



an Open Access Journal by MDPI

# Neutral and Ionic Organic-Base Phase Change Materials: Design, Synthesis, Characterization, New Developments, Applications and Perspectives

Guest Editors:

#### Dr. Eduardo J. Garcia-Suarez

Center for Cooperative Research on Alternative Energies (CIC energiGUNE), Basque Research and Technology Alliance (BRTA), Vitoria-Gasteiz, Spain

#### Dr. Angel Serrano

Thermal Energy Solutions Area, CIC energiGUNE, Parque Tecnológico de Miñano, C/Albert Einstein 48, 01510 Vitoria-Gasteiz, Álava, Spain

#### Prof. Dr. Elena Palomo del Barrio

Thermal Energy Solutions Area, CIC energiGUNE, Parque Tecnológico de Miñano, C/Albert Einstein 48, 01510 Vitoria-Gasteiz, Álava, Spain

Deadline for manuscript submissions: closed (20 June 2023)



mdpi.com/si/90394

## **Message from the Guest Editors**

Dear Colleagues,

Phase Change Materials (PCM) are one of the most important players for the consolidation of thermal energy storage (TES) in the current energy transition. However, the boost to implementate TES systems in the market remains a big challenge. In this sense, the development of versatile TES systems with high TES density, easy preparation and handleing and low cost that will contribute to the desired implementation are highly demanded.

This Special Issue is consequently devoted to new developments, desing, synthesis and characterization of OPCMs (neutral and ionic) with energetic solid-liquid and/or solid-solid transitions but it covers potential applications and future perspectives of these interesting materials as well. Therefore, we kindly invite you to submit your manuscript to this Special Issue in the form of a full paper, communication or critical review.







an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

### Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials. materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

### **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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

### **Contact Us**

*Materials* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi