

BINDING MATERIALS DESIGNED FOR CONSERVATION AND RESTORATION OF THE MURAL PAINTING SUPPORT IN THE RUPESTRAL CHURCHES

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Currently little unapproached, the conservation of the rupestral mural painting in Romania is a special case characterised by severe microclimate conditions. The temperature and moisture fluctuations led to occurrence of freeze-thaw phenomena, the movement and recrystallisation of soluble salts, as well as micro-organism attack. The above-mentioned factors may cause detaching of the mural support, or subsequent rendering brittle of such layers that may ultimately lead to lacunae of varying area and depth. Given the risk of a faster progress in the rupestral painting degradation, obtaining binding materials compatible with the original materials and equally resistant to the microclimate conditions specific to the caves becomes a must.

The present paper brings information on the *in situ* behaviour of certain hydraulic binding materials to be applied in the conservation of rupestral mural painting support. Such materials should have good strength and freeze-thaw resistance, and low content in SO₃ and soluble salts. This materials should also be compatible with original materials. The materials have been applied at the Sfintii Arhangheli Church (19th century AD) in the Sfantul Grigorie Decapolitul cave of the Bistrita Monastery, Valcea County, and at the Corbii de Piatra Rupestral Church (14th century AD), Arges County, Romania.