

PRELIMINARY ARCHAEOLOGICAL AND ARCHAEOMETRICAL STUDIES OF GLASS ARTIFACTS FROM SIDE (ANTALYA) EXCAVATIONS

Assoc. Prof. Dr. A. Tolga TEK
Anadolu University, Faculty of Art and Science, Department of Archaeology

Assoc. Prof. Dr. Feriřtah ALANYALI
Anadolu University, Faculty of Art and Science, Department of Archaeology

Assist. Prof. Dr. Ali Akın AKYOL
Gazi University, Faculty of Fine Arts, Department of Conservation & Restoration of Cultural
Properties, Material Research & Conservation Laboratory (MAKLAB), Ankara, Turkey
aliakyol@gazi.edu.tr / aliakinakyol@gmail.com

Side is one of the well known ancient classical site on the southern Mediterranean coast of Turkey. The most important part of the city is the theatre and the nearby Dionysos Temple. In 2009, archaeological drilling works performed in the theater galleries and Dionysos temples belonging to the glass-making materials were recovered as Late Roman period glass workshop in Side.

The glass artifacts from Side excavations between the years from 2009 to 2013 campaigns were analysed both archaeologically and archaeometrically. The Early Byzantine Period glass samples (glass, glass droplet, slag, glass raw material, and raw glass) which might be indicative of local glass production, recovered from different locations of the archaeological site were examined in order to understand the production technology, determine the probable raw material resources, and identify the chemical contents by using various physical and chemical methods.

The samples were primarily grouped visually with their forms, then, were photographically documented. The production techniques of the glass were predicted in terms of their shape of pores in the structures by binocular microscope analysis. The elemental and mineralogical structure of the glass samples were analysed by the methods of X-ray fluorescence spectroscopy (XRF) and Raman confocal spectroscopy.

Key Words: Early Byzantine Glass, Glass Analyses, Side Excavation Early Byzantine Glass, XRF Analysis of Glass, Raman Analysis of Glass