Kerpic08 - Learning from earthen architecture in climate change
International Conference
Cyprus International University, Lefkoşa / Northern Cyprus 4-5 September 2008

Paper code: 06

An Archaeometric Study on a Hımış Type Old House from Central Anatolia

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ABSTRACT

Mortars and Plasters are one of the main elements of construction and their function give information about the living mode of the period of a building.
In the present study, chemical and mineralogical analysis of a mortar + plaster sample taken from 150 years old, traditional Anatolian House from Sivas-Turkey was carried out and the results were given.

The architectural form of the house is "Hımış" type which has timber-adobe composition belonging to the region of original Anatolian synthesis. The interior part of the house was deteriorated by a fire, but the outer part stayed up to date relatively un-deteriorated. This house has been attracted attention of the today's architects and civil engineers in respect of its material technologies so that collaboration with the chemistry group was realized.
In order to have a preliminarily idea about the deterioration of sample, water soluble salt content were determined in respect of anions qualitatively and quantitatively. The relatively very low salt content (Chloride and Sulphate salts) gave the idea that the outer part of the house might not be affected by the atmospheric alteration due to the composition of the soluble salts.

KEY WORDS :

Archaeometric Study; water soluble salt; hımış construction; deterioration of the plaster;