



an Open Access Journal by MDPI

Design and Analysis of Offshore Wind Turbines

Guest Editors:

Dr. Shuaishuai Wang

Department of Marine
Technology, Norwegian
University of Science and
Technology (NTNU), Trondheim,
Norway

Prof. Dr. Yihan Xing

Department of Mechanical and
Structural Engineering and
Material Sciences, University of
Stavanger, N-4036 Stavanger,
Norway

Deadline for manuscript
submissions:

30 April 2025

Message from the Guest Editors

This Special Issue aims to address the key challenges and enhance technologies for dynamic analysis to improve the design of OWTs, with contributions both from academia and industry. Various topics include, but are not limited to:

- Innovative concepts and technologies;
- Stochastic- and reliability-based design and analysis;
- Conceptual and detailed design;
- High-fidelity aerodynamics and hydrodynamics;
- Integrated aero-hydro-servo-elastic modeling and analysis;
- Advanced control technologies;
- Stress and strength analysis of OWTs;
- Novel conceptual studies including multi-rotor designs;
- Novel materials;
- Substructure design and analysis;
- Mooring line design and analysis;
- Rotor and blade design and analysis;
- Innovative drivetrain design and analysis;
- Numerical and experimental analysis;
- Machine learning and digital twins.



mdpi.com/si/184054



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Joshua M. Pearce

Department of Electrical &
Computer Engineering, Western
University, London, ON N6A 3K7,
Canada

Message from the Editor-in-Chief

Designs (ISSN 2411-9660) is a peer-reviewed and open access journal which provides a unifying research framework for a wide range of engineering designs of disciplines and industrial applications, including mechanical engineering, electrical engineering, civil engineering, mechatronics, aerospace engineering, bioengineering, energy engineering, industrial engineering and manufacturing systems are of interest. We would like to invite you to contribute to the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High visibility: indexed within Scopus, Inspec, and other databases.

Journal Rank: CiteScore - Q2 (*Engineering (miscellaneous)*)

Contact Us

Designs Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/designs
designs@mdpi.com