



## Wind Turbine Aerodynamics

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### Message from the Guest Editor

Dear Colleagues,

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.

Prof. Wen Zhong Shen

*Guest Editor*

### Keywords:

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





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## Message from the Editor-in-Chief

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