SESSION: Issues in the Consolidation of Marble

INSTRUCTOR: George Wheeler

TIME: Tuesday, 11th June/ 16:30 – 18:00 (1.5 hours)

SESSION OUTLINE

ABSTRACT
One of the most frequently used stone materials in sculpture, monuments, and buildings is marble. This stone – formed primarily of the carbonate mineral calcite and to a lesser degree dolomite – often is subject to deterioration by acid rain (and other processes and modes of deterioration). Because of its frequent use and susceptibility to deterioration it is often subjected to consolidation with varying degrees of success, and includes a range of consolidant materials which will be discussed in detail.

OBJECTIVES
Students should develop an understanding of some the difficulties associated with consolidating marble with respect to the variety of materials outlined below.

CONTENT OUTLINE
- organic resins
- alkoxy silanes
- lime water
- nanolime solutions
- reactive water-based systems
- performance, advantages and disadvantages of each will be discussed specifically as they relate to marble consolidation.

READINGS
= Essential reading material
= Available online


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