

## Special Issue

# Recent Advances in Renewable Energy Systems: Integration Challenges, Forecasting, and Grid Optimization for Sustainable Energy Management

### Message from the Guest Editor

This Special Issue, 'Recent Advances in Renewable Energy Systems: Integration Challenges, Forecasting, and Grid Optimization for Sustainable Energy Management', invites high-quality research articles, reviews, and case studies that address the following topics:

- **Renewable energy conversion technologies:** Innovations in solar, wind, hydro, and bioenergy systems;
- **Grid integration and optimization:** Challenges and solutions for integrating renewables into power grids and microgrids;
- **Flexibility resources:** Energy storage systems, demand response, and virtual power plants;
- **Renewable energy forecasting:** Advanced models for solar, wind, and other renewable energy sources;
- **Smart grid technologies:** AI-driven grid management, real-time monitoring, and resilience enhancement;
- **Sustainable energy management:** Policy frameworks, economic impacts, and lifecycle analysis of renewable energy systems;
- **Distributed generation:** Reliability and electric vehicle grid-integrated systems.

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### Guest Editor

Dr. Ali S. Alghamdi

Department of Electrical Engineering, College of Engineering, Majmaah University, Majmaah 11952, Saudi Arabia

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### Deadline for manuscript submissions

31 October 2025



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

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## 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.

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### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

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

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