

## **The Centre for the Study of Manuscript Cultures (CSMC)**

cordially invites you to the workshop

### **Seals and Sealing: A Survey of Materials, Forms and Functions**

Thursday, 25 November 2021, 2:00 pm – 6:30 pm CET

Friday, 26 November 2021, 2:00 pm – 6:00 pm CET

### **Zoom-Meeting**

Registration:

<https://www.csmc.uni-hamburg.de/en/register-workshop15>

The Cluster of Excellence 'Understanding Written Artefacts: Material, Interaction and Transmission in Manuscript Cultures' is devoted to the comparative investigation of written artefacts produced on all kinds of writing support (i.e. parchment, palm leaf, rock, et cetera) from the Mesopotamian civilisation to the present day and throughout all parts of the world (with a focus on Asia, Africa, and Europe). Among other things, researchers of the Cluster and especially of the Research Field 'Creating Originals' investigate the criteria for the originality of documents. Recently, they have been focussing on legal aspects, seals, and sealing practices in particular.

This workshop, which is organised in cooperation with the Research Field 'Artefact Profiling', intends to give an overview of seals and their materiality throughout the world from antiquity to today, to allow comparisons of how different cultures authenticated documents or attested specific qualities, and to present ways of applying scientific and analytical methods to the study of seals. Talks will introduce the main characteristics of seals and sealing practices in the considered times and regions, and provide representative case studies.

## Programme

### Thursday, 25 November, 2:00 pm – 6:30 pm

2:00 – 2:15 Claudia Colini (Berlin/Hamburg), Philippe Depreux (Hamburg), and Jörg B. Quenzer (Hamburg): *Introduction*

#### Session 1: 2:15 pm – 4:15 pm

2:15 – 2:55 Valeska Becker (Münster): *Stamps from European prehistory – Chronology, distribution, motives and meanings*

2:55 – 3:35 Katelijn Vandorpe (Leuven): *Seals and sealing in the multicultural society of Greco-Roman Egypt*

3:35 – 4:15 Uta Lauer (Hamburg): *Cultural High Density – A Survey of Chinese Seals and the case of Jiang Chengzhi (1924-2015)*

4:15 – 4:30 Break

#### Session 2: 4:30 pm – 6:30 pm

4:30 – 5:10 Nitzan Amitai-Preiss (Jerusalem): *Sealing in the Early Islamic Period: Administrative and Commercial Types*

5:10 – 5:50 Annabel Teh Gallop (London): *Malay Seals from the Islamic World of Southeast Asia: Considerations on the use of lampblack*

5:50 – 6:30 Bidur Bhattarai (Hamburg): *Seals and Sealing Practices in Nepalese Palm-leaf and Paper Artefacts*

## Friday, 26 November, 2:00 pm – 6:00 pm

### Session 3: 2:00 pm – 3:30 pm

- 2:00 – 2:40      Marcin Wołoszyn (Leipzig), Olga Karagiorgou (Athens), and Stephen Merkel (Bochum): *'Ghosts of vanished archives'. Byzantine seals in the light of Lead Isotope analysis*
- 2:40 – 3:20      Lisa Wright (Rochester) and Anna Siebach-Larsen (Rochester): *Deciphering impressions: Historical applications of Reflectance Transformation Imaging*
- 3:20 – 3:30      Break

### Session 4: 3:30 pm – 5:00 pm

- 3:30 – 4:10      Marie-Adélaïde Nielen (Paris) and Agnès Prévost (Paris): *The Merovingian royal sealing: The case of the diploma of Chilpéric II of 716*
- 4:10 – 4:50      Andrea Stieldorf (Bonn): *Images in wax and lead. European Seals in the High Middle Ages*
- 4:50 – 5:00      Break

### Session 5: 5:00 pm – 6:00 pm

- 5:00 – 5:50      Agnieszka Helman-Wazny (Hamburg), Charles Ramble (Paris) and Hussein Mohammed (Hamburg): *Seals on archival documents in Mustang, Nepal: Identification, material analysis and digital matching*
- 5:50 – 6:00      Claudia Colini (Berlin/Hamburg) and Philippe Depreux (Hamburg): *Perspectives*

## Abstracts and Contributors

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**Valeska Becker (Münster):** *Stamps from European prehistory – Chronology, distribution, motives and meanings* (25 November, 2:15 pm – 2:55 pm)

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**Abstract:** In prehistoric Europe, clay stamps/clay seals/pintadere occur mostly in the Neolithic and the Copper Age and then, after a long hiatus, again during the Bronze and Iron Ages, with various shapes and motives. Decorations encompass, for example, geometric shapes like circles, spirals, S-figures, crosses, sun-like motives and chevrons, but also animals like deer or bears. Although they have attracted the attention of many researchers, their precise function is still a matter of debate. This is mainly due to the fact that imprints of the stamps have never been found, pointing to organic materials that were decorated. Since the face of the stamps is usually not exactly plain, the surface that was stamped may have been slightly soft, for example human or animal skins, leather, textiles, food or even the fresh clay of house walls. Remains of paint on some few pieces ensure that they were definitively used as stamps. At the least, we can be sure that they were a means of communication, whether sacred or profane, connected to specific persons or groups, and maybe markers of identity or possession.

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**Katelijjn Vandorpe (Leuven):** *Seals and sealing in the multicultural society of Greco-Roman Egypt* (25 November, 2:55 pm – 3:35 pm)

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**Abstract:** Already before Alexander's conquest, the Egyptians had a long tradition of sealing objects, using scarabs, signet rings, stamps or similar tools. The Greeks brought along their own signet rings and new customs, like the use of double documents, which were partly sealed. The Romans introduced new habits from the West, like lead seals for transport and the use of plaster instead of clay to stopper amphoras. This paper gives an overview of sealing practices in Greco-Roman Egypt (3<sup>rd</sup> century BCE to 3<sup>rd</sup> century CE) departing from the multiple functions of sealings. Special attention is paid to innovations introduced by the Ptolemies and the Romans.

**Uta Lauer (Hamburg):** *Cultural High Density – A Survey of Chinese Seals and the case of Jiang Chengzhi (1924-2015)* (25 November, 3:35 pm – 4:15 pm)

[uta.lauer@uni-hamburg.de](mailto:uta.lauer@uni-hamburg.de)

**Abstract:** In 2009, Chinese seal engraving was added to UNESCO's list of 'Intangible Cultural Heritage of Humanity'. A brief historical survey of materials, forms, and functions of Chinese seals will be followed by a case study of two seals by Jiang Chengzhi (1924 – 2015).

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**Nitzan Amitai-Preiss (Jerusalem):** *Sealing in the Early Islamic Period: Administrative and Commercial Types* (25 November, 4:30 pm – 5:10 pm)

[amitaipr@mail.huji.ac.il](mailto:amitaipr@mail.huji.ac.il)

**Abstract:** Due to the lack of historical books from the Umayyad period, seals are the most important source of information, administrative data, and knowledge of the administrative division and its terms. Some types of the Early Islamic seals of Palestine evidence connections between the Muslim authorities and non-Muslim subjects. Another type shows commercial ties between provinces of the Muslim empire. All types enrich our understanding of the Early Islamic period.

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**Annabel Teh Gallop (London):** *Malay Seals from the Islamic World of Southeast Asia: Considerations on the use of lampblack* (25 November, 5:10 pm – 5:50 pm)

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**Abstract:** Over two thousand Malay seals – defined as seals from Southeast Asia with inscriptions in Arabic script – are catalogued and described in the recently-published *Malay Seals from the Islamic World of Southeast Asia* (Singapore: NUS Press, 2019). These seals originate from the present-day territories of Malaysia, Singapore, Brunei, Indonesia, and the southern parts of Thailand, Cambodia and the Philippines. They date from the late 16<sup>th</sup> to the early 20<sup>th</sup> centuries. The inscriptions on Malay seals serve to identify the individual owner through a combination of name, title, pedigree, place, and date, often accompanied by a pious phrase. As such, they are similar to seals from all over the broader Islamic world. However, unlike most other Islamic seals, Malay seals are generally stamped in lampblack rather than ink, and it is the use of this unusual sealing medium that will be highlighted in this paper.

**Bidur Bhattarai (Hamburg):** *Seals and Sealing Practices in Nepalese Palm-leaf and Paper Artefacts* (25 November, 5:50 pm – 6:30 pm)

[bidur.bhattarai@uni-hamburg.de](mailto:bidur.bhattarai@uni-hamburg.de)

**Abstract:** Very few studies have been carried out so far in the field of seals, sealing practices, materiality, functions, and their contents in the subcontinent. Focusing on palm-leaf and paper artefacts largely hailing from Nepal, this paper will look at seals and sealing techniques in such artefacts. In particular, it will present (1) selected examples of seals and (2) sealing practices that are still in use in the region, and will offer (3) preliminary remarks about the content and function of the seals. Some of these aspects will be illustrated through live films.

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**Marcin Wołoszyn (Leipzig), Olga Karagiorgou (Athens), and Stephen Merkel (Bochum):** *'Ghosts of vanished archives'. Byzantine seals in the light of Lead Iso-tope analysis* (26 November, 2:00 pm – 2:40 pm)

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**Abstract:** Lead is the most common non-ferrous metal in the Roman and Medieval periods and was very well-known also to the Byzantines. Seals (molybdoboulla) appear to be the most characteristic group of byzantine lead objects. It remains an open question what sources of lead were used to manufacture the Byzantine seals. In our paper, we present the results of lead isotope analyses of ten Byzantine seals from the sigillographic collection of Dr. R. Feind (Cologne; four specimens from the Early Byzantine, five specimens from Middle Byzantine and one specimen from the Late Byzantine period). Taking into account that the extant number of Byzantine seals is estimated to even 100,000, the possibility to identify the source of the raw material used in their production will contribute in a major way not only to Byzantine sigillography, but also, more broadly, to our understanding of the circulation of metals throughout the eastern Mediterranean in the Middle Ages.

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**Lisa Wright (Rochester) and Anna Siebach-Larsen (Rochester):** *Deciphering impressions: Historical applications of Reflectance Transformation Imaging* (26 November, 2:40 pm – 3:20 pm)

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**Abstract:** Seals can pose particular difficulties for the researcher, given the specifics of their materiality and use. Through wear and damage, textual and pictorial details – as

well as aspects of the seal's materiality – can become invisible to the human eye, and cannot be adequately recovered by standard imaging practices. Reflectance Transformation Imaging (RTI) is a solution for capturing and representing visual information in ways that uncover impossible-to-see details and information through the controlled movement of light. In this presentation, we will cover the basics of 'Why RTI?' and its specific benefits for sigillographic research. We will discuss its use as a dynamic new approach to viewing objects that have relief and how it is an alternative means of capturing that relief in a minimally invasive, non-destructive way. We will cover RTI's challenges and limitations, and discuss its potential as an equitable, inclusive, and accessible means of scholarship that enables collaborative research on seals and related material objects.

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**Marie-Adélaïde Nielen (Paris) and Agnès Prévost (Paris):** *The Merovingian royal sealing: The case of the diploma of Chilpéric II of 716* (26 November, 3:30 pm – 4:10 pm)

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**Abstract:** Using the techniques of experimental archaeology and the archaeology of gesture, this talk will present, by means of a reconstruction, the technical and practical aspects of the sealing of Merovingian royal diplomas. Seven Merovingian royal diplomas still have their original wax seals: such a small number of preserved original impressions does not allow for a statistical assessment, but it does allow for a few hypotheses regarding the process of sealing in the chancellery of the Frankish kingdoms. Thus, the preparation of the parchment, the practice of riveting, the production and shaping of the beeswax, the affixing of the matrix, and finally the protection of the imprint by means of the document's folding system, can be better known thanks to a careful examination of the various elements that make up the document. Secondly, we will look at the symbolic aspect of this sealing, with the study of the images present on the sigillary impression, but also that of the presence of fragments of human hair included in the seals.

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**Andrea Stieldorf (Bonn):** *Images in wax and lead. European Seals in the High Middle Ages* (26 November, 4:10 – 4:50 pm)

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**Abstract:** High medieval seals were primarily used to corroborate charters of emperors, kings, and bishops, and bore the image of their owner. Printed mostly in wax, but sometimes also in lead, these images seemed to embody the respective king, bishop et cetera. Together with the physical connection of the seal with the charter, the image and mate-



riality should reflect the will and responsibility of the seal owner. Around 1100, the conception of seals changed: they no longer only embodied but also represented their owner and his (or her) status. At the same time, more documents were issued by new issuers, so that new groups of seals appeared, e.g. of convents or cities, whose seal images began to follow new logics. The paper will show different examples of seals and seals owners and show how the images were intended to authenticate the charters.

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**Agnieszka Helman-Wazny (Hamburg), Charles Ramble (Paris), and Hussein Mohammed (Hamburg):** *Seals on archival documents in Mustang, Nepal: Identification, material analysis and digital matching* (26 November, 5:00 – 5:50 pm)

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**Abstract:** While various devices are used for the authentication of archival documents from Mustang, this talk will consider the use, identification, and analyses of seals. Although there is a growing body of published research on the subject of Tibetan seals, their use in borderland areas such as Mustang merits closer attention. A methodology for imaging and identifying seals developed gradually during the Mustang Archives project (2015–19) while documents were organised into categories according to function and codicological features, then read, summarised and checked for dates, names of places, scribes, and other parties concerned. The seals were intended to certify ownership or validate the document. This enquiry made it possible to shed light on features such as the shape of the seals, the choice of the language (Tibetan, Nepali) and script (which includes examples of Arabic and Roman), the incidence and relevance of certain motifs, and the extent to which the content of the seal was implicated in the identity of the owner. We paid closer attention to seals as we digitised them together with whole documents and then undertook research on their identification, as well as formal and material analyses. For this purpose, we used Automatic Pattern Detection, which has become increasingly important for scholars in the Humanities, since their research benefits from the growing quantity of digitised manuscripts and data which can then be used for further research. Thus, among other things, our data was used for a state-of-the-art learning-free pattern detection method developed in the CSMC for the task of detecting patterns such as drawings, seals, words, and letters in images of written artefacts without the need of any annotated training data. Here the seals of Mustang documents will be discussed from the perspective of various different disciplines represented by the authors' expertise.