Archaeologycal Description to the monastery of *al-malak* in Fayoum and analytical study of the bricks used in the construction

Abstract

The paper is a archaeological descriptive study of the monastery of al-malak in Fayoum. From other side it will define its building materials and analyses it. The location of the monastery has a historical and archaeological importance, in the history of Egypt, where it belongs to the city of Fayoum, with a long history throughout the Egyptian historical ages. The monastery is among the most important Christian Monasteries of Archangel Gabriel from the 3^{ed} century,

The monastery was one of buildings which constructed due to the spread of the monasticism in fayoum. The monasticism considered on of Egyptian Christianity, and was the beginning of the establishment of the monasteries, which contains cells, fort, library, mills and contemporary ovens. The churches designed according to the Bacilican, Byzantine and Coptic style. The monastery contains two churches, the first is the church of the archangel Michael, and one portico of this church beside the previous church. The second is the church of archangel Gabriel, which designed in the basilican style, and contains on some frescos and icons. Presents the Christ and his students, Mary and the child, and archbishop Murkoruos. This church has many icons to Mary and child, to the burning icons. The Polish mission of excavations had discovered in 1989 A.M, many cells which engraved in the rock were added to this church. Also they discovered many of died bodies and a collection of golden and silver coins.

The use of X-ray to exam the building material of the monastery, identify the components of the brick of the walls, identify changes mineral that occurred

when burning the clay. which indicates temperatures burning bricks that affect the eccentric crystalline various metals in the clay during the burn , and the main ingredient is aluminum silicate , in addition to quartz located within the child or as an additive improved.