

active Eurasian margin during Palaeozoic time, giving rise to a major ensimatic arc. A continental sliver was rifted off, related to transform and/or active margin processes, opening the Küre Basin as a back-arc basin in Latest Palaeozoic-Earliest Mesozoic time. A carbonate platform, possibly a Gondwana derived fragment or a Palaeotethyan seamount, drifted northwards, collided with the trench, subsided and was overridden by the accretionary complex, partially closing Palaeotethys. This collision could have triggered southward subduction-accretion of the Küre Basin, followed by uplift in Late Jurassic time. Pre-Late Jurassic granites in the northern Central Pontides may relate to southward closure of the Küre basin, rather than to northward Palaeotethyan subduction, as in some recent models.

**THE GEOCHEMISTRY OF LAVAS FROM AND ADJACENT  
TO THE SOUTHERN  
TROODOS TRANSFORM FAULT ZONE:  
COMPARISON WITH OCEANIC FRACTURE ZONES**

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Mid-ocean ridge transform faults are dominated by exposures of peridotites and of other lithologies normally met with in the lower zones of the oceanic crust. In contrast adjacent ridge segments are mostly occupied by MORB basalt flows. Such a petrologic dissimilarity can be attributed to a paucity of volcanic eruptions within and to uplift and rifting parallel to the fracture zones.

Similar morphologic and tectonic features are found within the Southern Troodos Transform Fault Zone (STTZ), a rare example of a relatively well-preserved fracture within an ophiolite.

There are however distinct and important differences between oceanic transform zones and STTZ. Lavas within the STTZ are extremely depleted in the High Field Strength Elements (HFSE) ( $\text{TiO}_2 < 0.30\%$ ,  $\text{Zr} < 20$  ppm,  $\text{Zr/Y} < 2.5$ ) than lavas recovered from oceanic transforms or from adjacent ridges. To the north of STTZ synchronous lavas extruded along the spreading ridge(s) are less depleted in HFSE than intra-STTZ lavas ( $\text{TiO}_2 = 0.36-0.67$ ,  $\text{Zr} = 30-50$  ppm,  $\text{Zr/Y} < 0.27$ ) but still considerably more depleted than any MORB. Such first order differences are attributed to the tectonic environment of ophiolite generation which, in this instance, is considered to be above a subduction zone.

Second order geochemical differences along the spreading axis indicate a higher degree of fractionation in synchronous lavas as the STTZ is approached. At the ridge

- STTZ intersection the extrusives display considerable diversity ( $\text{TiO}_2=0.28-0.97\%$ ,  $\text{MgO}=4.71-10.28\%$ ,  $\text{Zr}=14-44$  ppm) whilst equivalent lavas north of the STTZ are less varied ( $\text{Mg}=6.50-9.66\%$ ,  $\text{Zr}=30-41$  ppm). For the same MgO values however, lavas close to STTZ have lower values of incompatible elements.

These variations can be modeled satisfactorily by more extreme low pressure fractionation as the STTZ is approached and by derivation of the melts from a more depleted mantle source. Lavas within the STTZ have had considerably less residence time in the upper crust and were derived from possibly an even more depleted source.

Although geochemically different from melts close to oceanic fracture zones the diversity is however similar and cannot be attributed to the limiting effect of the fracture zone on partial melting but to a greater control of pooling of mantle-derived melts generated within a multiply-depleted mantle and so facilitating higher degrees of fractional crystallisation.

## A VIEW ON THE PALEOZOIC SEDIMENTS OF ALBANIDES

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The Paleozoic sediments in Albanides occur in the Korabi Gashiand Albanian Alps zone.

1. The Korabi zone (Pelagonian zone), is of the scale structure and totally allochthonous, represent one of the domains where the Paleozoic deposits are widespread and predominant ones. The sedimentary series of Kollovozi, Muhurri and Korabi tectonic units represent the individual scales of the Korabi zone:

a. Kollovozi unit, built up by the following deposits:

— Ordovician, starting, with sandstones and quartzites succeeded by schists, acid volcanics and the sandstones with schists and quartzites.

— Silurian - Devonian, consisting of the black Schists with a limestone level, containing crinoids and conodonts of the Upper Silurian Lower Devonian in the lower part, passing upwards to the schists with the conglomerate lenses.

— Lower-Middle Triassic composed of the schistouse-carbonate flyschoidal formation with the conglomerates at the basement. It transgressively overlies the Paleozoic series.

D. Muhurri unit, where the following deposits can be distinguished from bottom to top.

— Silurian, starting with the sandstone sediments succeeded upwards by the