

## Special Issue

# Artificial Intelligence for Sustainable Energy Systems: Smart Grids, Homeostatic Control, and Distributed Resource Optimization

### Message from the Guest Editors

This Special Issue is dedicated to this pressing issue and addressing the possible regulatory and engineering solutions to the negative impact on the grid's service quality standards as a result of this increasing trend, especially in developing countries. This Special Issue is dedicated to this important area of research not only for its direct link to the Smart Grid and Sustainable Energy System agenda, but also because of its economic and regulatory ramifications, which undoubtedly affect a vast and crucially determinant sector of countries' economies, namely the energy and electric power distribution sector.

- smart grid
- microgrid on-grid
- small means of distributed generation (PMGD)
- electrical energy distribution
- distributed energy resources (DER)
- service quality standards
- energy homeostasis
- sustainable energy systems (SES)

---

### Guest Editors

Prof. Dr. Franco F. Yanine

Facultad de Ingeniería, Universidad Finis Terrae, Providencia 7501014, Chile

Prof. Dr. Sarat Kumar Sahoo

Department of Electrical Engineering, Parala Maharaja Engineering College, Odisha 761003, India

---

### Deadline for manuscript submissions

closed (30 January 2026)



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/199273](https://mdpi.com/si/199273)

*Processes*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

[mdpi.com/journal/  
processes](https://mdpi.com/journal/processes)





# Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/journal/  
processes](https://mdpi.com/journal/processes)



## 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))