tipically lower crustal, with 206/204 ratios of 17.446-17.990, 207/204 ratios of 15.547-15.627, and 208/204 ratios of 37.716-38.843. Their calcalkaline character, also suggested by zircon typology, and the presence of ophiolitic materials and of eclogite in the host rocks may suggest a subduction environment (Boriani et al, 1990, Tectonophysics).

At the end of the Hercynian metamorphism the Southalpine crust underwent conspicuous thinning and large scale strike slip faulting. Emplacement of a large body of mafic magma at the base of the crust induced granulite facies metamorphism (Ivrea-Verbano Zone) with partial melting and complex interactions between mafic magma and host rocks. Tapping of evolving magma chamber at different stages caused intrusion of mafic stocks and dykes in the upper crust along the main tectonic lineament (CMB Line) and the emplacement of granites (Graniti dei Laghi).

Most of the basic and intermediate rocks are cumulitic. Trace elements, REE (Boriani et al., 1992, Acta Volcan. in press), and Sr (Pinarelli et al., 1988, Rend. Soc. Ital. Mineral. Petrol.) and Pb (Pinarelli et al. 1992, Lithos, in press) isotopic data suggest that they mostly resulted from FC and AFC of a mantle derived melt contaminated by crustal material mostly in the lower crust. Granites derive from the same parental magma but more contaminated and evolved.

THE RHODOPE QUESTION VIEWED FROM EASTERN GREECE

E. von Braun

Isernhagen

New field data gathered in western Thracia provide an opportunity to review age and character of the Rhodope massif. Until their collision both, gneiss basement and the overthrusted Circum Rhodope Belthad mutually independent evolutions. The Circum Rhodope Belt consists of a lower? Permo-Triassic greenschist facies Makri Unit and an upper low - to nonmetamorphic Jurassic-Lower Cretaceous Melia Unit, the two units separated by thrust but transported in common towards N or NW onto the basement. That latter, containing pre-metamorphic ophiolite elements, has been transformed in an amphibolite and a greenschist facies under SSW directed stress. For this opposition of stress vectors, the age of the Circum Rhodope Belt cannot be taken as a means for estimating a minimum age of the basement. However, transgressive Late Cretaceous? or Early Tertiary autochthonous deposits confirm the termination of regional metamorphism and anatexis well before the Upper Cretaceous. Latest since the collision, ductile deformation was replaced by brittle fracturing. Tertiary rifting allowed the ascent of effusive and intrusive intermediate to acid magmas. Clarification of the relations between the Strendze respectively, Serbo-Macedonian, and the Rhodope basement should permit to confirm or dispel assumptions of a Paleozoic origin of the latter.

K-FELDSPAR MEGACRYSTS BEARING GRANITIC SUITE IN THE SERRE (CALABRIA, SOUTHERN ITALY)

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The late hercynien plutonism is widespreed along the Calebria Arc Peloriten. It is late to post metamorphism end consists of a calc-alkaline association end of a peraluminous one (Paglionico and Rottura 1979). In the Serre (Southem Calabria) a porphyritic granitic body (15-5 km) striking NE-SW intrudes the calc-alkaline plutonites. It displays granodioritic to monzogranitic composition (SiO_2=69.71%-74.08%) with calc-alkaline affinities but peraluminous features (A/CNK=1.07-1.23). These rocks are enriched in REE (x for $\sum$REE=290,34) and show increasing Rb and decreasing Sr, Ba and LREE towards the more evolved terms which are characterized also by negative Eu anomaly. The Rb/Sr age on muscovite is 287 Ma and the initial $^{87}Sr/^{86}Sr$ ratio at 290 Ma ranges from 0.7113 to 0.7117. The overall geochemical and isotopic features indicate that fractionation of biotite, plagioclase, quartz and apatite controlled the evolution. The microgranular enclaves occurring in the peripheral front of the pluton and having tonalitic composition quite similar to the fractionated assemblage, likely represent comulates. The composition of the calculated fractioned assemblage seems to be in equilibrium with the melt at P=2Kb and T=690^{0}C-770^{0}C (see Naney 1983). The initial $^{87}Sr/^{86}Sr$ isotopic ratios indicate that the origin of the studied granites involved crustal rocks as contaminants or as source of the melts.

The megacrysts of k-feldspar have BaO contents decreasing from core (2.05%) to rims (0.44%) with the latter bearing comparable with the BaO contents (0.20%) of the interstitial k-feldspar. They are in isotopic equilibrium with the whole rocks $((^{87}Sr/^{86}Sr)_{290Ma}{}^{K\text{-}feld}$ = 0.7116-0.7119). So a magmatic origin must be inferred for this phase which started to crystallize when 63% of liquid was present. Its growth happened during a large time-iterval and as consequence it formed very large crystals with variable $(k_{d(Ba)}{}^{K\text{-}feld/1}$ and ranging from 7.31 to 17.86 in the cores (Fornelli 1991). The megacrysts experienced transformation into max-microcline (Δ=0.81Å-0.96Å due to subsolidus deformations which affected also biotite and quartz. The deformation however did not influence tha isotopic and chemical composition of the K-feldspar which maintain its original signatures. The subsolidus deformation overprints the flow structures such as