

Mueezuddin AIPS Final Report – Pakistan to U.S. Exchange

Grantee Information

Name: Dr. Mueezuddin Hakal

U.S. Institution: Department of Anthropology, University of Wisconsin, Madison, WI

Home Institution in Pakistan: Taxila Institute of Asian Civilizations, Quaid-i-Azam University, Islamabad.

Research Field: Field Archaeology

Scholar Bios

In 2010, Dr. Mueezuddin Hakal completed his M.A. degree in archaeology, and continued his academics further for the degree of MPhil; which constantly lead him towards the accomplishment of Ph.D from University of Peshawar in 2015. After Ph.D, with training mainly in historical archaeology and epigraphy, with specialization in Field Archaeology of Gilgit-Baltistan, he joined Karakoram International University (KIU) Gilgit as Assistant Professor in 2017 under Interim Placement of Fresh PhDs Program of Higher Education Commission (Pakistan). Soon after the completion of contract at KIU, he joined as Assistant Professor (TTS) at Taxila Institute of Asian Civilizations (TIAC), Quaid-i-Azam University, Islamabad, in 2018, to which he was associated as visiting faculty since 2016. In addition to this, his capabilities in archaeology were added by the training program in three sessions at Islamabad and Lahore under title “Teaching Archaeology and Cultural Heritage Management” in 2015. Since then, he remained in contact with Prof. Dr. Jonathan Mark Kenoyer and received guidance regularly. Now, he is in need to study Nari, a Bronze Age archaeological site at the southern edge of the Salt Range, Punjab, and, to train and guide the archaeology students mainly in ancient technologies at TIAC. Therefore, this academic tour was very important for him to learn about previous researches on Bronze Age archaeology of Pakistan and to observe teaching of Archaeology courses at Department of Anthropology, University of Wisconsin-Madison (UW-M). In this project he learned extensively about new researches methodologies in archaeology, based on experimental archaeology, and participated in the course relevant to ancient technologies.

What resources did you use and/or in which activities did you partake at the institution where you stayed? (Please select all the apply.)

- Visited an on-campus library **(Yes)**
- Utilized scholarly collections that were previously unavailable **(Yes)**
- Attended a lecture (outside of the classroom) **(Yes)**
- Attended an in-class lecture **(Yes)**
- Gave a lecture (outside of the classroom) **(Yes)**
- Gave an in-class lecture **(Yes)**
- Collaborated with other junior scholars **(Yes)**
- Collaborated with other senior scholars **(Yes)**
- Exchanged contact information with other scholars (if yes, approximately how many?) **15**
- Attended a local/cultural event **(Yes)**
- Began a new research project **(Yes)**
- Continued working on a research project started before this program **(Yes)**

- Became more familiar with the U.S. culture and lifestyle (Yes)
- Other (please explain below)

Program Description

All of the on-campus and off-campus academic activities at UW-M were under following two major aims:

1. To learn about the academic contributions of University of Wisconsin-Madison in the studies of Indus Valley Civilization, which will be helpful in conducting excavation based researches at Nari in District Khushab (Pakistan).
 - a. Collection of published sources of literature on the studies of cultures and the civilization developed along the river Indus.
 - b. Learning record keeping procedures during field work.
 - c. Developed an understanding of artefacts' typology from the sites of Indus Valley Civilization.
 - d. Developed new skills in pottery drawing.
 - e. Archaeological data management.
 - f. Analysis of archaeological data by using modern tools of digital microscopy and scanning electron microscopy through petrology.
 - g. Practical experience in ancient technologies and participation in the manufacturing of stone tools, hand-made and wheel thrown pottery, pottery kiln management, bead making, glazing technologies around the world and faience preparation in Indus Valley Civilization, applied bronze smelting procedures, iron smelting and sword making, and preparation of musical instruments.
 - h. In addition it was possible to tour museums on campus of UW-Madison and in Chicago. Visited museums include: The Art Institute of Chicago, The Field Museum, Oriental Institute Museum, University of Wisconsin Geology Museum and Chazen Museum of Art, UW-M.

2. To develop his capabilities in teaching of courses relevant to Indus Valley Civilization, particularly related ancient technologies.
 - a. Delivered three proper lectures on the topics "Ashokan Rock Edicts and Brāhmī script" to Sanskrit students of the South Asia Summer Language Institute (SASLI), "History and Antiquities of District Ghizer: A Case Study of Tehsil Punyal, Gilgit-Baltistan" his PhD research and "Further Investigations on Nari, Pakistan" to the research scholars at Department of Anthropology. On which he received proper feedback from research scholars and mentor in order to conduct researches and teaching in a better way.
 - b. Participated regularly in the class of "Ancient Technology and Invention" course no. "ANTHRO-352" taught by Prof. Dr. J. M. Kenoyer during eight weeks of summer session 2019.
 - c. Based on the above course he developed course outline with some changes having the title of "Investigating Ancient Technologies through Experimental Archaeology". Which is proposed to be taught at Taxila Institute of Asian Civilizations, Quaid-i-Azam University, Islamabad.
 - d. Worked with students to learn about the experiments for their assigned projects.

3. Other activities:
 - a. He Learned allot about American History and Culture from Prof. Dr. J. M. Kenoyer.
 - b. Visited the areas around Madison and Chicago.
 - c. Roamed around in the surroundings of UW-M, and became familiar with the landscape and roads/ transportation networks.
 - d. Hangout at different restaurants serving diverse foods from around the globe and tasted new foods.
 - e. He watched a movie at cinema.

Deliverables and Outcomes

Teaching

His regular participation in the course of eight weeks summer session 2019 of “Ancient Technology and Invention” course no. “ANTHRO-352” by Prof. Dr. J. M. Kenoyer brought new to his understanding about the teaching methodology with practical observation and participation of students. In this connection, he observed every sample, collected from different countries, which were adding the theoretical understanding of a student was completely new to him. This method of teaching archaeology is unique and not common in study of archaeology in Pakistan. He intends to replicate it at TIAC for the academic development of students and scholars at Pakistan. On the other side, his delivered lectures, inside and outside the class room, were helpful to share the knowledge and experience in research at University of Wisconsin-Madison. In addition to this, he learned about the effective method of presentation on power point. This will help him in teaching and presenting his research in better way. More than this, the course outlines and power point presentations, relevant to Pakistan archaeology, taught at UWM, will add him to teach such courses in the best way at Pakistan.

Research

The study of ceramics was under the supervision of Prof. Dr. J. M. Kenoyer. The activities connected to it include: Experiments of handmade and wheel thrown pottery from study and preparation of soil to further construction of pots leading to the depiction of designs with the use of colors extracted from natural sources, and ultimately managing of a pottery kiln to get the best results replicating the ancient technology now rarely applied. This was added by their analysis through professional photography, pottery drawing and their analysis and analysis with the help of digital microscopy and scanning electron microscopy through petrology. This type of adopted research procedure will help him to understand and apply on the pottery analysis in his researches will be conducted in Pakistan.

The theoretical understanding about the sources of copper and tin to extract their alloy bronze and manufacturing technologies was added by the particle experiments here. It includes the sources of copper and tin from nature and furthers their treatment in Kiln, which includes heat management, crucible nature and treatment, alloy preparation in crucible, designing the mold, mold treatment, which results the bronze artifacts. This all procedure he learned here for the first time in his archaeological career.

In this connection, he was equipped with updated literature, tools of recording and record keeping, and modern tool of digital microscopy, which will help him to study the pottery from ceramic phases of Mehrgrah, Nal, Kuli, leading to Ravi and Kot Dijian periods, which expresses their maturity at developed phases of Indus Valley Civilization. With this approach he can further study Proto-Historic and also historic ceramics from Gilgit-Baltistan and other areas of Pakistan.

Deliverables and Outcomes

He is now academically prepared to conduct excavations at Nari, Khushab, or any other archaeological sites of Indus Valley Civilization.

He is now equipped with teaching material, and can teach the class of Ancient Technologies at Taxila Institute of Asian Civilizations, Quaid-i-Azam University (Pakistan).

This activity has strengthened the collaboration between University of Wisconsin-Madison and Taxila Institute of Asian Civilizations, Quaid-i-Azam University (Pakistan), for further archaeological research.