

Graduate Student Workshop on Ceramic Technology and Petrography

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This event was held on Tuesday, April 20, 2010 from 5 to 7 PM at the North Campus of SUNY Buffalo. The invited discussants were Dr. Russell Adams, Research Associate in the Department of Anthropology at McMaster University in Hamilton, Canada, and Dr. Hajnalka Herold, Research Associate at the Vienna Institute for Archaeological Science (Austria).

The purpose of the workshop was to introduce graduate students to the theory and methodology behind ceramic petrography, the study and characterization of mineral inclusions in ceramic thin sections. In this method, ceramic samples are ground to 0.03 mm thick and mounted on a glass slide. They can then be examined with a polarizing light (petrographic) microscope, which allows for the identification of minerals in the sample, based on their behavior in both plane and cross-polarized light. This method borrowed from geology has proven quite useful for addressing a number of archaeologically relevant topics, such as identifying the source of clay used in pottery, as well as examining the additional technological choices made during the ceramic manufacturing process (method of forming, use of temper, firing temperatures, glazing and finishing). Ceramic petrography continues to be frequently utilized by archaeologists working in a variety of periods and regions, since it allows the researcher to analyze a large volume of material at relatively low costs.

After briefly outlining the basic theoretical and methodological framework of the method, Drs. Adams and Herold each discussed the ways in which they incorporated ceramic petrography in their own research.

Dr. Adams works in southwest Asia, most recently in the Faynan district of southern Jordan. His research focuses on Bronze Age production (both ceramic and metallurgy), technology, and environmental contamination. More information on his research can be found at:

<http://russellbadams.brinkster.net/RussellAdams.htm>.

Dr. Herold works in Central Europe, specifically in eastern Austria and western Hungary. Her research focuses on the Early Middle Ages (c. 600 – 900 C.E.), particularly on the relationship among Avars, Slavs, and Bavarians in the Danube region. Ceramic compositional analyses allowed her to explore the connections between material culture, technological

traditions, and social identity. More information on her research can be found at:

<http://homepage.univie.ac.at/hajnalka.herold/research.html>.

The graduate students were able to examine some of Dr. Adams' thin sections under polarized light microscopes, illustrating some of the techniques and methods outlined in the presentations. They were invited to consider how thin-section petrography might be salient in their own research projects.