

Seminar - PCMs4Buildings

PCMs: Thermophysical characterization and buildings' applications

14-15 June, 2018

Department of Chemical Engineering
University of Coimbra

DAY 1

09h15 | Reception

09h30 | José J. Costa, Jorge Rocha, University of Coimbra, Portugal
Opening session

09h40 | Nelson Soares, University of Coimbra, Portugal
Systems with PCM-filled rectangular cavities for the storage of solar thermal energy for buildings, the case of the PCMs4Buildings project

09h55 | **Keynote:** Ana Lázaro, Mónica Delgado, University of Zaragoza, Spain
Pros and cons of different calorimetric methodologies applied to PCM in building applications

10h30 | Coffee-break (Poster session)

11h00 | Luísa Durães, University of Coimbra, Portugal
Thermophysical characterization of commercial paraffin-based PCMs for low temperature thermal energy storage applications

11h20 | José J. Costa, University of Coimbra, Portugal
The importance of the thermophysical characterization of microencapsulated PCMs for the numerical analysis of the heat transfer with solid-liquid phase change

11h40 | Sandra S. Lucas, University of Greenwich, United Kingdom
Assessment of latent heat storage of PCM-mortars: a case study using a full-scale experimental test

12h00 | Romeu Vicente, University of Aveiro, Portugal
Use of PCMs in polyurethane foam layers: from the individual layer to building solutions

12h20 | Flash Presentation I - *to be defined*

12h30 | Lunch - FREE TIME

14h00 | Laura Aelenei, LNEG, Portugal
New solutions for building envelope: Building Integrated Photovoltaic Systems with integral thermal storage

14h20 | Adélio Gaspar, University of Coimbra, Portugal
Thermal regulation of photovoltaic modules using thermal energy storage units with PCMs

14h40 | Luís Coelho, Polytechnic Institute of Setúbal, Portugal
Developments in thermal energy storage, the case of the TESse2b project

15h00 | Szabolcs Varga, University of Porto, Portugal
Development of PCM thermal energy storage for active cooling of the indoor space

15h20 | Flash Presentation II - *to be defined*

15h30 | Coffee-break (Poster session)

16h30 | **Social event:** World Heritage Coimbra, University of Coimbra: visit to the Royal Palace and the 18th century Physics and Zoology Galleries

18h30 | Closing

DAY 2

09h15 | Reception

09h30 | **Keynote:** Daniel Cederkrantz, Hot Disk AB, Sweden
Measuring the thermal conductivity of PCMs - dos and don'ts

10h10 | José Luís B. Aguiar, University of Minho, Portugal
Properties of cement mortars with phase change materials (PCMs)

10h30 | Coffee-break (Poster session)

11h00 | Paulo Santos, University of Coimbra, Portugal
Phase change materials for improving the thermal performance of LSF construction

11h20 | Tiago Silva, University of Aveiro, Portugal
Thermal performance of a window shutter with phase change materials

11h40 | João Garcia, Polytechnic Institute of Setúbal, Portugal
The SCORES project and the new compact hybrid storage technologies

12h00 | Flash Presentation III - *to be defined*

12h10 | Flash Presentation IV - *to be defined*

12h20 | Flash Presentation V - *to be defined*

12h30 | Lunch - FREE TIME

14h00 | **Workshop:** *Thermophysical characterization of PCMs*
1. Thermal analysis session
2. Hot Disk® session

Daniel Cederkrantz, Hot Disk AB, Sweden
Pedro Simões, University of Coimbra, Portugal
Telma Matias, University of Coimbra, Portugal

18h00 | Closing

Organization:

Adélio Gaspar, DEM-UC
José Costa, DEM-UC
Nelson Soares, DEM-UC

Luísa Durães, DEQ-UC
Pedro Simões, DEQ, UC
Telma Matias, DEQ-UC

Ana Ramos, ADAI
Margarida Gonçalves, DEC-UC



Cofinanciado por:



Call for Abstracts

www.adai.pt/pcms4buildings

until: 04/05/2018

Registration:

www.adai.pt/pcms4buildings

until: 01/06/2018

Contact:

pcms4buildings@gmail.com

FREE

REGISTRATION

The seminar is free but places are limited

Registration is required for both the Seminar and the Workshop of the 2nd day