

STUDY AND RECONSTRUCTION OF ARCHAEOLOGICAL CERAMIC DISH (CUERDA SECA) FROM MUMLOK PERIOD (13th to 15th century), Al FUSTAT, EGYPT.

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American International Journal of Contemporary Scientific Research, 2016,

www.yloop.in/index.php/AIJ/202/195 ISSN 2349-4425 (Online) editor@yloop.in

Abstract

This study dealt with the Archaeological dish was found in the excavation done by the Supreme Council of Antiquities (SCA) in Al Fustat, Egypte, then added to the Faculty of Applied Arts, Helwan University, it certainly entered the museum at the date of April 24, 1945 AD, It has been registered under No. 3/6 in the museum record, which was made by the cuerda secaceramic technique which was used glaze-decorated ceramics, appeared in al-Andalus in the Islamic period, it dates back to the Mamluk Period date to 13th to 15th century. The dish was restored fortwith, with unsuitable materials that turned into several parts separated from the body and some are missing, especially at the rim and suffered from many deterioration phenomena, including, cracks, and decay. The aim of the present paper is to study the chemical and the mineralogical composition of the clay body, the glaze and unsuitable materials which used in complication to study the object and restore it. The main problem in the restoration of this dish is to put a scientific Strategy to reconstruction, and installed the original archaeological shape of the dish. Different analytical methods were used including; Optical microscopic study (Cross sections). X-ray diffraction (XRD) and scanning electron microscopy (SEM) coupled with energy dispersive X-ray spectroscopy (EDS). The type of the fabric of the dish, an attempt to discover the structures. The dish was hand made, it had fine texture and reddish color, it isn't porous, The glaze layer and the body are homogenous with subtle variations in the ratios of line intensities in the body. The results obtained by (XRD) reported that the clay body composition: Quartz, orthoclase, albite, gehlenite and hematite. The presence of gehlenite indicates that the firing temperature was between 750 and 1050 °C, while the restoration material was. The dish was fully re stored including cleaning, consolidation, construction, completion and coloring.