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Creation of Specialized Electronic Library for Art Investigation Bulgarian Cultural Heritage

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Bulgaria is officially established as a country in 681, located on the ethnical and cultural crossroad between Asia and Europe from one hand and Mediterranean Sea and Northern Europe. Moreover in the cultural heritage of Bulgaria Thracian, ancient Greek, Roman, Byzantium and other artifacts are included. During the centuries very different mixtures of techniques, materials and objects are formed. Identification and analysis of archaeological and art materials is essential for the preparation and determination of the most appropriate strategy for restoration and conservation and also to optimize the conditions for storing and stacking of museum exhibits. The study of cultural valuables is a difficult and complex task, almost impossible without the use of a good database of reference materials. During the last two years we have collected a large set of reference materials by IR and Raman spectra and a library of reference materials, including information about the Vibrational Spectra, the type, the chemical composition, the historic period of usage, literature, compatibility, application, etc was created. The database also includes samples of the Bulgarian cultural sites, spectral data, electronic files and images illustrating the spectra obtained. Dedicated website with free access to the electronic library of IR, FIR, Raman, XRF and more, including reference information, for archaeological and art materials have been made. We planning after the database is completed a neural network and statistical analysis to be perform in order to find the characteristic techniques, materials, objects, and more details.

Keywords:

Electronic database, dyes samples, real objects

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References:

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