

The metal provenance question takes a prominent part in studies of ancient metallurgy. The growing body of archaeological evidence indicates that copper played a basic role in the production of body ornaments, tools, weapons, and even metal vessels throughout many parts of prehistoric Europe. Because there is no strict correlation between chemistry of metal object and copper ore used for its production, the chemical composition has little applicable use in metal provenancing. The same is true for the typological and cartographic methods that are widely used in archaeology since the mid-19th century. It is now widely accepted that isotopic composition of lead does not change through a *chaîne opératoire* in the copper ore treatment or metal(work) processing, meaning that each copper mine can be "fingerprinted" by a specific lead isotope signature.

This project aims to address the metal movement and consumption in the Chełmno group of the Lusatian culture in Poland (1200–450 BC) through a lead isotope oriented perspective. A corpus of 100 metal artefacts, mostly from the metal hoards and local workshops, will be investigated for lead isotope (MC-ICP-MS) and elemental (ED XRF) compositions to determine the possible origin of metal sourced for their production.

The project results will provide a framework to discuss the metal trading networks, and metal movement and consumption in the Chełmno group and their kinsmen from the northern parts of Lusatian culture in the region of modern Poland. This would also help to install the northern Lusatian metal(work) in the ongoing international debate on metal movement and consumption in the later European Bronze Age and Early Iron Age, and will drive and force Polish academia to catch up with the rest of Europe. The project also intends to promote the greater implementation of lead isotope analysis among Polish academia, museum and scientific institutions.