

Special Issue

Cutting-Edge Applications of Wind Turbine Aerodynamics

Message from the Guest Editors

The advancement of wind turbine aerodynamics is crucial for optimizing the performance and efficiency of wind energy systems. This Special Issue aims to gather researchers and industry experts to discuss the latest innovations and technologies in wind turbine aerodynamics, focusing on enhancing energy capture and reducing operational costs. Key areas of interest include advanced aerodynamic modeling and simulation, innovative blade design, and control strategies to maximize efficiency and minimize wear and tear. Research topics of interest include, but are not limited to, the following:

- Advanced Aerodynamic Modeling
- Innovative Blade Design
- Control Strategies
- Turbine–Wake Interactions
- Noise Reduction Techniques
- Sustainability and Environmental Impact

By addressing these topics, this Special Issue aims to present groundbreaking research and practical solutions that will drive the future of wind energy, providing insights for both academic researchers and industry practitioners. The goal is to facilitate knowledge exchange and foster collaborations that will lead to more efficient, reliable, and sustainable wind energy systems.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

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