Complementary use of SR and neutrons for heritage study at NRC ''Kurchatov institute''

<u>Elena Tereschenko^{1,2}</u>, Alexei Veligzhanin¹, Konstantin Poduretz¹, Ekaterina Kovalenko¹, Roman Svetogorov¹, Pavel Kashkarov¹, Ekaterina Yatsishina¹

1 National Research Centre "Kurchatov Institute", Moscow, Russia 2 Federal Scientific Research Centre "Crystallography and photonics" Russian Academy of Sciences, Moscow, Russia **tereschenko EY@nrcki.ru**

The variety of cultural heritage objects and the wide range of the solved tasks determine a diverse sets of methods that should be used for the researches. The complementary combination of synchrotron and neutron diagnostic methods as well as a number of laboratory methods (including electron microscopy, mass-spectrometry, optical spectrometry and else) allows to realize the mostly complete study of such objects.

The most striking instances of the comprehensive studies on exhibits from the old museum collections of the State Historical museum and The Pushkin State Museum of Fine Arts and the new archaeological finds will be presented.

The selection of methods for the study of artifacts was determined not only by the characteristics of the materials (metals, ceramics, stones, etc), the preservation state surface and inner structure of the objects, the possibility of microprobe sampling, but also the concrete historical targets.

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