Special Issue

Data-Driven Modeling for Offshore Energy Systems

Message from the Guest Editor

The advancement of deep learning and its increased implementation in various fields of engineering and science, partially due to the accessibility of high computational power and big data management systems, has also broadened the range of possibilities for offshore energy system structural analysis, performance modeling, active and passive control design, and power output optimization. The aim of this Special Issue is to compile data-driven and physics-informed machine learning approaches to study forward and inverse problems involved in offshore energy systems. This includes, but is not limited to, physics-informed dynamic modeling of offshore wind turbines and wave energy converters, power generation modeling and power optimization, data-driven modeling and optimization of offshore energy system arrays, implementation of neural networks and machine learning techniques for control system design, and data-driven approaches for fluid–structure interaction simulations for offshore energy systems.

Guest Editor

Dr. Masoud Masoumi
Department of Mechanical Engineering, Manhattan College, Riverdale, NY 10471, USA

Deadline for manuscript submissions

closed (20 December 2023)

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/150758

Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

mdpi.com/journal/jmse

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/journal/jmse

MDPI

About the Journal

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.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).