

## Special Issue

# Vertical Axis Wind Turbines: Current Technologies and Future Trends

### Message from the Guest Editors

Wind power has now become a major power source. The majority of it is produced via the large horizontal-axis wind turbine (HAWT), the size of which continues to increase. However, the difficulty of increasing its size has become apparent, and reducing the impact on the environment has also become an issue. In order to achieve carbon neutrality, it is necessary to pursue every possibility, and there are great expectations for the widespread use of vertical-axis wind turbines (VAWTs) and the resolution of these problems. Wind farms using small, low-cost VAWTs is considered to be one such promising technique. The purpose of this Special Issue is to collate original papers and review papers on various topics related to vertical-axis wind turbines, and to investigate new possibilities of vertical-axis wind turbines. Keywords:

- vertical-axis wind turbine (VAWT)
- aerodynamics related to VAWT
- computational fluid dynamics of VAWT
- blade element momentum theory of VAWT
- reduction in costs of VAWT
- control of VAWT
- wake analysis of VAWT
- wind farm of VAWT
- closely spaced arrangements of VAWTs
- interaction between VAWTs

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### Guest Editors

Prof. Dr. Yutaka Hara

Faculty of Engineering, Tottori University, 4-101 Koyama-Minami, Tottori 680-8552, Japan

Prof. Dr. Yoshifumi Jodai

Department of Mechanical Engineering, National Institute of Technology (KOSEN), Kagawa College, 355 Chokushi, Takamatsu 761-8058, Japan

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### Deadline for manuscript submissions

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

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*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

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