MARE.14

Materials and Techniques for the Restoration of Monuments

Compatibility, Durability, Sustainability and Economy issues in Retrofitting Heritage Structures

MARE.14 is a constitutional course for architects, restorers, engineers, archaeologists, conservators, professionals and other scientists, focusing on materials and techniques for the conservation and retrofitting of heritage structures, based on the principles of Compatibility and Durability.

Theory and Practice (Laboratory and Field):

- Basics on principles and demands of restoration
- Integrated strategy for developing proper repair materials
- Problems and damages of heritage structures
- Non destructive techniques of diagnosis
- Design of compatible, effective, long-lasting repair materials
- Quality control of raw materials
- Manufacture of repair materials and criteria of acceptance
- Application techniques of repair materials
- Monitoring of repair materials behavior after interventions
- Life cost and Life cycle analysis

Materials studied:

Mortars: Binders, Aggregates, Admixtures, Bedding mortars, renders, plasters, flooring mortars, Lime-based, mixed type, mud mortars

Grouts: For filling cracks and voids in masonry, for consolidating superficial architectural elements (renders-plasters, murals, wall mosaics)

Earth blocks, Fired bricks: Study of the old materials and techniques of their manufacture, testing their properties - criteria for their selection, advanced composite materials, Applications

Advanced composite materials - Applications

Acquisition Competencies: Participants will become skilful in designing, manufacturing, testifying and applying on the site compatible and long-lasting repair materials.

Certificate: A certificate of attendance will be awarded by the Interdepartmental Program of Postgraduate Studies AUTH.

Participation:

Duration: 6-20 July 2014 (15 days)

Location: Archaeological site of Dion
Aristotle University of Thessaloniki

Accomodation: Dion University excavation hosts

Language: English

Application deadline: 31 April 2014

Secreteriat

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Information

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Coordinators

The course is coordinated by 3 sectors of Aristotle University of Thessaloniki:

- Laboratory of Building Materials, Dept of Civil Engineering
- Interdepartmental Program of Postgraduate Studies on the Preservation and Restoration of Cultural Monuments
- Dept of Archaeology and History of Ancient and Byzantine Art and Civilization, School of History and Archaeology, Dion University excavation

Organizing Committee

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Alexopoulou Alexandra, Associate Professor AUTH
Pingiatoglou Semeli, Professor AUTH
Mentzos Aristotelis, Professor AUTH

International Scientific Board (to be confirmed)

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Arun G., Prof., Yildiz Technical University
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