

# Application of neutron resonance capture analysis for the investigation of the element composition of the panel of the triptych (presumably 17<sup>th</sup> century)

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The method of Neutron Resonance Capture Analysis (NRCA) is currently being developed at the Frank Laboratory of Neutron Physics (FLNP) [1]. The method is fully non-destructive it can be used to determine the bulk composition of objects without preparation or sample taking. The NRCA is based on the registration of neutron resonances and the measurement of the yield of reaction products in the resonances.

In this work we describe the application of NRCA for the investigation of an archeological object transferred to the FLNP by the Museum and Exhibition Complex (MVK) "Volokolamsk Kremlin". The object was the panel of the triptych (presumably 17<sup>th</sup> century) which was found in the Moscow region, Volokolamsk district, village Chubarovo.

The experiment was carried at the Intense Resonance Neutron Source (IREN) facility with a multi-sectional liquid scintillator detector which was used for the registration prompt gamma-quanta and was created at FLNP JINR [2, 3].

## REGERENCES

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