

# Research and Monitoring of Deterioration Processes from Brukenthal Museum

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**Cuvinte cheie:** petroarheometrie, conservare, muzeul Bruckenthal, deteriorare.

Construction of the palace that belonged Brukenthal governor of Transylvania, took place between 1778-1788.

Brukenthal Museum was subject to rapid restoration performed on the occasion that has become a European cultural capital Sibiu alongside Luxembourg. Nature of such early intervention has left scars in the manner of execution, as is visible in many places, partly due to deficiencies Construction Worker routines that would not look when construction is involved for this important heritage.

Another cause of failure of this intervention is to restore the correction application materials from areas contaminated with salts very clear signals its presence by characteristic black sulphate crust. It consists of gypsum crust in most parts, which are recorded sporadically with thaumasite and mirabilite.

Unlawful use of finishing materials with low porosity, the screen turns into a land of excessive accumulation of salts on the surfaces of discontinuity, causing crystallization of the components in the process of precipitation and downward pressure eventually leading to exfoliation of the finishing layer (Figure 2).

Lack of appropriate treatment of pottery raw or replace it if necessary building was not considered. The consequences are immediate formation of accumulation of salts on the surface finishing out quickly. Are also reported accumulation of salts in stone class stratification (Figure 7) which proves that the foundation works as a water pump that will bring solutions through capillaries lithic materials.

Frame near the main gate are reported interventions with Portland cement, made aggressive ettringit, which feeds the SO<sub>4</sub> anion, increasing the destructive effect of intervention in the adjacent area.

Table 1. Interpretation RX diffractometry performed on exfoliated black crust at the main entrance.

dA	l/lo	Mira bilit	Etr ingit	Calcit	Gips	Halit	The nardit
9,73	15		+				
7,56	22				+		
5,61	4		+				
5,5	65	+	+				
4,80	12	+					
4,27	5				+		+
3,82	17	+					
3,48	6		+				
3,22	52	+					

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