

The National Museum of Przemyśl possess one of the largest and most valuable collections of Orthodox Art in Poland. This important collection has not been carefully examined so far. The most valuable part of this collection is constituted by icons, especially those painted in the late Middle Ages and dated to the 15th-16th centuries. These works should be comprehensively studied by an art historian, as well as by a conservator and scientists including chemists, physicists, and geologists. Works of this type are anonymous, with little information about their origin, and dating them is therefore difficult as well as the determination of their artistic environment. This research can provide help in obtaining answers to these questions, as well as serves to identify the materials used by painters and subsequent stages of creating the analyzed works. The research results will be presented regularly on the project's website, in journal articles and at national and international conferences. The importance of this type of advanced research is demonstrated by the positive response to the monograph dealing with icons from the collection of the National Museum in Krakow. This monograph was the effect of several years of a research grant financed by the Ministry of Science and Higher Education of the Republic of Poland. This publication from 2019 has already gained positive reviews in Romanian, Greek and Serbian scientific journals. The scale and innovation of the study have received appreciation in the eyes of members of the Committee on the Art Sciences of the Polish Academy of Sciences, who awarded it with the first prize for the most distinguished scientific publication of 2019. For the general public, but also for specialists, this significant part of the resources of Polish museums remains unknown or poorly disseminated, although, as it turns out, it is a very important part of the common heritage of many European nations.

The analysis of icons from the collection of the National Museum in Przemyśl related to the "Krakow" icons would therefore complement the panorama of this art, developing in the Ruthenian lands connected to the Polish Crown in the 14th century. At the same time, this study would complement significantly the current knowledge and would be an important reference for further research. We can identify for example, which chalk or realgar (the raw material needed to produce a yellow dye) deposits were used by local painters. Specialized laboratories have analytical instruments for examining traces of elements in a sample e.g. of grounds, thanks to which we obtain a unique composition, appropriate for a particular deposit from which this material was taken. In the future, it will be possible to determine more accurately the origin of materials used by painters thanks to this type of pioneering research. This will allow to clarify which works were prepared on-site, i.e. in Przemyśl and which could have been imported from further regions. Current wood research allows to determine not only from which tree species used for the support of icons, but also when these trees were cut. This data supports the estimation of time of creation of the icon. The final effect of the research will be a Polish-English monograph devoted to the heritage of the Polish-Ukrainian borderland. This information is significant in the broader context of contact zone of civilizations of the Western and Eastern world. The study will also concentrate on the analysis of artworks in the context of their subjects and painting quality. This will be supplemented by physico-chemical measurements in the context of research results already carried out and published.