

Analytical techniques in provenance determination of archaeological objects from Lower Silesia.

Autorzy

Barbara Łydźba-Kopczyńska

Eugeniusz Zych

Czesław August

Grzegorz Rusek

Aleksandra Pankiewicz

Rok wydania

2008

Czasopismo

Journal of Molecular
Structure

Numer woluminu

887

Strony

41-47

DOI

10.1016/j.molstruc.2008.02.049

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Raman spectroscopy, a non-destructive technique, appears to be a very useful research technique in archaeology and geology. In the presented study Raman spectroscopy proved to be an efficient, fast and informative tool to determine the provenance of archaeological objects found in the excavations of Lower Silesia (Poland). The combined spectroscopic, X-ray powder diffraction and petrographic methods allowed for determination of the provenance and the mineralogical composition of archaeological vessels manufactured in late 9th and the turn of the 10th century that were found in Gilów located at the Sudety Foothills (south-western Poland). The analysis revealed that most of the investigated ceramics were manufactured locally, however two out of three investigated pottery groups show influence of south style originating from Moravia, a historical region located in the Eastern part of Czech Republic and South of Gilów.

Słowa kluczowe

Micro-Raman spectroscopy, Mineralogy, X-ray powder diffraction, Thermal analysis, Ceramic

Adres publiczny

<https://doi.org/10.1016/j.molstruc.2008.02.049>

Strona internetowa wydawcy

<http://www.elsevier.com>