

te comes from the Cyclade Islands Milos and Kimolos. There we know of about 10 different technical varieties, of which the best are autochthonous types originating by hydrothermal alteration but altered halmyrolytically by Quaternary transgression.

NEOFORMATION OF MINERALS AND GEOCHEMICAL CHARACTERISTICS OF PLIOCENE LAYERS OF AGIOS THOMAS, AEGINA ISLAND, GREECE

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In the NE part of the Aegina Island in the area of Agios Thomas - Alones siliceous sediments of Lower Pliocene (4.4 ± 0.2 m.y.) in age occur. These sedimentary rocks contain biogenic opal (opal-A) and authigenic opal (opal-CT). Opal-CT has been derived from diagenetic transformation of formerly biogenic sediment enriched in diatom frustules, sponge spicules and radiolarian tests. Both opal-A and opal-CT-rich sedimentary rocks are interbedded and covered by volcanic breccia. The diagenesis was taken place in shallow burial depths and primarily controlled by high heat flow in the region from the Pliocene up to Holocene.

Besides the mineralogical conversion, a change in major and trace element concentration encountered during diagenesis. So, with the exception of silica, the content of all the other major, and trace elements present a depletion from the diatomaceous rocks to porcelanites (opal-CT-rich strata). Generally, the distribution of all the elements analysed depends on the mineralogical composition of the rock. Especially, boron values in diatom-rich layers are characteristic for marine depositional environment with normal salinity-alkalinity.

Finally, the transformation of opal-A to opal-CT is an unusual phenomenon in such young sedimentary rocks, which were not deeply buried.

FE-CR-SPINELS AND ILMENITE MINERALIZATION IN THE METAMORPHOSED ULTRAMAFIC ROCKS OF ASKOS AREA, THESSALONIKI DISTRICT, N. GREECE

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The development of Fe-Cr-spinels and Fe-Ti-oxide mineralization in the ultramafic rocks of Askos area Serbo-Macedonian massif, during regional metamorphism is studied. The meta-ultramafics are massive to sheared serpentinites consisting of coarse fibrous