

THE GEOLOGY OF THE MIDDLE BLACK SEA (SAMSUN-SİNOP) BASIN AND THE PETROLOGY OF THE VOLCANIC ROCKS

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ABSTRACT.— The rock units that have been deposited from Liassic to Quaternary in the Middle Black Sea Region are introduced. These rocks lie on top of the metamorphic rocks that form the basement. Petrological studies were carried out on the volcanic rocks which have formed in different stages. Information on these studies is also presented in this paper. When the regional geodynamic evolution and its chemical characteristics are taken into account, it is concluded that among the volcanic rocks, Hamsaros volcanics of Upper Cretaceous age, Yemişliçay formation and its Çokran Member, and Tekkeköy volcanics of Eocene age all belong to the group of island arc volcanics and that they were derived from an old subduction zone; Whereas Akyörük basalt were formed as a result of mantle diapirism in the central part of a continent.