ties and planar weaknesses of the crystals (cleavage-, twin-planes, inclusions, etc);
- the surface of the crystals in contact with the basic magma equilibrates with the latter, resulting in variably resorbed crystals with an andesine relic skeleton and a reaction rim, through dissolution of labradorite composition;
- cooling of the basic magma leads to interstitial and peripheral crystallization of a more sodic plagioclase with a strong normal zoning;

This evolution is compatible with a context of magma mixing. It does not exclude dendritic growth, which may have occurred simultaneously in some of the studied samples.


OS01-48
GEOCHEMISTRY, EVOLUTION AND ORIGIN OF THE FANOS GRANITE (NORTHERN GREECE)
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The Fanos granite (Northern Greece) is a pluton composed of high silica, fine- to coarse-grained leucogranites with small amounts (<3%) of biotite, which intrudes the Mesozoic Guevgueli ophiolitic complex.

The mineralogy and chemistry of the rocks studied suggest on the whole that they are peraluminous with calc-alkaline affinity, I-type characters and 80$^\text{th}$ 7.11 to 8.03 per mil. They belong to the same differentiation series, from a single parent magma, with fractional crystallization as the main differentiation process. Mass-balance calculations based on major elements suggest 32% crystal accumulation mainly of K-feldspars and plagioclases. Compatible - incompatible trace element diagrams have substantiated that fractional crystallization and not partial melting is the evolution process.

The REE patterns are concave and display LREE enrichment, while HREE decreases and Eu/Eu* progressively increases with differentiation. REE behaviour is controlled mainly by plagioclase and accessory phases (allanite, sphene, apatite and zircon).

The origin of the Fanos granite has been tested by partial melting modeling of graywacke and quartz diorite as possible source material. The Rb, Ba, Sr and REE patterns of the quartz diorite hypothetical partial melts are similar with that of the less evolved type of the Fanos granite.

Discriminant diagrams indicate either a volcanic arc or a collision related tectonic environment for the Fanos granite.

OS01-50
ENCLAVES IN THE HERCYNITIC FICHTELGEBIRGE, FE- AND TITANIUM-CRUSTAL AND MANTLE MAGMATISM
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The granites of the Fichtelgebirge subdivided into an older and a younger can be attributed to a specific tectonic setting. The granites were emplaced in Lower Palaeozoic country rocks and more mafic rocks (redwitzites). The forms the largest granite complex it is a large east-west elongated, south. Enclaves have been sampled from most mafic facies of the G1-granites a few centimetres to approx. two met Petrographic and geochemical data groups of protoliths for the enclave metamorphic.

The contribution of mantle- and/or crustal genesis of the Fichtelgebirge granite: basis of the results of the investigation.

OS01-49
NATURE AND COMPOSITION OF RESTITES IN THE VELAY GRANITE (FRANCE)
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(CNRS UA 10, Clermont-Ferrand, France).

The Velay granite (biotite granite or biotite-cordierite granite) is known for its abundant enclaves of varied types. Numerous studies have shown that it results from the melting of the surrounding metapelitic and orthogneissic series. Some of these enclaves, made of Al-rich biotite (30%), cordierite (40%), plagioclase (10%), sillimanite (10%) and 10% of quartz, garnet, hornblende, and accessory minerals are definitely restites formed by melting of metapelites. Arguments for that are:

1. They show a metamorphic

2. Textural relation indicate that (giving cordierite) occurred by

3. Lacking, must have been estimates from various thom

4. K700-800°C are identical

5. The granite itself and imply t

6. Forming during biotite breaking

7. Is compatible with the nature

8. The granite composition.

After a mechanical separation of enclaves were analysed for 30 composition of the surrounding are: enriched in A1203, Fe203, depleted in Cu2, Na20, and Si02. Restites are enriched in Rb, Cs, Rb, and depleted in Ba and Sr. Results are surprising, it is mineralogy of the restite cons.

9. And-cordierite, with abundant Plagioclase and quartz are not but have been incorporated in (to indicate that some should be to)

10. Composition of rocks to identify; suggest also that mass balance a "standard restite" (typically Rb) is sometime a hazardous tas.

OS01-51
TOURMALINE PLASITE FROM THREE POSSIBLE GENETIC
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- The tourmaline plasites have range up to 2 m in thickn

- Several hundred meters in