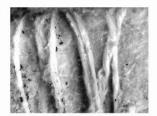
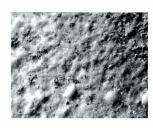
EXPLORING TEXTILE IMPRINTS ON CLAY FROM THE 3^{RD} AND THE 2^{ND} MILLENNIA BCE: ADVANCING CUTTING-EDGE RESEARCH AND DOCUMENTATION PROTOCOLS WITH CASE STUDIES OF DIVERSE TEXTILE CONSUMPTION CONTEXTS









Textiles have held a central role in societies for c. 10,000 years, shaping social and individual identities such as gender, age and status, while the art of textile making was pivotal in the past economies. Yet, due to an environmentally limited preservation, excavated textiles only represent a small fraction of textile consumption in the past. Notable exceptions are textile imprints on clay: preserved on a non-organic matrix, they provide crucial evidence for textiles and their production in the earliest periods with the most limited textile finds, and in all regions where environmental conditions inhibit the survival of organic materials.

Although informative about the qualities of the impressed products, as well as diverse contexts of textile consumption in the past, textile imprints have only recently gained more focused attention from archaeologists, still lacking a more comprehensive approach. The project "Exploring Textile Imprints on Clay" (acronym: ExplorTIC) aims to develop comprehensive research and documentation protocols utilising digital methods, online repository and database, based on a new dataset of over 2000 textile imprints on clay. In comparison to the number of excavated textiles from the two study areas, this dataset allows for undertaking comparative studies and statistical analyses on a scale unthinkable before. The primary source-material will originate from two case studies: 1) textile imprints on pottery from North-Central Europe, represented by finds from Poland dated from the Neolithic to the Early Iron Age; and 2) Bronze Age textile imprints from Aegean clay sealings from the Corpus der minoischen und mykenischen Siegel in Heidelberg. Reflecting the PI's expertise and increasing interest in textile imprints on clay among Polish archaeologists, the selection of two case studies enables exploration of a multitude of products and diverse textile consumption contexts. Adopting a broad chronological framework of over two millennia facilitates a diachronic and cross-regional, comparative investigation of technological developments in textile making. The primary goals of the project encompass specific research (1–3) and methodological (4–5) objectives, to be outlined as follows:

- 1) Revealing the **diversity of textile use-patterns** and **consumption contexts** documented by textile imprints on clay, including transmission of their **ornamental function** on pottery, the **incorporation of textiles in pottery making and metallurgy**, various **textile applications in storage and sealing practices**, and patterns of **textile reuse and recycling**.
- 2) Tracing potential **individuals associated with specific textile products and practices** through documented on clay sealings repetitive utilisation of identical cords and seals; distinctive methods of textile handling, such as binding or knotting.
- 3) Revealing local and regional, **long-term developments** in textile technology and exploitation of natural resources.
- 4) Evaluating **digital documentation and analytical methodologies**, including Reflectance Transformation Imaging (RTI), 3D photogrammetry, 3D scanning, and Scanning Electron Microscopy (SEM) employed in combination, and establishing **a comprehensive digital documentation protocol**, creating a **standardised vocabulary** and **manual for technical analysis**.
- 5) Defining characteristics **classifying impressed raw materials and techniques of production** through archaeological experiments. Formulating **best practices to address key challenges in the study of textile imprints on clay**, including their fragile nature, high three-dimensionality, alternations of actual textiles due to pressure; and the identification of raw materials and production techniques.

Additionally, experimental impressing on clay of 30+ samples of raw materials and 15+ samples of products made using various textile techniques will produce imprints for the online **reference collections** complete with 3D printing templates.