

## Study and restoration of icon "Dormition of the Mother of God"

*Tuesday, 14 June 2022 15:00 (20 minutes)*

This presentation focuses on restorative intervention and non-destructive diagnostic analyses conducted in two icons part of the Medieval Art Pavilion at the National Historical Museum in Tirana. The recognition of the materials used in their realization by carrying out these diagnostic tests helped us to discover their author. The two icons are the "Dormition of the Mother of God" (dated 1762) and the other icon "St. Mary with Christ" (dated 1701) are taken by the iconostas of the church of St. Mary's Monastery, located near the village of Pojan of Fieri district on the territory of the ancient city of Apollonia. In collaboration with the Institute of Nuclear Physics of Albania, Prof. Nikolla Civici, were performed several analyses. These tests were carried out with ED-XRF show that some colors vary and some others do not. For example, the red color used in the 1762 repainting of the icon "Dormition of the Mother of God" has more Mercury (Hg) composition and less Lead (Pb) while the red used in the icon "St. Mary with Christ" in 1701 has more Lead (Pb) composition and less Mercury (Hg) composition. So do brown, yellow and white pigments, while green, blue and okra pigments result in the same.

The icon "Dormition of the Mother of God", was radiographed part-by-part with X-rays through 15 radiographic plates Kodak, which served for the coverage of its entire surface. From the study of these plates were recorded the areas of wood with knots, the part where the two pieces of the icon join, with two crosses fixed with nails, as well as their shape and position. Also, the surface of the wire used under the grunt, the state of the preparatory layer, as well as the cracks and wood degradations of wood insects were also accurate. Quite interesting was the recording of the initial layer of the painting, with the preparatory discs, as well as the highlighting of two parallelogram-shaped connectors in the interior of the wood. From this diagnosis we understood the way in which the author made the ascent and reinforcement of the two parts of the wood.

The types of metal, earth, vernique and organic binding oxides were examined by ED-XRF analysis. The archeometric measurements targeted the characterization of pigments used in the icon, during which measuring systems are optimized for detecting elements with average atomic numbers (Ca-Zr). During these measurements the instrument worked with high x-tube voltage of 30 kV, current 20  $\mu$ A. Spectral analyses of the preparatory layer for the verification of stratigraphic layers observed that the first layer is wires related to the support of wood with organic animal connectors. After this layer lies an organic connecting layer and the preparatory layer of the gipsy grund and after this layer come gradually the layers of colors.

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