K. Aslıhan Yener

During 1995/96, K. Aslıhan Yener directed the second season of work at the Amuq Valley Regional Projects in the Hatay, Turkey (see separate report), with Tony J. Wilkinson, who directed the geoarchaeological investigations. Preliminary investigation at the large Chalcolithic site of Tell Kurdu, which had been briefly surveyed in 1995, was continued with an exploratory sounding in 1996. A destruction event was found below the topsoil with collapsed architectural elements and carbonized grains spread over nearly the entire extent of the $5 \times 5$ m exposure. Fragments of mudbrick collapse and part of a wattle and daub wall of a structure emerged with remains of several large pottery scatters in situ. The regional survey included reconstructions of land use and geomorphological changes in order to assess the impact of human communities on the environment. Our Dutch colleagues from Gröningen cored samples of soil from the lake bed for pollen analysis and reconstructing the palaeoecology. An interrelated parallel investigation was a survey of Late Bronze Age sites to assess the nature of Aegean interaction in the Amuq. Progress was

The last season of excavations at Kestel mine and its mortuary chamber took place in the summer months. The first aim was to investigate the initial ore extraction methods in the mine shaft and then to date the graves. As part of the program to open the mine to tourism, floodlights were installed in the first chamber. Our other aim was to map surface features related to ore processing and openwork mining above the mine on the mountain slope which were targeted for excavation. Our last objective was to build a depot/storage structure with working space to house the ceramics, groundstone tools, and crucible fragments from both the Göltepe and Kestel excavations. The building, located in the Celaller village grammar school yard, would make these collections available to scholars seeking to do research projects on any of the Göltepe and Kestel finds in the future. Two multi-authored articles appeared on instrumental analysis of archaeological materials from Göltepe and Kestel: "The Application of Surface Analysis Techniques to Archaeological Ceramic Crucibles," by A. Adriaens, K. A. Yener, and F. Adams, in *Proceedings of the 6th European Conference on Applications of Surface and Interface Analysis*, edited by H. J. Mathieu, B. Reihl, and D. Briggs (New York: Wiley, 1996), pp. 123–26; "SIMS Analyses of Ancient Ceramic Crucibles and Slags from Turkey," by A. Adriaens, K. A. Yener, F. Adams, and R. Levi-Setti, in *Tenth International Conference on Secondary Ion Mass Spectrometry SIMS X*, edited by A. Benninghoven, B. Hagenhoff, and H. W. Werner (New York: Wiley, 1997), pp. 877–80.

Another thrust of Yener’s research was the establishment of a joint collaborative project with Argonne National Laboratory. 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 as a result of our successful grant application. The knowledge of how to benefit from modern x-ray techniques is now being transferred to a new field, the archaeological community. By organizing pilot experiments and training graduate students in these
modern techniques, interaction between x-ray experimentalists and archeologists have been established. Our graduate students and colleagues are now utilizing the APS facilities and other instrumental analysis techniques such as the scanning electron microscope available at the University of Chicago. They constitute the vanguards of a departmental field specialization now being developed in scientific techniques and archaeology that we hope to expand to include Argonne National Laboratory. To that end Yener taught a seminar in “Metal Technology and Social Organization: The Anthropology of Technology.” Yener spoke about instrumental analysis and archaeology at a workshop held for the University of Chicago-Argonne National Laboratory teams who won the collaborative project grants. Another workshop on the “Shedding Light on the Past: Synchotron X-Rays and Archaeology” took place at Argonne National Laboratory.