

Technical examination of Two Icons on the Silk from Khara-Khoto

(Abstract)

Kamilla B. Kalinina
(State Hermitage Museum)

Buddhist collection from Khara-Khoto stored in Hermitage Museum is unique collection of art treasures of Tangut state Xi Xia. All art objects, manuscripts and other artifacts were brought by P. Kozlov to St.-Petersburg after his expedition to Central Asia in 1907 -1909.

One of the interesting parts of this collection is the numerous group of Buddhist icons on the different support (about 250). But only small part of them painted on silk.

Technical and analytical studies of painting technique were carried out on two thankas on the silk. One of them devoted to Avalokitesvara (Guanyin), one of the great bodhisattva (end of XII-XIV C). Another thanka devoted to the Planet Deities (XIV C). The conditions of these two icons were different. Icon "Planet Deities" had bad condition. As a result of negative environmental factors color layer was badly damaged: it was separated from the support in some places, partly cracked, spelled and powdered.

The binding medium, analyzed by gas chromatography-mass spectrometry, was determined as animal glue with addition of small amounts of carbohydrates. Pigment composition of colored layer and ground was investigated by polarized light microscopy (PLM) and micro-chemical tests. To study painting structure cross-sections were made.

It was revealed that ground of these two thankas had different composition. The ground of the icon with the image of Avalokitesvara consists of chalk. The ground of the icon "Planet Deities" consists of clean decanted gypsum.