Archaeometry Lab at MURR Graduate Internship Application

The MURR Archaeometry Laboratory is pleased to offer two Graduate Internship positions in the area of **compositional analysis of archaeological ceramics** starting in Summer or Fall 2024. Applicants studying archaeological ceramic production using a multi-method approach are encouraged to apply. The regional focus for one position is open, and preference for the second position is for an applicant with interest in Mesoamerican and/or Central American ceramics. International scholars are encouraged to apply.

The successful applicants will receive training and perform analyses on their own materials for their thesis projects under the supervision of Archaeometry Lab mentors. As part of their training, the intern is expected to participate in lab activities including sample preparation and analysis, and statistical interpretation of compositional data. The laboratory supports NAA, XRF, Raman spectroscopy LA-ICP-MS, and petrography research, and interns will have access to those techniques. More information on the capabilities of the Archaeometry Lab can be found on our website.

The internship can begin in Summer or Fall 2024, on a mutually agreeable date. The residency periods range from 4-6 months (minimum 4-months). The intern must maintain residence in Columbia (MO) for the duration of the term and will receive a minimum monthly stipend of $2,000. The applications will be reviewed by an internal panel, and assessed on the basis of project feasibility, strength of research design, and intellectual merit.

There are **FOUR** parts to complete your Internship Application:

Part 1: Provide a 3-5 page statement on your intended program of research. This must include an outline of the research question(s), a description of the samples to be analyzed, the analytical techniques or reference databases that will be used, a statement on why MURR is the ideal location to conduct this research, and a statement on funding support for your project. Be as specific about your research goals as possible. Include a summary table of site names, material type, number of samples, and temporal periods as relevant. Include a statement about your intended dissemination of results (i.e. thesis, publication, conference presentations).
Part 2: Complete the application form. Ensure that all signatures are provided. Submit in .pdf format.
Part 3: Include a current CV in your application package.
Part 4: Include a brief letter confirming support of your application from your Graduate Advisor. The support letter can be delivered by the Advisor via email.

Please send questions or your application package by email to archaeometrylab@missouri.edu with the subject line: 2024 Graduate Internship Program. The deadline for applications is end of day on November 26th. Successful applicants will be notified by December 15th. Additional information about the laboratory is available at Archaeometry.missouri.edu.

Part 1: Applicant Information

1. Full Name	
2. Current Address (mailing & email)	
3. Nationality (for work permit purposes)	
4. Are you a US citizen, permanent resident, or visa-holder legally eligible to work in the US?	
5. Current Doctoral Program and status (University, Department, Year)	
6. Thesis Supervisor Name and Contact Information	
7. Project Timeline: tentative dates for your residency. We encourage a 4-6 month stay, with a minimum requirement of 4 months.	

**While we will aim to accommodate your timeline as much as possible, please note that we may need to make schedule adjustments to ensure faculty availability.*

Part 2: Project Budget: This training program is funded by NSF grant #2208558 awarded to the Archaeometry Lab. However, applicants are required to raise funds to cover lab consumable costs that will arise. The table below outlines the per-sample costs for each analysis type. These rates are only applicable to applicants who are accepted to the program and only for the duration of the internship. We strongly encourage applicants to seek external funding to support their research costs in advance of their internship application (e.g. NSF Doctoral Dissertation Research Improvement Grant, Wenner-Gren Foundation, support from thesis supervisor, grants from host institution, etc.). We encourage applicants to contact us for consultation on your project budget. You must describe your source(s) of funding in your proposal narrative.

Project Budget Summary: please fill out the number of samples and costs relevant to your project.

Analysis, consumables and materials required	**Cost per sample**	**n= of samples**	**Total**
Neutron Activation Analysis: polyethylene vials, quartz, NIST reference materials, irradiation fees, HPGe usage fees, etc.	$30*		
XRF: as part of an approved research project these can be analyzed by the intern at no cost per sample.	$0		
LA-ICP-MS or Raman Spectroscopy: rate by consultation	Request quote		

**Our regular subsidized rate of $50 per sample for NAA (2024 pricing) will be further reduced to $30 per sample only for the duration of the internship residency.*

Signatures

By signing this form you understand the terms and conditions of the MURR Pre-Doctoral Internship program and agree to the residency requirements as stated. You also agree to abide by MURR Archaeometry Laboratory Data Management Policies as described below (found at Archaeometry.missouri.edu/data_management_policy.html).

Applicant Signature Date

Applicant Graduate Advisor Signature Date

MURR Archaeometry Data Management and Sharing Plan

The Archaeometry Laboratory respects intellectual property and acknowledgment of individuals' contributions towards scientific research, and encourages dissemination and sharing of primary-source data with the broader scientific community. Our position on data-sharing is in-line with obligations laid out by the Society for American Archaeology's Principles of Archaeological Ethics, the Register of Professional Archaeologists' Code of Conduct, and the Archaeological Institute of America's Code of Professional Standards. That is, that archaeologists are stewards of the archaeological record and have an ethical obligation to make their data available to other scholars within a reasonable time period. The data management and sharing plan outlined here is intended to emphasize the importance of these ethical obligations and to meet requirements of major funding entities such as the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH).

Data Management and Use

Geochemical research of archaeological materials benefits greatly from the existence of comparative databases. Therefore, data generated at the Archaeometry Laboratory are retained by the laboratory and are available for comparative use in future projects at the discretion of the laboratory staff. Any use of data by the laboratory will fully acknowledge the source and contributor of these data. Should a situation arise in which a contributor's unpublished data are to be used in a significant manner in a journal or book publication, this contributor will be viewed as a collaborator on the overall project. If this contributor declines the role as collaborator, use of these data will follow the Data Sharing guidelines below. In all cases, the role of the contributor will be fully acknowledged and the source of these data will be given.

Data Sharing

We offer data hosting services for compositional data at no additional charge for all of our clients in order to make these data available to the broader scientific community. Our policy on data-sharing is as follows:

Standard Analyses

Investigators submitting projects at our Standard Rate (i.e., those not participating in our NSF-subsidy program) are strongly encouraged to share, and/or allow us to share the results of their analyses following publication. With the consent of the Principal Investigator, compositional data from a project will be made available on our Web site's data-sharing portal following a reasonable amount of time from the issuance of the technical report for a project. Typically, this equates to a period of no less than two years, or coinciding with publication of a professional document presenting the results and/or data from a project, whichever comes first. The Archaeometry Laboratory realizes that many research and compliance/regulatory projects extend for prolonged periods of time. As such, Principal Investigators have the option of specifying a suitable timeframe for posting of data at the outset of a project.

NSF-Subsidized Analyses: As an NSF-supported laboratory, and in accordance with NSF requirements for dissemination and sharing of results and data management plans, the Archaeometry Laboratory carries an obligation to share and to maintain a formal data-management plan for data generated using NSF funding, including data generated by

laboratory staff and by investigators participating in our collaborative NSF-subsidy program. Collaboration with the Archaeometry Laboratory under our NSF-subsidy program involves acceptance of a moving two-year window for public dissemination of results in a book, journal, Web resource, thesis, dissertation, or other document (either printed or on-line) accessible to the archaeological community. After two years following MURR's issuance of a technical report detailing the analytical results of NSF-subsidized projects, the Archaeometry Laboratory will provide public access to these data via its data-download Web portal or similar data-sharing portal. If, at the end of the first period of two years, additional time is required by the Principal Investigator(s) for completion of an NSF-subsidized project, the Principal Investigator(s) may solicit an extension by submitting a short (one-page) progress report to the Archaeometry Laboratory for review by the NSF-subsidy program review committee. In the event that the committee finds that an investigator has made no progress towards completion of the project during the previous two-year window, the Archaeometry Laboratory reserves the right to post data generated under that project on-line.

Storage and Use of Archived Specimens

Archived specimens, unless explicitly requested to be destroyed or to be returned to the PI, will be maintained by the Archaeometry Laboratory and made available for future research. Archival specimens are viewed as data in this context, and are subject to identical policies for the compositional data as outlined above.