

RESEARCH

K. Aslihan Yener

In 1997 **K. Aslihan Yener** was promoted to Associate Professor of Archaeology in the Oriental Institute, the Department of Near Eastern Languages and Civilizations. The third season of work at the Amuq Valley Regional Project in the Hatay, Turkey directed by Yener took place in fall 1997 together with Tony Wilkinson, who led the geoarchaeological investigations. The survey and work in the Amuq became the background for a seminar on the Amuq in the second millennium BC taught in the Winter Quarter 1998. The work in the Amuq was funded by the National Geographic Society, the Institute of Aegean Prehistory, and the Oriental Institute. The Samuel H. Kress Foundation gave a conservation grant for establishing advanced archaeological conservation at the sites of Tells Kurdu and Domuztepe in Turkey. Yener was awarded a Fulbright scholar award to render operational the Amuq Regional Project, which will entail staying in Ankara and Antakya for a quarter. Tasks to be undertaken include the construction of a dighouse and conservation facilities and participation in the reorganization of the prehistory galleries in the Antakya Archaeological Museum. Yener delivered three papers on the third Amuq Valley season: "The 1997 Oriental Institute Amuq Valley Projects" at the 1998 meetings of the International Symposium of Excavations, Surveys, and Archaeometry, 25–30 May, Tarsus, Turkey; "Excavations and Survey in the Plain of Antioch: The Oriental Institute Amuq Regional Project 1995–1997" at the First Congress on the Archaeology of the Ancient Near East, Rome, 18–23 May 1998; and at the Chowder and Marching Society October meeting in Chicago at the Oriental Institute. As part of the Archaeological Institute of America lecture series, Yener delivered papers on the "Excavations on the Plain of Antioch (Amuq) Revisited" at Lynchburg, Randolph-Macon College, Greensboro and Chapel Hill in the spring.

In addition to overseeing current operations in the field and planning future excavation strategy, Yener continued her work in the Amuq on the description and analysis of the materials of past excavations that date to the fifth and fourth millennia BC — especially the metals housed in the Oriental Institute Museum. Having established a successful joint collaborative project with Argonne National Laboratory last year, she was delighted to learn that the grant was renewed for a second year. With the construction of the University of Chicago beamlines at the Advanced Photon Source (APS) and Argonne beamlines, synchrotron radiation became available to the Oriental Institute. The knowledge of how to benefit from modern x-ray techniques is now being transferred to a new group, the archeological community. By organizing pilot experiments, and training graduate students in these modern techniques, interaction between x-ray experimenters and archeologists has been established. Our graduate students and colleagues are now utilizing the APS facilities and other instrumental techniques such as the scanning electron microscope (SEM) available at the University of Chicago. They constitute the vanguards of a departmental field specialization now being developed in scientific techniques and archaeology. To that end Yener taught a seminar in Metal Technology and Social Organization: The Anthropology of Technology and will be developing jointly taught courses with the Geophysics Department. The potentials to archaeology of instrumental analysis was presented to a workshop held in Oakbrook for the University of

Chicago and Argonne National Laboratory teams who won the collaborative project grants.

A new and very exciting initiative for Yener is work towards establishing a Science and Technology Center (STC) based on archaeology. A workshop on the use of modern scientific analytical methods in archaeology at Argonne National Laboratory was a huge success and paved the way for a successful preproposal to the National Science Foundation (NSF). Out of hundreds of applicants, we were part of the short list of forty-four of which ten will be funded. Called the Center for the Study of Ancient Technology and the Environment (CSATE), if funded it will be housed at the Oriental Institute and has as its mandate high-tech analysis of archaeological materials including metals, minerals, and organic materials. It includes physical scientists and archeologists associated with the University of Chicago, Argonne National Laboratory, the Field Museum of Natural History (Chicago), University of Illinois at Urbana-Champaign, the Missouri University Research Reactor center, Southern Illinois University at Carbondale, and a number of other institutions. Yener spoke at the August 1997 workshop entitled "Shedding Light on the Past: Synchrotron X-Rays and Archaeology" at the Argonne National Laboratory. In the spring, Yener spoke at the University of Chicago Alumni Association program, delivering "Beam Me Up Scotty: Science-Based Archaeology." The work at the APS and the techniques being developed were featured in a front page article "Argonne Taps Relic's Ancient Secrets," by William Mullen in the *Chicago Tribune* (13 April 1998).

In addition to regular teaching and committee work during the academic year, Yener devoted as much time as possible to the further research and writing necessary to continue working on the analysis of archaeological materials from Göltepe and Kestel. These include: K. A. Yener, H. Özbal, L. Barnes, R. H. Brill, and E. C. Joel, "Anatolian Metal Trade and Lead Isotope Analysis," *XXXIV^{eme} Rencontre Assyriologique Internationale, Istanbul, July 6-10, 1987*, pp. 547-564 (Ankara: Turk Tarih Kurumu Yayınları, 1988); A. Adriaens, K. A. Yener, and F. Adams, "An Analytical Study Using Electron and Ion Microscopy of Thin-Walled Crucibles from Göltepe, Turkey," *Proceedings of the International Archaeometry Conference, Urbana, Journal of Archaeological Science* (in press); and A. Adriaens, K. A. Yener, F. Adams, and R. Levi-Setti, "SIMS Analyses of Ancient Ceramic Crucibles and Slags from Turkey," in A. Benninghoven, B. Hagenhoff, and H. W. Werner, eds., *Tenth International Conference on Secondary Ion Mass Spectrometry SIMS X*, 877-80 (Chichester and New York: Wiley & Sons, 1997). Several articles are in press or in preparation: A. Adriaens, K. A. Yener, and F. Adams "Tin Bronze Metallurgy in Transformation: Analytical Investigation of Crucible Fragments from Tell al-Judaidah, Amuq, Turkey dated to circa 3000-2900 BC," *Journal of Archaeological Science* (in preparation); and A. Adriaens, P. Veny, F. Adams, R. Sporcken, P. Louette, B. Earl, and K. A. Yener, "Analytical Investigation of Archaeological Powders from Göltepe, Turkey," *Archaeometry* (in preparation).