Special Issue

Design, Control, Modeling and Simulation of Energy Converters

Message from the Guest Editors

Due to the increasing development of energy conversion systems with diverse technological applications (such as electromobility, sustainable energy and highly energy-efficient systems, among others), the design, control, modelling and simulation of power converters are becoming additional interests in all energy conversion processes. Moreover, they allow us to achieve high energy efficiency and operational reliability.

Some of the characteristics of the modelling and simulation of power systems prior to their design is the ability to have a rigorous theoretical analysis and solid simulations. These enable us to foresee stress situations in components integrating the whole system in a laboratory and/or applications in industry. This Special Issue on the "Design, Control, Modeling and Simulation of Energy Converters" aims to cover the recent advances in the development and application of power converters. Topics include, but are not limited to, methods and/or applications in the following areas:

Energy engineering;

- Solar energy;
- Power converter:
- Energy storage;
- Fuel cell;
- Renewable energy.

Guest Editors

Prof. Dr. Leobardo Hernandez

Escuela Superior de Ingeniería Mecánica y Eléctrica, Unidad Culhuacan, Instituto Politécnico Nacional, Av. Santa Ana No. 1000, Col. San Francisco Culhucan, Mexico City 04430, Mexico

Prof. Dr. Jazmin Ramirez-Hernandez

Escuela Superior de Ingeniería Mecánica y Eléctrica, Unidad Culhuacan, Instituto Politécnico Nacional, Av. Santa Ana No. 1000, Col. San Francisco Culhucan, Mexico City 04430, Mexico

Deadline for manuscript submissions

31 January 2026



Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



mdpi.com/si/220103

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))

