

## **RHYOLITE RELATED TO PANAFRICAN GRANITE IN THE EASTERN PART OF THE BOHEMIAN MASSIF (CZECH REPUBLIC)**

1HANZL, P., 1BURIANKOVA, K., 2LEICHMANN, J. and 1JANOUSEK, V. 1Czech Geological Survey, Praha, Czech Republic; 2Masaryk University, Brno, Czech Republic;

The Brunovistulicum is a part of the Cadomian, mostly magmatic unit situated on the eastern margin of the Variscan consolidated Bohemian Massif (Central Europe). It has been correlated with Panafrican granitoids of the Gondwana. The eastern part of the Brunovistulicum is composed of I-type granodiorites. The western part has an affinity to S-type granites. Both the parts are separated by a belt formed by mantle derived metabasites which are intruded by the western granites. Rocks of the Brunovistulicum are cut by dykes of acid subvolcanic rocks (thickness ranging from first dm up to tens of metres) of rhyolitic composition. They are calc-alkaline with clear affinity to a continental source (e. g. high K, Rb or strongly fractionated REE). The continental source is also confirmed by Sm/Nd isotopic data. The matrix is aphanitic, quartz and feldspars are common phenocrysts, biotite and amphibole are rare. Contamination of rhyolites is indicated by xenolites and xenocrysts of the mafic wall rocks. Remarkable space relations were found between the rhyolites and the S-type granites in rare stocks, where granites pass to rhyolites. There are no remarkable changes in chemical composition of the rocks and variation diagrams point to a similar character of magmatic differentiation and magmatic source. Textural evolution from the hypautomorphic granite to porphyric rhyolite with sector zones in feldspars and brecciated rocks indicates crystallisation of the granitic magma during rapid pressure decreasing in the upper level of the crust.