## From words to objects: the art of glassmaking through recipes

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## Abstract

Glass is part of our tangible cultural heritage, present in diverse cultural and creative expressions. In this research we aim to create new knowledge based on the link between historic documentary information on glass production and the produced historical glass objects. This is fundamental for the discovery of new information and insights into the history and conservation of our material culture, impacting its preservation, interpretation and appreciation. Representative recipes of glass-based paints, such us grisailles, yellow silver staining, enamels and sanguine red, are being selected from treatises and recipe books dated from the 15th century to the 19th century and reproduced in laboratory. These allows the characterization of this paint material with analytical techniques such as Optical Microscopy (MO), X-Ray Diffraction (XRD), Particle Induced X-ray Emission (PIXE), Scanning Electron Microscopy (SEM) and Colorimetry. The results are being correlated with historical glass paints applied on stained-glass aiming to understand how this historical written information represents the practices at the stained-glass workshops.

Keywords: historical reconstructions, conservation, archaeometry

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