bouring grains. Complete recrystallization of quartz is observed in strongly deformed zones where chessboard SGB are replaced by prismatic SGB. A weak macroscopic schistosity parallel to the magmatic foliation is a typical fabric in these areas. Deformation lamellae and undulatory extinction verifies low grade deformation of the granodiorites quartz fabric.
Chessboard SGB also occurs in quartz of the country rocks. They are strongly overprinted by prismatic SGB in the Dobragneis and the Varied unit, whereas chessboards are the dominant texture of quartz in the Monotonous unit. In general, there are distinct clues to seperated as well as common developments of the Rastenberger granodiorite and its country rocks. There is every indication that it is possible to distinguish these developments by classification of different types of chessboard SGB and comparison of subgrain textures at all.

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PETROLOGICAL STUDY OF EVOLUTION OF STROMATITIC LAYERING: AN EXAMPLE FROM THE CZECH PART OF THE GFÖHL GNEISSES

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The aim of this study is to propose a genetical model for the origin of layered leucosome from the Rokytná migmatititc complex (RMC). The RMC forms part of the Gföhl gneisses occurring at the eastern edge of the Moldanubicum of the Bohemian Massif. This migmatitic body includes a large volume of stromatites (up to 250 m thick) characterized by well-layered leucosome forming from 70 to 80% of the rock volume. The origin of this rock was explained by syntectonical migmatitization and alkalization (BECKE, 1881; PRECLIK, 1931) and more recently by the migmatitic mobilization of the rock primarily rich in the leucocratic components such as granulites or K-fsp rich sediments (MATĚJOVSKÁ, 1970). Another model suggests migmatitization of paragneisses with large import of granitic components (**DUDEK** et al. 1972).

Our studies are focused to test two elementary hypotheses of leucosome origin - the stress controlled viscous fluid segregation or strain dependent subsolidus segregation. In order to solve this problem we have used 1) statistical grain frequency methods (KRETZ, 1969; FLINN, 1969; MCLELLAN, 1982), 2) petrochemical analytical and mineral chemistry study an 3) micro fabric analysis. The result of our investigation is compared with the physical model to test gravitational stability of the rock if the viscous fluid segregation hypothesis is taken into account.

The results of micro fabric analysis (3) indicate solid state HT non coaxial deformation to be responsible for the stromatititc geometry of RCM. This hypothesis is in good accord with a physical model, that does not allow the latter hypothesis supposing evolution of stromatitic layering due to segregation from melt.
The results of grain frequency analysis are equivocal. It is explained by release of Qz during dealkalisation of K-Fsp.

TECTONIC EVOLUTION OF THE SOUTHEASTERN BOHEMIAN MASSIF: EVIDENCE FROM NEW $^{40}Ar/^{39}Ar$ MINERAL AGES

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The eastern margin of the Bohemian Massif consolidated during continental collision within an overall transpressive regime. Available geochronological data (DALLMEYER et al., 1992; FRANK et al.1990) suggest late Variscan age of nappe stacking within the Moldanubian and the Moravian nappe complexes. Within the Moravo-Silesian foreland, however, Proterozoic ages have been reported by SCHARBERT & BATIK (1980). Structural characteristics indicate a clockwise displacement path with NNE-directed HT motion during emplacement of hot Moldanubian units onto cool Moravian foreland, followed by orogen-perpendicular LT displacements (FRITZ & NEUBAUER, 1993).

New $^{40}Ar/^{39}Ar$ mineral ages have been elaborated from (1) an W-E section across the Svratka dome which include samples from the Svratka crystalline complex (Moldanubian hangingwall), samples from the Moravian nappe complex (intermediate nappe complex) and samples from the Svratka window (footwall) where imbricated basement units are exposed. (2) A second set of samples has been taken in a NE-SW section, parallel to the direction of HT nappe transport to reveal thermal influence during thrust propagation.