

## Special Issue

# Wind Energy Assessment Based on CFD Simulations and Analytical Techniques

### Message from the Guest Editors

Wind energy stands to play a crucial role in ensuring sustainable energy development in the world as its potential is abundant across the globe. However, the conversion capability of the existing wind turbines is still unsatisfactory and far from the Betz limit. This inability stems from both technological constraints such as an efficient design of the wind turbine rotor, generator/alternator and gearbox and environmental issues such as appropriate site selection (micrositing) and wind regime characteristics.

This Special Issue aims to address recent developments on wind turbine rotor design improvement through CFD simulations as well as analytical assessment on site siting and wind regime characteristics. Topics include, but are not limited to:

- CFD simulations;
- Wind turbine design;
- Fluid flow characterizations;
- Wind power assessment;
- Site siting;
- Wind regime characteristics.

---

### Guest Editors

Dr. Djamal Hissein Didane

Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, Parit Raja 86400, Johor, Malaysia

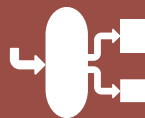
Dr. Bukhari Bin Manshoor

Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, Parit Raja 86400, Johor, Malaysia

---

### Deadline for manuscript submissions

closed (15 March 2025)



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/194522](https://mdpi.com/si/194522)

*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))