ARCHAEOMETRIC STUDIES OF POLISHED STONE ARTEFACTS FROM MECSEK-VILLÁNY MTS. (SOUTH HUNGARY)

OLÁH, I.1, BENDŐ, Zs.2*, SZAKMÁNY, Gy.2 & SZILÁGYI, V.3
1 Hungarian National Museum, National Heritage Protection Centre; Daróci u. 1-3, H-1113 Budapest, Hungary
2 Department of Petrology and Geochemistry, Institute of Geography and Earth Sciences, Eötvös Loránd University, Pázmány Péter setány 1/C, H-1117 Budapest, Hungary
3 Nuclear Analysis and Radiography Department, MTA Centre for Energy Research, Konkoly Thege u. 29-33, H-1121 Budapest, Hungary
* E-mail: bendozs@caesar.elte.hu

87 polished stone artefacts from the Korinek-collection were investigated. These artefacts were collected as stray finds by Prof. László Korinek from the southern part and southern foreland of Mecsek Mountains (South Hungary). The collection contains predominantly axes, but adzes, chisels, grinding stones, handstones, and perforated pendants can also be found. The majority of the artefacts are fragmented, although finished and semi-finished tools also occur. The semi-finished tools show very interesting preparation marks.

The source area of the collection partially overlaps with the area of a recently excavated archaeological site near Diósvízlő. The pottery found here together with polished stone tools suggests that at least some of the latter artefacts originate from Transdanubian Linear Pottery culture.

Besides doing provenance analysis the authors have compared particular artefacts of the Korinek-collection and stone artefacts deriving from the nearby archeological site, Diósvízlő.

Macroscopic description and magnetic susceptibility measurements were made on all samples, polarising microscopic petrography, mineral chemistry by SEM-EDX and PGNAA bulk chemical analyses were used on selected samples. Intact artefacts were analysed by non-destructive methods only. In case of SEM-EDX analysis a newly developed, completely non-destructive method was applied.

As regards the raw materials, the majority of the artefacts were made from late Cretaceous fine-grained dyke or subvolcanic alkaline magmatic rocks of the surrounding Mecsek Mountains. However, a few alkaline magmatic rock samples come from other localities. The provenance of haimite-bearing sodalite phonolite is the Moravian-Moldanubian territory, most probably Zelenicky Vrch. There are relatively high amounts of several varieties of greenschists-metabasites-contact metabasites. Felsőcsatár and Zelezný Brod types of tools could also be identified, but there are still pieces of unknown origin. Other raw materials, such as sandstone, serpentinite, mylonite, siltstone, volcaniclastic siltstone, limestone and quartzite, represent only few pieces.

Links between artefacts of the Korinek-collection and samples from Diósvízlő excavation site have been found. Regarding the raw materials of the collection and the excavation site alkaline magmatic rock types are very similar and two sandstone types are completely identical.