Special Issue

Modelling Techniques for Floating Offshore Wind Turbines

Message from the Guest Editors

As the demand for sustainable energy sources grows, floating offshore wind turbines (FOWTs) have emerged as a promising solution to harness wind energy in deeper waters. While the projections for deployment capacity over the coming decades point towards exponential growth, the challenges to overcome are also very significant. Research and innovation are needed to allow for safe, cost-effective and sustainable projects. This Special Issue focuses on the latest advancements in modelling techniques for FOWTs, both experimental and numerical, addressing critical challenges faced by the design, operation and decommissioning of floating wind turbines. We aim at collecting contributions focused on the following topics:

- Wind resource assessment;
- Wake modelling;
- Experimental model testing;
- Hydrodynamics;
- Mooring analysis;
- Power cables dynamics;
- Wind turbine controllers;
- Fully coupled modelling;
- Structural analysis;
- Digital twins;
- Offshore operations.

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Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (*JMSE*; ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

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