that none significant (directional) deformation after the growth of blasts has occurred. More strongly flattened varieties, with clearly distinguished S3 mylonitic layering, have occasional relicts ("ghost structures") of the hinges of F1/2 folds in the form of bent mica and recrystallized aggregates of quartz.

The late and asymmetrical kinking folds F4 are the same as observed in the Śnieżnik gneisses. All described features are characteristic for the migmatitic suite of the Gierałtów type. These rocks do poses the same style, sequence and amount of deformational events as the Gierałtów gneisses (Dumicz 1989). The only Variscan obliteration and mylonitization of the earlier, complicated fabric (twice folded and migmatized), make some of the Gierałtów gneisses locally very similar to the original augen Śnieżnik metagranites.

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Variscan Hydrothermal Veins in the Prague Synform (Barrandien Area)

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A few papers dealt with hydrothermal veins of various relative ages in Lower Palaeozoic sediments of the Prague basin (e.g. Suchy et al. 2002). Not many of them were concentrated on study of character of the fluid systems related to deformation stages, which affected the basin. In our present research stage we are focused on a definition of the Variscan (synorogenic) fluids and conditions of their origin and migration. First of all it is important to specify P-T conditions of Variscan deformations and their genetic connection with relevant fluid systems and thermal histories (Glasmacher 2002).

Field work took place at several localities of SW part of the basin (e.g. Homolák quarry, Srbsko). Preliminary research on Variscan veins revealed that calcites are dominant mineral phase in veins, which are mostly deformed and recrystalised, and calcite is fine and medium grained (in Devonian limestones). Veins are not very long, frequently have irregular or lenticular shape and they are arranged into en echelon arrays. Veins in Ordovician quartzite-sandstone are filled with quartz showing a fibrous structure. In drusy cavities a black organic matter occurred. Older hydrothermal veins are deformed and may be penetrated by younger veins.

So far two fluid systems have been found in fluid inclusions (FIS) of calcites, aqueous and liquid hydrocarbons. Sizes of FIS are around 5 micrometers. Due to the small size of the fluid inclusions there were difficult to observe eutectic temperatures (Te).

Homogenisation temperature (Th) primary and/or pseudosecondary aqueous FIS have values between 77–120 °C and generally have lower salinities (0,2–7,9 wt.% NaCl equiv.). Primary inclusions rich in hydrocarbons show Th between 41–85 °C.

Parent aqueous solutions have $\delta^{18}O$ values between +0,4 ‰ and +2,2 ‰ SMOW. When fluids were isotopically buffered by wall rocks than isotopic composition of fluids is more positive.

Preliminary results suggest accord with other authors (e.g. Suchy et al. 2002) that tectonically deformed veins were generated in condition of the oil window. Relationships between tectonic evolution and hydrothermal veins of the Prague synform will be subject of the further study.

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