International Course on Stone Conservation SC13

SESSION: Overview of micro-destructive diagnostic criteria & techniques; Sampling methodology

INSTRUCTOR: Marisa Laurenzi Tabasso

TIME: Tuesday, 14th May/ 9:30-11:00 (1.5 hours) & 11:30-13:00 (1.5 hours)

SESSION OUTLINE

ABSTRACT

This session will address:

- Aims of a diagnostic study
- Criteria for the selection of the most suitable analytical techniques for a given diagnostic problem
- Criteria for the selection of "samples" to investigate by non-destructive techniques or to be collected and analyzed by micro-destructive techniques.
- Introduction to the most common non-destructive and micro-destructive analytical techniques nowadays available (property or characteristic measured, type of information provided, field of application, type and size of sample needed, etc.).

OBJECTIVES

To understand how to approach and plan a diagnostic study on stone and other porous building materials. To be informed about the most common non-destructive and micro-destructive analytical techniques nowadays available (property or characteristic measured, field of application, type and size of sample needed, etc.).

CONTENT OUTLINE

Aim of a diagnostic study. Criteria on how to plan a suitable and feasible diagnostic study. Tables listing the analytical techniques and their most relevant characteristics. Examples of diagnostic results.

READINGS

📖 = Essential reading material
💻 = Available online

📖 Ferretti, Marco. 1993. Analytic methods. In *Scientific Investigations of Works of Art*. 1-46. Rome: ICCROM.

📖 Brunetti, Bruno G. 2008. Portable equipment for non-invasive in-situ measurements: Present and perspectives. In *In Situ Monitoring of Monumental Surfaces*. ed. Piero Tiano and Carla Pardini. 217-26. Firenze: Edifir.

📖 Matteini, Mauro. 2008. Monitoring decay processes: Their causes and the durability of conservation treatments. In *In Situ Monitoring of Monumental Surfaces*. ed. Piero Tiano and Carla Pardini. 7-12. Firenze: Edifir.

📖 Delgado Rodrigues, José. 2008. Surface and bulk characterisation of stones in architectural heritage. In *In Situ Monitoring of Monumental Surfaces*. ed. Piero Tiano and Carla Pardini. 143-55. Firenze: Edifir.