

This difference can be explained by an analogous difference in the vertical movements between the areas of the two groups of the geotectonic zones.

PETROGRAPHIC AND GEOCHEMICAL STUDY OF PERIDOTITES FROM THE DAFNOSPILIA - KEDROS AREA (SOUTHERN THESSALY).

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The ophiolitic rocks of Dafnospilia - Kedros area (W. Thessaly), which belong to Pindos - Koziakas - Othris - Argolis - Angelona - Crete - Karpathos - Rhodes main ophiolitic belt, consist the uppermost stratigraphic unit. They form large outcrops of serpentinized peridotites and locally retain their original protolithic character. They are cut by gabbroic veins whereas subophiolitic metamorphic soles were observed, at their base, as well.

Their microscopic investigation exhibits textures similar to those from upper mantle peridotites, indicating that they are mantle, tectonized peridotites. They were classified, according to their normative mineralogy, into harzburgites, which are predominant and lherzolites, which are more restricted. Petrochemical study of harzburgitic peridotites, reveals an enrichment in some refractory elements, as well as, a depletion in some lithophile ones, indicating a typical depleted mantle chemical character, in contrast with the lherzolites which are more fertile.

Petrographic and geochemical results of this study, as well as, similar results from other areas, suggest to establish a paleogeographic environment similar to a marginal basin.

EMPLACEMENT TECTONISM AND THE POSITION OF CHROME ORES IN THE MEGA ISOMA PERIDOTITES, SW OTHRIS, GREECE

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Petrogenetic criteria fail to predict an economic chrome potential in the Othris ophiolite nevertheless, several mines contain combined deposits of Al-rich chrome ore bearing three million tons. Structural mapping in the Mega Isoma massif reconciles this dilemma as follows: (i) Chrome ores originated within a harzburgite nappe now largely occluded by an over-riding nappe of pagoclasse lherzolite; (ii) Emplacement of the

herzolite tectonically thinned the orebearing section around the petrologic moho, entrapping massive ore pods along the thrust surface; (iii) Primary oceanic structures are overprinted by ductile cataclasis that preferentially affects ore sites, and in turn by brittle emplacement structures, so that all structures appear to reconcile a single "emplacement strain" orientation. Potential ore "traps" are located along the thinned "mocho" surface where mylonitic form lines rotate from the NW into conjugate shear zones.

GEOCHEMICAL AND ISOTOPIC (Sr, Nd) VARIATION IN MAGMATIC SERIES FROM THE BODRUM VOLCANIC COMPLEX (SE AEGEAN).

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Upper Miocene magmatism in the Aegean Sea forms two igneous provinces: the Central Aegean or Cycladic Province to the west where granitoids are predominant, and the Dodecanese Province to the east where both, intrusive and extrusive facies of subalkalic character occur these show potassic affinities and form series from mafic to felsic rock types. The most important center of this province, the Bodrum Volcanic Complex on the Turkish coast, is a partly eroded stratovolcano whose major activity (10 to 9 Ma) produced a variety of basaltic rocks, and two differentiated rock series, one Si-undersaturated, the other oversaturated. The dominant products of the latter, however, are of intermediate composition.

Rock types vary from basalts to either Ne-trachyandesites and alkali-trachytes, or to latites, trachydacites and rhyolites but show no systematic temporal evolution, except that rhyolites are restricted to the early stage. Their chemical compositions extend from 48 to 73% silica. The differentiated series are well discriminated above 53% silica by K, Ba, Sr, REE, Zr and Nb contents. Their major and trace element data show trends reflecting fractionation in shallow-level magma chambers, coupled with more complex mixing processes in the oversaturated series.

The basaltic rocks show a range of isotopic compositions with $^{87}\text{Sr}/^{86}\text{Sr}$ spanning from 0.7058 to 0.7071 and $^{143}\text{Nd}/^{144}\text{Nd}$ from 0.51264 to 0.51246 and include highly LIL element-enriched ultrapotassic basalts with characteristics of poorly evolved mantle-derived magmas. These are evidence for the existence of an "enriched mantle" component. The isotopic compositions of both differentiated series are well in the range of values for the basalts. The Si-undersaturated rocks show little variation for initial $^{87}\text{Sr}/^{86}\text{Sr}$ and $^{143}\text{Nd}/^{144}\text{Nd}$. This suggests that crustal contamination was minor and fractionation non-related to assimilation processes occurred. Likewise Sr isotopic

Φηφιακή Βιβλιοθήκη Θεοφράστου - Τμήμα Γεωλογίας, Α.Π.Θ.