



## **POSTER: Proteomic analysis of blood coatings and determination of the animal species origin of blood**

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In the past, blood was used as an ingredient in mixtures that have found their use, for example, as binders for painting purposes, wood coatings (e.g. parts of mills), preservatives for ceiling beams or walls, and floors of threshing floors. The blood coatings often served not only as functional materials but also have decorative purposes. We can find them for example on furniture and painted wood beams. Their colorfulness varies from dark brown to red, pink, and even green shades. Nowadays, the recipes for the different color shades preparations are not known, because of the absence of historical knowledge in this field

The aim of this work was to analyze the protein composition of 24 model blood coatings on wood that were prepared under restorer and conservator supervision at Wallachian Museum in Nature in 2019 and four historical samples coming from China from Medieval Ages delivered by Weltmuseum in Wien, Austria. Blood coatings were analyzed using nano-Liquid Chromatography – Electrospray Ionization – Quadrupole – Time of Flight Mass Spectrometry (nano-LC-ESI-Q-TOF MS).

The obtained results were compared to a publicly available protein database of plant and animal proteins (Uniprot). The identified proteins were compared to the original substances from which the model blood coatings were prepared. The animal origin of the blood used in the model and historical samples was determined using PostgreSQL RDBMS software.

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