrmekite formations, typical for initial stage of potassium metasomatism. Progressing of potassium metasomatism causes formation of new structures, with formation of new minerals. Crown myrmekite in micro-pegmatite granites is in the form of growing micro-pegmatite formations with plagioclase replaced by potassium feldspar, and it is related to intensive potassium metasomatism. Myrmekite is formed at initial stage of potassium metasomatism in cataclastically deformed porphyritic granites. In micro-pegmatite granites the crown myrmekite proves enhanced cataclasis, which is related to enhancement of tectonic tensions and deformations. Thus, presence of crown myrmekite demonstrates the areas of maximum tectonic deformation in micro-pegmatite granite facies of Broken up to the granites of Ilzeschtein granites.