



Phase Change Material (PCM) 2017

Guest Editors:

Prof. Dr. Luisa F. Cabeza

GREA Innovació Concurrent,
Universitat de Lleida, Pere de
Cabrera s/n, 25001 Lleida, Spain

Dr. Sumin Kim

Building Environment & Materials
Lab, School of Architecture,
Soongsil University, Seoul 06978,
Korea

Dr. Alvaro De Gracia

Departament d'Enginyeria
Mecànica, Universitat Rovira i
Virgili, Av. Paisos Catalans 26,
43007 Tarragona, Spain

Deadline for manuscript
submissions:

closed (31 October 2017)

Message from the Guest Editors

Dear Colleagues,

Phase change materials (PCM) have attracted the attention of researchers for their use in different thermal energy storage (TES) systems. These materials can store and release high amounts of energy in a reduced thermal range, making them suitable for implementation in multiple applications. Moreover, experimental tests at prototype scale are of crucial importance to analyze the performance of PCM use in a given application under laboratory or real conditions. Furthermore, numerical models play an important role to improve the design and control strategies of PCM units. Finally, the study of life cycle analyses of PCM systems have demonstrated that the use of appropriate TES systems using PCM can lead to less pollution in the environment and less CO₂ emissions.

Keywords: PCM; TES; Solar applications; Buildings; Industrial applications; Waste heat recovery; Materials development; Numerical modelling

Prof. Luisa F. Cabeza
Assoc. Prof. Sumin Kim
Dr. Alvaro de Gracia
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
X@Applsci