Special Issue

Optimized Heat and Mass Exchangers for Sorption Cooling Systems

Message from the Guest Editors

The are inviting submissions to a Special Issue of Energies on the subject area of "Optimized Heat and Mass Exchangers for Sorption Cooling Systems". Sorption heat transformer and storage systems offer clean solutions for decarbonization of heating/cooling, run by non-payable low-grade thermal energy, i.e., heat sources with temperature less than 100 °C. Despite all the promising features, the current sorption systems are not ready for wide market adoption. A revolutionary approach to their design and development is needed to overcome their technical limitations, such as low specific cooling power (SCP), low coefficient of performance (COP), and low energy storage density (ESD). This issue aims to collect contributions on recent advances in the field with a special focus on, but not limited to the following:

- enhanced sorption heat and mass exchangers;
- the thermodynamics and kinetics of sorption heat transformer and storage;
- enhancement of ESD, COP, and SCP;
- control methods for sorption systems;
- compact sorber bed design;
- sorption heat and cold storage system;
- novel sorption working pairs

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Deadline for manuscript submissions

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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