

probably already at amphibolite facies conditions by Late Devonian times. In contrast, Lower Carboniferous ages are common from within the acid granulite/peridotite units. Temperatures were high for a significant proportion of the uplift history of these rocks and it may be that the ages are not those of the high pressure metamorphism. This aspect of Bohemian Massif geology is currently actively under investigation and we may be in for a few surprises if the remarkably young ages derived for Alpine high pressure rocks are anything to go by.

TOPAZ BEARING QUARTZITES AT THE CONTACT WITH GRANITOID ORTHOGNEISSES NEAR ZDOBNICE IN THE ORLICKÉ HORY (LUGICUM, BOHEMIAN MASSIF)

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Variscan tin mineralization is very well documented from the Saxothuringian zone – in the Krušné hory. However, cassiterite, scheelite and topaz mineralization of pre-Variscan age is also reported in crystalline rocks of the Lugicum (Michniewicz, et al. 1991). These mineralization follows contacts between orthogneiss and country rocks and is considered to be Caledonian (Borkowska et al. 1990) or more precisely early Caledonian as deduced from the ²⁰⁷Pb/²⁰⁶Pb age of 507±10 Ma – 503±4 Ma (Kröner, Jaeckel and Opletal – this volume).

Topaz-bearing quartzites were recently discovered by field geochemical prospection near Zdobnice in the Orlické hory at the top of mountain crest (910 m). Granitoid orthogneiss is in a overturned position above quartzites and mica schists.

Muscovite quartzite is fine grained, distinctly foliated with lepidogranoblastic texture. Hypidiomorphic topaz 0.X–2.6 mm in size was affected by two tectonometamorphic phases recorded by two cleavage systems and recrystallization. Crystals of topaz were corroded by quartz (silicification effect), partly replaced by muscovite during the first phase and crushed during the second one.

The dated granitoid orthogneiss with lepidogranoblastic texture represents metamorphosed granite contact metamorphic effect of which can still be seen in country micaschist and marbles (sulphide – scheelite – cassiterite contact mineralization).

With a view of these fact the discovery of primary topaz in muscovite quartzite at the contact with granitoid orthogneiss proofs the existence of the end of early Caledonian (or terminal Cadomian) magmatic event cca 500 Ma old and contact pneumatolitic metallogenic activity in the eastern part of Lugicum.

SILURIAN (WENLOCKIAN) SPOROMORPH IN SOUTH BOHEMIAN MOLDANUBICUM

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In strongly metamorphosed graphitic limestones from the locality “U vápenky” quarry at the southern periphery of Český Krumlov, further well definable Cryptospores, sculptured miospores together with nethromorphic acritarchs (*Deunffia*, *Domasia* sp. div., *Veryhachium* sp., *Leiofusa* sp. div.) *Leiosphaeridium* sp. div., *Tasmanites*, *Glaeocapsomorpha prisca*, organic-walled tubes and cuticles were discovered.

According to Burgess and Richardson (1991) the appearance of sculpture on hilate cryptospores and trilete miospores is an event of biostratigraphical, biological and evolutionary significance, which is useful for interregional stratigraphical correlation. The sculptured sporomorphs appeared first in the late Wenlockian *Cyrtograptus lungreni* Biozone of the type area in Shropshire. This assemblage characterized inshore facies. According to Dr. P. Dufka (personal communication), some of the sporomorphs stated above (e.g. trilete miospore Type 1, Burgess & Richardson) have been newly described from the Wenlockian of the Barrandian area (Dufka in press).