

Investigating Ancient Technology and Ceramic Composition at Al-Khidr Site (Failaka Island, Kuwait): Geochemical Analyses of Bronze Age Pottery by pXRF and Thin-section Petrographic Analyses

Authors : Hasan Ashkanani

Abstract : Pottery assemblages from the site of Al-Khidr on Failaka Island, Kuwait, were analysed in order to reconstruct the chemical composition of Bronze Age wares and to build a mineralogical database of Bronze Age pottery dated from Failaka Periods 1-3B (2000-1650 BCE). A total of 145 ceramic sherds from Al-Khidr, as well as reference groups, were analysed by non-destructive portable X-ray fluorescence (pXRF) spectrometry. Preliminarily petrographic thin-section analysis was applied to four samples to reconstruct possible clay paste recipes and to identify raw materials. The results indicate that geochemical analyses can successfully distinguish subgroups within a typological category of ceramic assemblages. The results identified two subgroups within the Al-Khidr typological category: the Dilmun Barbar tradition and the Mesopotamian tradition. Future comparative compositional studies can be conducted to explore other aspects of craft specialisation, such as ceramic technological choices and possibly the influence of sociopolitical units

Keywords : Kuwait archaeology, pottery, pXRF, Dilmun

Conference Title : ICAA 2021 : International Conference on Archaeology and Anthropology

Conference Location : Istanbul, Türkiye

Conference Dates : December 20-21, 2021