



Contribution ID: 6

Type: **Talk**

Visualization of the sealed contents of a rare medieval reliquary from the historic district of Mainz

Wednesday, 20 June 2018 09:35 (20 minutes)

It is about a rare 12th century enamelled reliquary from Mainz. This phylacterion is a pendant in the shape of a quatrefoil. It was found in the old town of Mainz in 2008 in an ancient dump. The conservation was performed in the laboratory of the Generaldirektion Kulturelles Erbe (GDKE), Direktion Landesarchäologie Mainz.

In total, the conservation work on the pendant took 500 hours.

The phylacterion is made of gilded copper. Front and verso are enamelled using the technique of email champlévé. The high concentration of mercury revealed by μ -XRF indicates that fire gilding was used.

Since no object was discernable in the interior of the reliquary on radiographs, neutron imaging was performed at the Research Neutron Source Heinz Maier-Leibnitz (FRM II), Technical University of Munich in Garching in order to see if more information could be gained about the contents.

A first short scan directly showed some small objects inside.

The first neutron tomography carried out with a short intensity made the content visible. Inside the phylacterion, different small packages could be seen, around 8 –10 of them. Around one of these packages, the surrounding textile is also very recognisable. The fabric is folded into a few layers and a thin thread is wrapped around it to keep it together.

The pendant is dated to the last third of the 12th century. This object is one of only four phylacteria known of this type. It is a rare example from controlled excavations.

Primary author: Mr HEINZEL, Matthias (Römisch-Germanisches Zentralmuseum)

Co-author: SCHILLINGER, Burkhard

Presenter: Mr HEINZEL, Matthias (Römisch-Germanisches Zentralmuseum)

Session Classification: Imaging of Cultural Objects

Track Classification: Neutron Radiography and tomography