

## Abstract

Granitoid belong to one of the most important rock type in the continental crust, especially in the orogenic belts. We classify them into several basic types, according to their mineral composition, petrographic and petrogenetic features, chemical composition and geotectonic environment of their origin.

Genetically very interesting type of granitoids, genesis of which is widely discussed in the present literature, are leucogranitoids. They represent, with exception of very old Archaic granitoids of tonalite-trondhjemite-granodiorite suite products of extreme differentiation of magmas, which are derived from various crustal and mantle sources, or originate by magma mixing and mingling processes and by reaction of melts with country rocks during magma ascent. According to geotectonic setting of their origin, leucogranitoids can be divided into leucogranitoids, which originate on divergent plate margin, especially on the mid-ocean ridges and in the leucogranitoid, which originate on destructive plate margins – island arcs or active continental margins.

The submitted work presents petrographic and geochemical characteristic of individual leucogranitoids types, characterizes sources of magmas, tectonic setting and major differentiation processes as partial melting of water and fluids saturated rocks, fractional crystallization, magma mixing and mingling and assimilation.