

Sveučilište J. J. Strossmayera, Odjel za fiziku, i Technological Education Institute of Lamia, Department of Electronics, Vas u sklopu Erasmus+ programa pozivaju u četvrtak 03.07.2014. s početkom u 10.00h u prostoriji 60 na Odjelu za fiziku na predavanje

Applications of new technology in Cultural Heritage prof. dr. sc. Theodore Ganetsos



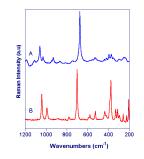


Sažetak predavanja:

In this research work we present the results of analysis of semiprecious stones, as a part of the I.&D. Passas Foundation Collection – Byzantine & Christian Museum. Our main interest was the analysis on the artifacts made from semiprecious stones mainly statuettes of goddesses as well as vases.

The art objects studied and presented here are made of nephrite, jadeite [two very different minerals known under the common term "jade"], lapis lazuli, sodalite and fluorite. All the artifacts come from China and can be dated from the late 19th – early 20th century.

We studied the identification of a group of 43 samples, from which we bring out 15 items in the present paper. We separated the specific mineral from general categories such as Jade





to Jadeite and Actinolite-Nephrite. A very good approach for this is the application of Raman Spectroscopy.

The separation by mineralogical characterisation, using Raman spectroscopy, of the Jade artefacts was successful. The different behaviour of Actinolite and Jadeite under Laser Beam was detected and was interpretive with Raman investigation. The possibility of the provenance of some Artifacts from well-known mines with Historical context was strong but we must continue the characterization.