

farther to the east. The only difference is seen in higher degree of metamorphism of the Velké Vrbno Unit relative to the Keprník and Desná units in the east. In such a context, the Velké Vrbno Unit represents only the westernmost part of the Silesian do-

main that experienced the deepest continental subduction. Therefore, the major intraplate boundary between the Lugian and the Silesian domains should be located farther to the west between the Velké Vrbno Unit and the Staré Město Belt.

## Carbonates of the Devonian Transitional Development in the Surroundings of Valchov (Němčice–Vratíkov Belt, Drahany Upland)

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The Němčice–Vratíkov belt of the Devonian Transitional Development, which was defined by Chlupáč (1959) but described as juxtaposition of two facies by Kettner (Kettner 1967), is situated at the eastern margin of the northern part of the Brno massif, stretching from Šebetov across Vratíkov, Valchov and Němčice to Petrovice. Devonian and Lower Carboniferous carbonates crop out in many isolated and strongly tectonically strained bodies. Tectonic pattern of the Němčice–Vratíkov belt was described by Melichar and Kalvoda (1997). The study of conodont assemblages and microfacies investigations of carbonate rocks from the abandoned quarry SW of Valchov were performed.

1. The western part of the quarry is formed by layers of grey to black biomicritic, thin-bedded limestones (2–10 cm thick) with abundant black shale intercalations (1–4 cm thick) dipping towards ESE. This sequence shows thinning- and fining-upward trend, with frequent parallel lamination in the carbonate beds. The carbonates can be classified as moderately sorted wackestones–packstones. Shallow-water grains are represented by small crinoids and detrital quartz grains. Pelagic styliolinids are locally abundant. The matrix is composed of neomorphic microspar. These rocks can be regarded as distal calciturbidites. The mixed conodont assemblages belong to the Upper Frasnian Pa. rhenana and Pa. linguiformis zones.

2. The eastern part of the Valchov quarry is formed by grey coarse-grained biotrital limestones. They may be described as poorly sorted floatstones–rudstones with abundant fragments of corals and stromatoporoids (often silicified) and crinoids. Detrital quartz grains form a minor contribution. Matrix is composed of neomorphic microspar. The limestones probably represent sediments of fore-reef talus. The rich conodont assemblages belong to the Upper Frasnian Pa. rhenana Zone and correspond to the Palmatolepid–Polygnathid biofacies of the upper to middle slope environment.

The study of conodont assemblages and sedimentological and microfacies investigations indicate that two tectonically juxtaposed facies of different sedimentary environments appear in the Pa. rhenana Zone.

### References

- CHLUPÁČ I., 1959. Stratigrafický výzkum moravského devonu v severní části Dražanské vysočiny. *Věst. Ústř. Úst. geol.*, 34: 193–200
- KETTNER R., 1967. Problém tektoniky Moravského krasu. *Čs. Kras*, 18 (1966): 69–90.
- MELICHAR R., KALVODA J., 1997. Strukturně-geologická charakteristika němčicko-vratíkovského pruhu. II. seminář České tektonické skupiny, Ostrava, pp. 51–52.

## Preliminary Data on the AMS Fabric in Crystalline Rocks from the West/East Sudetes Contact Zone in the Fore-Sudetic Block – Structural Implications

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### Introduction

Crystalline complexes situated in the Sudetic foreland east of the Góry Sowie massif were investigated by means of anisotropy of magnetic susceptibility (AMS) method. The AMS data combined with the available structural data allow a new approach to be undertaken in the reconstruction of tectonic evolution of the West/East Sudetes contact zone.

### Geological background

Crystalline rocks in the eastern Fore-Sudetic Block have experienced three deformation events, D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub> (Mazur and Puziewicz 1995; Mazur et al. 1997; Mazur and Józefiak 1999; Szczepański and Józefiak 1999). Deformation D<sub>1</sub> produced the main foliation S<sub>1</sub>, which is now mostly steeply dipping. The locally preserved L<sub>1</sub> stretching lineation trends gen-