Special Issue

Numerical Assessments of Tidal Stream and Wave Energy in Coastal Shelf Seas

Message from the Guest Editors

The exploitation of marine renewable energies has attracted the interest of governments committed to reducing carbon dioxide emissions. Particular attention has thus been dedicated to tidal stream energy, which is predictable by nature, and the wave resource, which is particularly abundant in coastal shelf seas. However, prior to the commercial-scale deployment of energy converters, refined resource assessments are required to optimize the design and location of devices while improving the economic reliability of the project. As extensive in situ observations cannot encompass the available resources at regional scale, resource assessments most often rely on numerical modelling tools. This Special Issue aims at reviewing the most recent research studies and future challenges in numerical assessments of tidal stream and wave energy, addressing model calibration, resource variability, or the environmental effects of energy extraction over a wide range of spatio-temporal timescales (from turbulence to decade and from single device to shelf sea).

Guest Editors

- Dr. Nicolas Guillou
- Dr. George Lavidas
- Dr. Georges Chapalain

Deadline for manuscript submissions closed (12 April 2021)



Journal of Marine Science and Engineering

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Impact Factor 2.8 CiteScore 5.0



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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

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