

Glass gaming counters are founded at both archaeological sites of Przeworsk and Wielbark Cultures, mainly in the context of cemeteries. There are glass discs in discoid shape with a plano-convex section and rounded edge. They were produced by placing the viscous glass on flat or 'sand' surface or melted from pieces of broken glass or mosaics. Depending on way of making the counter the bottom side might be flat or slightly concave and pitted. Most often these were made of deeply colored glass. At Poland's territory, the most common are monochrome counters: white, black, green, blue or yellow. On the other hand, rare finds are polychrome counters made of e.g. mosaics. The chronology of their occurrence is wide, approximately from the end of the 1st century AD to the beginning of 4th century AD.

The aim of the project is a bipolar investigation of glass counters from Roman Iron Age from Poland. Project will combine both archaeological and archaeometric research. To archaeological studies we can include examination of discovery context, the coexistence with other artifacts and characterizing production method of the counter. To determine the way of making counter the earlier performed by author experimental research will be useful during which she used different surfaces to make counters and checked what type of traces are left on the bottom site of the counter. Thus, when the bottom side is flat, we can presume that the counter was made on e.g. roof tile fragment or some other type fired piece of clay, on the other hand when the bottom side is pitted we can assume that the counter was made on sand or sandstone. Detailed catalog will allow to examine the differences and similarities in counter occurrence in Przeworsk and Wielbark Cultures. Physico-chemical analyzes will be performed by LA-ICP-MS method. In this method the sample is taken by a laser beam directly from the object without earlier preparation. It is considered as a non-destructive method. It allows to determine the chemical composition of glass. For many years it was believed that Roman glass is very homogenous (because the major composition of glass is homogenous), recently the groups within it started to be divided. New archaeological excavations and re-examination of museum materials: chunks of glass and objects allowed that. It turns out, that Romans produced raw glass at one place (e.g. Egypt or Levantine) and then transported it to secondary production center where the glass was (de)colored and the objects were manufactured like beads, vessels or counters. The archaeometric studies will allow to e.g. determine the production technology of glass, colorants/opacifiers used.

This research allow to extend our knowledge about glass which was used to produce the counters and way of its making, as well as favor to understanding their meaning within Przeworsk and Wielbark Cultures.