



# HMC 08

## 1<sup>st</sup> HISTORICAL MORTARS CONFERENCE

LISBON | LNEC | 24<sup>th</sup> to 26<sup>th</sup> September 2008

### CHARACTERIZATION | DIAGNOSIS | CONSERVATION | REPAIR | COMPATIBILITY

#### INVITATION

The organizing committee is very pleased to invite you to attend the conference HMC08 – Historical Mortars Conference 2008: Characterization, Diagnosis, Conservation, Repair and Compatibility which will be held from the 24th to the 26th of September 2008 in the National Laboratory of Civil Engineering (LNEC) Congress Centre in Lisbon.

#### ORGANIZATION

The conference is organized by the following institutions:  
Laboratório Nacional de Engenharia Civil (LNEC)  
Universidade de Aveiro (UA)  
Universidade de Évora (UE)  
Faculdade de Ciências da Universidade de Lisboa (FC-UL)  
Instituto Superior Técnico (IST)  
Instituto Politécnico de Tomar (IPT)  
Direcção Regional de Cultura do Alentejo (DRCALEN)

#### THEMES

The Conference, is based in four main themes, related with the central aims of 4 research projects, financed by Fundação para a Ciência e Tecnologia (FCT), that are being developed by the organization institutions of this event:

- I. Characterization of historical mortars: chemical, mineralogical, micro-structural, physical and mechanical characterization of historical mortars, including techniques and methodologies of testing and case studies.
- II. Decay and diagnosis of historic masonry structures: damage, decay mechanisms, diagnosis, case studies.
- III. History, protection and conservation of historical renders and plasters: history of the technology, protection of the historical heritage, consolidation materials and techniques, restoration and conservation of architectural heritage, case studies.
- IV. Design of compatible repair mortars: compatible materials and techniques for conservation and repair, compatibility requirements, testing methods, case studies.

#### SCOPE

Historical mortars have proved to be very durable and present an extremely good performance as part of ancient masonry, in the role of renders, plasters or joints. Therefore, the knowledge of their composition, behaviour characteristics and decay mechanisms is a very relevant issue from the cultural point of view but also for the planning of conservation interventions and the design of techniques and materials to be employed.

The spread and discussion of the conclusions of four research projects recently developed by the organizing institutions, together with the need at an international level, of increasing the knowledge in this area, with the aim of promoting the protection of cultural and historical heritage, have set the background for this conference.

The research projects, financed by FCT- Fundação para a Ciência e Tecnologia, are the following: Cathedral - Characterisation and Conservation of Traditional and Historical Mortars from Alentejo's Religious Buildings; Development of methodologies for the evaluation of the effects of humidity in old walls; Conservarcal - Lime renders conservation - improving repair techniques and materials on architectural heritage; Study of compatible mortars for the preservation of the built heritage.

These projects involved interdisciplinary work teams, promoting the exchange of information and the work of scientists from different fields necessary for historical mortars studies, such as: Engineering, Chemistry, Architecture, Conservation and Restoration and result of the cooperation between LNEC (Laboratório Nacional de Engenharia Civil), UA (Universidade de Aveiro), UE (Universidade de Évora), FC-UL (Faculdade de Ciências da Universidade de Lisboa), IST (Instituto Superior Técnico), IPT (Instituto Politécnico de Tomar) and DRCALEN (Direcção Regional de Cultura do Alentejo).

#### SPONSORS

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An objective of HMC08 is to bring together scientists and technicians related with the Cultural Heritage preservation field, promoting interdisciplinary discussion for the scientific studies in conservation of historical mortars as historic heritage. Therefore, professionals of the area are invited to participate in the Conference and to transmit their knowledge and experiences in the processes and forms of old mortars' decay, as well as in the application of scientific methods for their conservation and preservation.

#### NACIONAL SCIENTIFIC COMMITTEE

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#### REGISTRATION AND CONFERENCE FEES

All participants must fill the registration form that can be found in the website of HMC08 (<http://hmc08.lnec.pt>) and send it to the Conference Secretariat by e-mail: [hmc08@lnec.pt](mailto:hmc08@lnec.pt)

Registrations	All Participants	Students
Before 30 <sup>th</sup> June 2008	300 €	150 €
After 30 <sup>th</sup> June 2008	350 €	200 €

#### CONFERENCE PROGRAMME

The conference will have national and international thematic lectures, technical sessions, posters session and a technical visit to historical monuments in the city of Évora.

#### DATE AND VENUE

The conference will be held at the Congress Centre of Laboratório Nacional de Engenharia Civil (LNEC) in Lisbon, from the 24<sup>th</sup> to the 26<sup>th</sup> September 2008. LNEC is located near the city centre, airport, metro station and several hotels.

#### PAPERS PUBLICATION

A book and a CD with the abstracts will be available at the conference. From the 15th July 2008 papers will be selected to be published, in accordance with the evaluation of the Scientific Committee and final editor decision in a scientific journal related with the field: Conservar Património or International Journal of Architectural Heritage.

#### SECRETARIAT

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## September, 24<sup>th</sup>

08:30	Registration		
09:00-09:30	OPENING SESSION		
	Plenary session: Invited lectures		
09:30-11:00	Theme I – Jan Elsen: <i>Chemical-mineralogical characterization of historic mortars</i> Theme II – Vladko Bosiljkov: <i>Low vs. high tech diagnosis techniques for assessment of masonry structures</i>		
11:00-12:00	Coffee break and POSTER SESSION (themes I and II)		
	Room #1	Room #2	
12:00-13:00	Parallel Session #1: Theme I		Parallel Session #2: Theme IV
13:00-14:00	LUNCH		
	Room #1	Room #2	Room #3
14:00-16:00	Parallel Session #3: Theme II	Parallel Session #4: Theme I	Parallel Session #5: Theme IV
16:00-16:30	Coffee break		
	Room #1	Room #2	Room #3
16:30-18:30	Parallel Session #6: Theme IV	Parallel Session #7: Theme I	Parallel Session #8: Theme III
19:00	Reception at the City Museum (casual)		

## September, 25<sup>th</sup>

	Plenary session: Invited lectures		
09:00-10:30	Theme III – José Aguiar: <i>When architecture had colour and ornament was not a crime! Conservation of architectonic surfaces</i> Theme IV – Thorborg Von Konow: <i>Design of non-hydraulic and hydraulic lime mortars appropriate for restoration</i>		
10:30-11:30	Coffee break and POSTER SESSION (themes III and IV)		
	Room #1	Room #2	
11:30-13:00	Parallel Session #9: Theme III		Parallel Session #10: Theme I / II
13:00-14:00	LUNCH		
	Room #1	Room #2	
14:00-16:00	Parallel Session #11: Theme IV		Parallel Session #12: Theme III
16:00-16:30	Coffee break		
	Room #1	Room #2	
16:30-18:00	Parallel Session #13: Theme I		Parallel Session #14: Theme IV
18:00-18:30	DISCUSSION PANEL		
18:30	Closing of work sessions		

## September, 26<sup>th</sup> - TECHNICAL VISIT TO EVORA

8:00	Departure from Lisbon
9:30	Arrival to Montemor-o-Novo to visit Saudação Convent and Santiago Church
11:00	Arrival to Évora, visit to Évora Cathedral and presentation about the places to visit
12:30	LUNCH
14:30	Visit to S. Mamede church, and to S. Mamede Place fountain, which has been recently restored
15:00	Visit to “Casas Pintadas” and “Condes de Basto” Palace
16:30	Visit to Santa Clara Church, temporary headquarters of Évora Museum, where an exhibition about the restoration of “Sé de Évora” old panels is installed
17:00	Visit to S. Francisco Church, passing by 5 de Outubro street, Giraldo Place and Serpa Pinto street fountain
18:00	Closing Session in D. Manuel Palace
19:00	Departure to Lisbon