Geophysical Research Abstracts, Vol. 9, 08816, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-08816

Greisens – the unconventional sculptural and architectural stone

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Greisens are genetically associated with hydrothermally altered granitic rocks. Their extraordinary mineralogical composition and enrichment of some metals (Sn, W) make them common target for ore exploration and exploitation. The Bohemian Massif (major geological unit within the Czech Republic) belongs to the European Variscan belt where tin-bearing greisens were exploited since medieval times. Exploitation of these rocks for building, architectural and sculptural purposes is less known phenomenon.

This study focuses on the general properties of this unconventional stone type. Along with mineralogical, petrographical, geochemical data, rock physical and mechanical properties are presented. The decay phenomena are documented from the Baroque St. Trinity column from Teplá (West Bohemia).