# Special Issue

# Absorption Heat Pumps for Heating and Cooling: Modeling, Simulation, Design, Optimization, and Experiments

## Message from the Guest Editors

Absorption systems have a great deal of potential in terms of boosting residual energy and reducing the demand for non-renewable energy sources. Recent studies of single and advanced absorption cycles (closed and open systems, new configurations and heat exchangers, coupling, activation, application, etc.) have significantly reinforced this research field. This Special Issue focused on absorption heat pumps for heating and cooling seeks to publish new knowledge on modeling, simulation, design, optimization, and experiments designed to understand parts of or whole systems, with the final aim being their real-world application. The topics of interest include, but are not limited to, the following areas:

- Absorption heat pumps;
- Mass and heat transfer:
- Solar thermal systems;
- Optimization;
- Artificial intelligence;
- Machine learning;
- Passive and dynamics heat exchangers;
- Absorption heat transformers;
- Automatization and control;
- Solar heat storage systems;
- Application of absorption systems;
- Desorption and condensation;
- Evaporation and absorption;
- Combined cycles;
- Hybrid cycles.

#### **Guest Editors**

### Prof. Dr. Armando Huicochea Rodríguez

Centro de Investigación en Ingeniería y Ciencias Aplicadas (CIICAp), Universidad Autónoma del Estado de Morelos, Cuernavaca 62209, Mexico

#### Prof. Dr. José Alfredo Hernández Pérez

Center for Research in Engineering and Applied Sciences (CIICAp), Autonomous University of the State of Morelos, Cuernavaca, Mexico



# **Processes**

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



mdpi.com/si/204121

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

mdpi.com/journal/ processes





# **Processes**

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



## **About the Journal**

### Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

#### **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), Ei Compendex, Inspec, AGRIS, and other databases.

### Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))

