

Exploring Cultural Heritage with X-rays (Hamburg/online, 13–14 Nov 24)

Hamburg and online, Nov 13–14, 2024

Registration deadline: Nov 6, 2024

Doreen Schröter, Centre for the Study of Manuscript Cultures (CSMC), Uni Hamburg, Germany

This workshop aims to connect members of the Excellence Cluster “Understanding Written Artefacts” (UWA) by the University of Hamburg and curators, conservators, archaeologists, and art historians with DESY scientists. The focus is to showcase and discuss applications of synchrotron radiation in the domain of cultural heritage. This workshop offers a unique occasion for networking between different scientific communities and facilitates interdisciplinary research.

The workshop will focus on the following topics:

- Best practices for working across disciplines
- Non-destructive analytical methods based on x-rays and synchrotron radiation for cultural heritage
- Requirements towards handling, storage and care of cultural objects for and during analytics
- Exploring the potential for joint studies, research collaborations or third-party funding applications
- Best ways to apply for beamtime and analytical support at DESY by museums, archives and libraries

DESY is currently planning an upgrade of the synchrotron radiation source PETRA III to PETRA IV, which will be a unique 3D X-ray microscope that will offer exceptional research possibilities for the fields of art, archaeometry, and conservation of heritage objects. The workshop will provide an outlook on research possibilities at PETRA IV and a unique opportunity to formulate requirements towards an ideal experimental set-up by users from different fields.

Online participation with Q&A Option via <https://desy.zoom.us/j/69500455243>

Program:

Wednesday, 13 Nov 2024

Lecture & Dinner at the Centre for the Study of Manuscript Cultures (CSMC), Warburgstraße 26, 20354 Hamburg

17:45-21:00

.Welcome by Agnieszka Helman-Wazny, CSMC

.Written Artefacts and Material Analyses by Konrad Hirschler

.Ceramic Artefacts from Ban Chiang, Thailand by Ulrich Bismayer

.Dinner at CSMC (Pavillon)

Thursday, 14 Nov 2024

Workshop day at DESY Campus, Seminar

Room FLASH, Building 28c, DESY Campus, Notkestraße 85, 22607 Hamburg

08:30 Registration

09:00-10:30

.Welcome & general introduction by Miriam Hufnagl, DESY

.Current and future research possibilities for cultural heritage by Christian Schroer DESY

.The progress of synchrotron research for application to heritage paper objects (Case study: Tsakali cards and cross-disciplinary collaboration) by Agnieszka Helman-Wazny, CSMC

.Authentication and risk assessment of X-ray investigations in terms of materials by Sylvio Haas, DESY

.Fishbowl discussion

10:45-11:00 Coffee break

11:00-12:30

.Improving access to synchrotrons for heritage materials: a look back at several initiatives at the French SOLEIL source by Loic Bertrand, ENS Paris-Saclay

.Reflections on an ethical approach to X-ray analyses of cuneiform clay tablets by Cécile Michel, CNRS

.Fishbowl discussion

12:30-13:30 **Lunch and Networking**

13:30-16:00

.Conservation, between Principles, Dilemmas, and Uncomfortable Reality by Fenna Yola Tykwer, Staatsarchiv

.Possibilities and limitations of non-destructive testing (Presentation of the Mobile Lab, CSMC) by Sebastian Bosch, Grzegorz Nehring, CSMC

.Fishbowl discussion

.Challenges and Solutions for Unfolding Ancient Documents: Using a Silver Package as an Example by Christiane Matz (Varusschlacht Museum) and Nicolas Klenert (ZEB)

.Experiences in using a mobile X-ray tomography setup at the museum by Samaneh Etheram CSMC, and Andreas Schropp, DESY

.Fishbowl discussion

16:00-17:00

.Poster session and Coffee including the presentation of ongoing projects including the synchrotron research

.Wrap up: Next Steps, networking, Ideas to follow-ups; Bild up Working Groups which meet afterwards

17:00 **Guided tour of PETRA III**

Please register until **6 November 2024** at: <https://indico.desy.de/event/43734>

Questions or suggestions regarding the research opportunities at PETRA III and IV before the workshop are very welcome and can be sent to katrin.zerbe@desy.de or agnieszka.helman-wazny@uni-hamburg.de

Reference:

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