

Painters often used a protein binding agents such as various types of animal glues, casein or eggs, either whole or their individual parts for preparation of many different types of temperas. The determination of the proteinaceous binder is essential in order to choose a suitable conservation method and for identification of the painting technique.

This diploma thesis aims to define the most suitable conditions to determine the proteinaceous binders by gas chromatography with flame ionisation detector (GC-FID).

Firstly, the optimal conditions needed for separation of individual amino acids, which are necessary to distinguish the protein binding agents, were set. Secondly, the empirically define conditions for hydrolysis of proteins, which breaks down proteins into the individual amino acids, were found.