trondhjemites by kaolinite. Biotite and partly hornblende from the calc-alkaline type granitoids are often partly or completely replaced by chlorite. Nevertheless the original minerals can be recognized, except for G7, the trondhjemitic group. Here the relict minerals are mostly missing. The youngest alteration process is the microclinization. Newly formed potassium feldspar encloses altered plagioclase and biotite. The microclinization, unlike sericitization and chloritization is not regional, it affected only leucogranites and restricted zones in the biotite granites (G3).

According to PEARCE et al. (1984) all granitoids, with one exception of the biotite and garnet bearing granite, plot in the Nb/Y and Rb/Y + Nb diagram in the field of volcanic arc granitoid (Fig. 4). The same situation has been shown by JELINEK & DUDEK (1993) for the subsurface part of Brno pluton and by FINGER et al. (1989) for the Dyje massif.

METAMORPHISM AND MIGMATIZATION OF THE PARAGNEISSES OF THE MONOTONOUS GROUP, SE MOLDANUBICUM

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In this study rocks of the southern part of the Monotonous Group (Ostrong area) were investigated. Paragneisses form the main part of the Monotonous Group. They are accompanied by leucocratic sillimanite-bearing orthogneisses, subordinate calc-silicate-gneisses, and sporadic eclogite-amphibolites. Two types of paragneisses can be distinguished: cordierite-gneisses, which are characteristic gneisses for the Monotonous Group, and cordierite-free paragneisses. A typical feature of the cordierite-gneisses is the migmatization to stromatic- or nebulitic cordierite-migmatites. The geochemistry of the paragneisses indicates shales respectively greywackes as educt material for cordierite-bearing and cordierite-free paragneisses. The environment of deposition is probably an active continental margin.

Three stages of metamorphism are recorded in the paragneisses:

* The early stage is preserved as kyanite relics in cordierite-gneisses and kyanite/staurolite relics in garnet-paragneiss. The conditions, 570 °C and 6 kbar (P_{min}), are estimated from the latter rock.
* The peak of temperature was determined in cordierite-gneisses and one garnet-bearing paragneiss as around 700 °C at P_{min} 4.5 kbar. Dehydration melting (THOMPSON, 1982) took place in this stage and initiated the migmatization of the cordierite-gneisses.
* Neoblasts of white mica crystallized during the retrogressive stage mainly in the cordierite-migmatites.

The deformation of the cordierite-migmatites near the tectonic boundary ("Granulitlamelle", FUCHS & SCHARBERT, 1979) with the overlying Varied Group shows that the migmatization essentially took place before the tectonic emplacement of the Drosendorf Unit (Varied Group). There is no indication for a genetic relation between the intrusion of the granites and the migmatization of the cordierite-gneisses at the contact of the South Bohemian Pluton to the Monotonous Group. The only effect is an alteration of cordierite, biotite, and potassium feldspar into fine-grained aggregates of chlorite and white mica. This alteration occurs close to the contact and rapidly fades away with increasing distance. It is explained by fluid supply during the granite intrusion.

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P-T CONDITIONS AND DEFORMATION MECHANISMS OF STRIKE SLIP FAULTS WITHIN THE SOUTHERN BOHEMIAN MASSIF: A FLUID INCLUSION STUDY AND MICROFABRIC ANALYSIS

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The Vitis Shear Zone and the Karlstift Shear Zone are two sinistral strike slip faults of the late Variscan conjugate shearsystem within the Southern Bohemian Massif (WALLBRECHER et al., 1990). Both shear zones transsect mainly the Weinsberg granite. Although the two faults display identical kinematics and timing, they show different deformation characteristics. The Vitis Shear Zone mainly consits of cataclasites, built by prograding brittle deformation of quartz- and feldsparclasts, while the Karlstift Shear Zone is dominated by ductile deformation which leads to the formation of mylonites. Microfabric analysis shows that temperature differences during the deformation were responsible for the different rheological behaviours of the rocks within the two faults. The temperatures deduced from feldspar and quartz behaviour after VOLL (1976), TULLIS & YUND (1980, 1991) and PRYER (1993) ranged between 400 °C and 450 °C in the Karlstift Shear Zone and between 280 °C and 320 °C in the Vitis Shear Zone. There are two possibilities to explain these temperature differences: 1) The intrusions of the younger "Feinkorn"-granites reheated the rock assemblages within the Karlstift Shear Zone during the deformation, which includes the assumption that both shear zones were active in the same crustal level, or 2) the rocks within the Vitis Shear Zone had been deformed in higher crustal levels than those of the Karlstift Shear Zone.