

Special Issue

Wind Turbine Aerodynamics

Message from the Guest Editor

In order to reach the goal of 100% renewable energy consumption, wind energy, as a pioneer of renewable energy, is developing very quickly all over the world. To reduce the levelized cost of energy (LCOE), the size of a single wind turbine has been increased to 10 MW nowadays and it will increase further in the near future. Big wind turbines and their associated wind farms have many challenges in aerodynamics, aero-elasticity and aeroacoustics. The typical effects are mainly related to the increase in Reynolds number and blade flexibility. This Special Issue collects some important works addressing the aerodynamic challenges to help scientifically the realization of such development.

Keywords:

- Wind turbine
- Wind farm
- Aerodynamics
- Aero-elasticity
- Aeroacoustics
- Fluid-structure interaction

Guest Editor

Prof. Dr. Wen Zhong Shen

Department of Wind Energy, Aero and Fluid Dynamics Section, Nils Koppels Allé, Building 403, 2800 Kgs. Lyngby, Denmark

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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