## Reg. No: 2023/51/D/HS3/00778; Principal Investigator: dr Mateusz Jerzy Cwali ski

Amber, a significant indicator of long-distance contacts in prehistory, is believed to have played a crucial role in shaping cultural relations, social elites' formation, and the spread of beliefs in the of Bronze Age Europe. Despite Pomerania's historical connection with Baltic amber, questions about the persistence of Neolithic traditions, competition between amber craftsmen from other Baltic regions, and the extent of amber products circulation towards the south remain unanswered.

The project aims to explore the economic and cultural significance of amber craftsmanship and amber itself in the Early and Middle Bronze Age in Polish lands, circa 2150–1200 BC, within the European context. Furthermore, it seeks to understand the role of Polish lands, particularly Pomerania, in long-distance interregional contacts involving exchange of amber and copper. The project aims to reevaluate the material and symbolic relationship between amber and copper, as well as trace their transmission networks.

The project's temporal scope spans from the moment of the initial widespread dispersion of amber beyond the Baltic area (at the turn of the 3rd and 2nd millennium BC) to the emergence of the first Southern European amber workshops introducing a new style of processing (around the 13th to 12th centuries BC). The research covers the majority of Bronze Age amber finds from Poland, with a special focus on Pomerania, and includes selected amber artefacts from neighbouring countries for comparative analysis (including Denmark, Germany, Italy, Czechia and Slovakia).

Firstly, it investigates the evolution of amber processing technology and stylistics from the end of the Neolithic to the beginning of the Late Bronze Age. Secondly, it examines the routes taken in redistributing amber products within exchange networks, considering the influx of copper. Thirdly, it identifies the regions serving as sources for obtaining amber raw material. Lastly, it explores the material and symbolic status of amber, along with the utilitarian role of amber products.

The project employs modern analytical methods, unprecedented in studies of Bronze Age amber finds, to address the research questions. Previous research on amber and bronze artefacts from many European countries demonstrates interregional connections through typological similarities, concurrently revealing the shortcomings of classical methods of comparative analysis limited to naked-eye observations of selected formal features. The project intends to overcome these limitations by utilizing innovative techniques such as microscopic imaging, infrared spectroscopy, lead isotopes measurements, radiocarbon dating, and computer tomography.

The research plan comprises three work packages: artefact documentation and sampling, scientific analyses, and data processing, integration, and interpretation. Each package entails specific tasks, including a comprehensive inventory of finds, analysis of amber samples in infrared and lead isotopes measurements in bronze samples to determine the respective origins of fossil resin and copper. Additionally, it involves radiocarbon dating of organic materials found alongside amber artefacts and, finally, microscopic observations and computer tomography of the latter to identify techniques and tools used in amber processing.

The significance of the project lies in its potential to provide unprecedented data on amber craftsmanship in Polish lands during the Bronze Age. It aims to reevaluate previous assumptions, offering a methodological turnaround in the study of amber and metal artefacts. The interdisciplinary and international nature of the project positions Polish archaeology to contribute to current debate on Europe's prehistory most important issues.