

ABSTRACTS OF THE PAPER PUBLISHED ONLY IN THE TURKISH EDITION OF THIS BULLETIN

ORIGIN OF MAGNESITE OCCURENCES IN SÜLEYMANİYE, MİHALLIÇIK, ESKİŞEHİR, TÜRKİYE

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In this study, the approaches on the origin of magnesite occurrences which are developed related to altered ultramafic rocks in the peridotites of Tavşanlı Zone have been implemented with isotopic data in addition to geological and mineralogical data. Cryptocrystalline textured magnesites display two different type of formation as both individual veins at the fractures and cracks of ultramafic rocks and stockworks. In order to determine carbon source in magnesite composition and formation of magnesite, δC^{13} and δO^{18} isotope studies have been done. δC^{13} (PDB) values in magnesite vary between -2.71 and -7.69 ‰. On the other hand, δO^{18} (SMOW) values vary between 27.35 and 29.43 ‰. These isotopic data indicate that magnesites are formed as mixing of both CO₂ from atmospheric origin of carbon for magnesite occurrences is the result of mixing CO₂ from atmospheric origin and CO₂ released during decarbonization of organic rich sediments. Volcanogenic CO₂ are also effective in the formation. The mineralization of Süleymaniye magnesites probably occurred after serpentinization of ultramafic rocks under near surface and low temperature conditions.

Key Words: Magnesite, isotope, Süleymaniye, Turkey

FORAMINIFER AND OSTRACOD FAUNAS OF THE SUBMARINE HILL HARMANTAŞI LOCALITY (GULF OF SAROS, NORTHERN AEGEAN SEA) AND THE IMPACT OF THE UNDERWATER SPRINGS ON THE FAUNA

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ABSTRACT.- A total of 46 sediment samples collected from Harmantaşı locality (Gulf of Saros, Northern Aegean Sea) were analysed for its Foraminifer and Ostracod content. 68 genera and 111 species of benthic foraminifera were identified. 99 of the species have calcareous tests, and agglutinant types were represented with only 12 species. 20 genera and 27 species of ostracods were found. Physicochemical parameters such as depth, temperature, dissolved oxygen, pH and salinity were measured to reveal the underwater topography of the region. Several underwater springs were detected around the fault lines. Taxonomical differences as well as morphological abnormalities were observed in the foraminiferal species found close to these springs. Water samples were collected from the springs and near stations. Heavy metal and trace elements analyses of these water samples revealed that there is no antropogenic pollution around the locality, but the submarine springs are the major source of the heavy metals and trace elements in sea water. Radioactivity of the sea water samples were found to be above the WHO limits. The aim of this study is to figure out the possible reasons of the morphological abnormalities observed in foraminiferal tests.

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