

## **Abstract:**

The Jurjir portal is the only remain part of the Jurjir mosque belonged to Buyids era. This portal is located in north-western side of Hakim mosque in Isfahan. The decorations of Jurjir portal are the integration of brickworks and stucco decorations which their implementations aren't the same thorough this portal, so this could conclude in different periods of implementation. Technical survey of decorations could result in understanding the probable periods of implementations. Some changes have been made in this portal over fifty years, so the authentic parts of this portal can't be identified from the additional parts. Therefore this research focuses on identifying the original parts of this portal from the additional parts. Due to loss of major parts of decorations during the recent restorations and over times, to retrieve the values and the authenticity of this portal, it is necessary to present a retrieval plan and restore its lost identity.

In this connection, the motifs and different layers of decorations have been studied and identified. Beside in situ observations, materials which are used in decorations of this portal have been identified by *X-ray diffraction (XRD)*, *Scanning electron microscopy with Energy Dispersive Spectroscopy (SEM-EDS)*, Attenuated total reflection Fourier transform infrared spectroscopy (*ATR-FTIR*).

Different implementation of decoration layers is due to variety of motifs and decorations itself, not because of implementation in different eras. Mortar which was used in decorations is a mixture of gypsum and soil and also organic materials were applied in some decoration's mortar. Over most of decorations, gypsum white and yellow ochre were applied as colors. A thin layer of gypsum mortar was covered the rhombus brickworks to rectify external imperfections and to make a smooth ground for color layer. In order to retrieve semi column decorations, brickworks motifs were matched with stucco motifs. Rereading inscription letters was done regarding the remaining evidence of letters. In other cases the old photographs were used in order to retrieve motifs.

**Keywords:** Brickworks, Buyids dynasty, Jurjir Portal, Retrieval plan, Stucco decorations.