Special Issue

Digital Twin Modelling of Wind Turbines

Message from the Guest Editors

The notion of Digital Twins (DT) has gained increasing popularity within the offshore and wind energy sectors. A DT is a digital representation capable of offering quantitative insights into the fundamental characteristics of a physical asset in real-time or near-real-time. A cost-benefit DT of a wind turbine can be utilized for various purposes such as predictive maintenance, anticipation of structural integrity, optimization of operations, performance monitoring, and even simulation for future design improvements. Multiple components and processes are involved in the DT modelling of wind turbines, including mathematical modelling, data processing and user interface. This special issue aims to provide a rapid turn-around in publishing the most exciting advances in the following areas: -Data-driven or physical-based modelling of the system/sub-systems (blade, rotor, gearbox and etc.) of a wind turbine;
-Data acquisition, integration and assimilation;
-Predictive analytics of future behaviours;
-Optimization;
-User Interface and visualization framework.

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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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