

MARBLES ALONG THE EASTERN MARGIN OF THE MOLDANUBICUM - A CONTRIBUTION TO ITS REGIONAL CLASSIFICATION

HÖGELSBERGER, H.^{*}, HOUZAR, S.^{} and NOVAK, M.^{***}**

^{*} Greenpeace Austria, Auenbruggergasse 2, A-1030 Wien, Austria.

^{**} West-Moravian Museum, Zámek 1, CZ-674 01 Třebíč, Czech Republic.

^{***} Moravian Museum, zelný trh 6, CZ-659 37 Brno, Czech Republic.

Marbles represent typical subordinate to minor members of rock sequences along the eastern margin of the Moldanubicum. Based on their chemistry, lithology, mineral assemblages, and character of their host rocks, several distinct groups and subgroups can be distinguished, disregarding the current regional subdivision into individual units, groups, nappes etc.

Group A marbles form 10 to 30 m thick homogeneous layers in biotite gneiss and are spatially associated with gneisses, quartzites and pyroxene gneisses. They occur along the South Bohemian Pluton and isolated in the center of the Strazek Moldanubicum.

The lenticular 10 m thick bodies of Group B marbles are hosted by locally migmatized biotite gneisses. They are associated with the rock sequence amphibolite - granulite - serpentinite - leucocratic gneisses and Fe-skarn. These marbles predominate within the Strazek Moldanubicum but they are also common within the eastern parts of the Moldanubicum of Western Moravia and in Austria (Raabs).

Group C marbles are heterogeneous in composition and show sometimes premetamorphic banded textures. Large bodies, up to 100 m thick, are hosted by gneiss or amphibolite and commonly associated with graphite-rich schists and quartzite. Fe-skarns are absent. Group C marbles are present in the Moldanubian Varied Group and Vratenin Group, however they are particularly typical for the Vranov-Olesnice Unit and the Velke Vrbno Group.

Calcite marbles of Subgroup C1 are by far most abundant. Locally bands or isolated bodies of grey tremolite marble (Subgroup C2) occur. Scapolite marbles (C3) are rich in silicates and are typical for the Varied Group in Austria. Dolomite marbles (C4) are rare and spatially associated with C1-marbles.

Group D marbles form homogeneous bodies up to 30 m of thickness. They are embedded in mica schists within the rock sequence mica schist - orthogneiss - amphibolite - Fe-skarn. Occurrences are known from the Svatka Unit. Nedvedice marbles (Subgroup D2) form a narrow belt in the northeastern part of the Svatka Unit. They contain locally nests of Fe-poor Ca-skarns.

In the case of Group B and C1 marbles, there is no correlation between lithology and distinct geological units.

Group	Name	MgO wt. %	Assemblage
A	calcite marble	< 3	Cal-Di-Tr-Qtz-Phl ± Ms,Kf,Plg
B	dolomite marble	± 20	Dol-Cal-Fo-Chl ± Spl,Di,Tr,Hbl,Chu
C1	calcite marble	< 3	Cal-Dol-Tr-Phl ± Qtz,Kf,Py,Gr
C2	tremolite marble	< 5	Cal-Tr-Phl-Py ± Gr,Qtz
C3	scapolite marble	< 2	Cal-Di-Sca-Phl-Kf-Plg
C4	dolomite marble	± 15	Dol-Cal-Tr-Phl-Di ± Srp,Fo,Gr
D1	calcite marble	< 3	Cal-Tr-Phl ± Qtz,Di
D2	calcite marble	< 1	Cal-Di-Grs-Wo-Ves

Tab. 1.: Marble types.

The individual groups of marbles located at the eastern margin of the Moldanubicum mostly have their counterparts west of the South Bohemian Pluton, particularly W of the line Ceske Budejovice - Vlasim. Calcite marbles (Group A) are common in the Posazavi area (central Bohemia) and perhaps in the Strakonice area (southern Bohemia). Dolomite marbles (Group B) commonly occur in the vicinity of Prachatice, Vimperk, Pisek and Malovidy in Posazavi. Group C marbles are very abundant in the Cesky Krumlov Unit. No analogons of calcite marbles (C3, D) are know from this area.

Generally, there is a quite similar distribution pattern of the individual marble groups east (Moravia, Austria) as well as northwest (southern and central Bohemia) of the South Bohemian Pluton.

DIE BLEI-ZINK LAGERSTÄTTE RAMPURA AGUCHA, RAJASTHAN, INDIEN

HÖLLER, W. und **STUMPFL, E.F.**

Institut für Geowissenschaften, Montan-Universität Leoben, Peter-Tunner-Straße 5, A-8700 Leoben.

Der proterozoische Aravalli-Delhi Gürtel in Rajasthan, Nordwestindien birgt eine Reihe von Pb-Zn-(Cu) Lagerstätten. Die stratiforme sedimentäre Pb-Zn Lagerstätte Rampura Agucha sitzt in Gesteinen des Bhilwara-Gürtels am Kontakt zum *Banded Gneissic Complex* (Basement) auf. Intrakratonisches Rifting vor etwa 2000 m. a. hat die Entwicklung des Bhilwara-Gürtels und des angrenzenden Aravalli-Gürtels wesentlich mitbestimmt. Pb-Isotopen Modellalter ergaben 1.800 ± 0.04 m.a. für die Lagerstätte Rampura Agucha (DEB et al., 1989). Nach der Kollision des Aravalli Kontinentalrandes mit dem jüngeren Delhi-Inselbogen vor 1.500 m.a. wurde die untere Kruste des Banded Gneissic Complexes über das nördliche Bhilwara-Aulako-