

## **A NEW APPROACHING TO PETROGENESIS AND AGE DATA OF ALKALINE VOLCANICS CUTTING THROUGH DAĞKÜPLÜ OPHIOLITE, NORTHWESTERN SİVRİHİSAR (ESKİŞEHİR)**

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Abstract.- In northwestern Anatolia, the ophiolite nappes related with Neotethyan Ocean, the continent fragments, granitoids and volcanic rocks were found along İzmir - Ankara - Erzincan Suture Zone (İAEKZ) as a results of the collision of Sakarya Continent and Anatolid - Taurid Platform. In northwestern Sivrihisar (Eskişehir), phonolites and trachytes with alkaline characteristic cut the ophiolite nappe. Late Cretaceous aged ophiolite nappe containing ultramafic - mafic rocks thrust over Anatolid - Taurid Platform. Alkaline volcanics were ranged as domes close and parallel to the ophiolite thrust line. According to  $^{39}\text{Ar}/^{40}\text{Ar}$  geochronological data on phonolites the age of these rocks are determined as 23-25 Ma (Late Oligocene - Early Miocene). Alkaline volcanics show enrichment in LILE (Ba, Sr, Rb, Th) and HFSE (Nb, Ta, Hf, Zr) relative to MORB. Also, light rare earth elements (LREE) have higher values than those of HREE values. However, Pb contents of alkaline rocks are considerably high. According to the geochemical results, phonolites and trachytes were generated from asthenospheric magma, enriched with fluid-melting processes linked to the previous subducted slab. These alkaline lavas have used the deep strike-slip faults created by extensional regime during the ascending and have undergone to a crustal contamination.

Key words: Sivrihisar, Ophiolite, Alcalen volcanics, Petrogeneses.