

Archaeological and PIXE analyzes on eneolithic pottery from Nanov-Vistireasa (Co. Teleorman)

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In Nanov-‘Vistireasa’ (Co. Teleorman) recent excavations (2012) yielded an Eneolithic (Boian-Spanțov phase) settlement (c. 4800-4450 BC) with an impressive quantity of pottery. Until now, complete batches of shards discovered in two large pits were under the macroscopic analysis and preliminary remarks on manufacturing technology (fabric types, tempers used, building methods, surface treatment, decoration types, and firing conditions) and functionality have already been presented.

The chemical composition of clay artefacts are strongly related to the sources of clay and recipe of the making, while the chemical composition of the pigments used for decoration is of great importance in the investigation of the manufacturing technology and provenance studies. The determination of the chemical composition of the ceramic paste and of the pigments used for decoration was carried out by the particle induced X-ray emission (PIXE) method. Most of the samples were selected on the basis of their paste composition observed macroscopically and others by the presence of decorating pigments (white and/or red) on their surfaces.

Our analysis, based both on the archaeological and micro-PIXE methods, aims to bring new data and add safety assumptions concerning provenance, manufacturing technology and organisation of production regarding the used and discarded pottery discovered in two pits from an eneolithic site from southern Romania.