



Water Waves on Vortical Flows

Guest Editor:

Prof. Dr. Christian Kharif

Ecole Centrale Marseille/Institut
de Recherche sur les
Phénomènes Hors Equilibre,
Marseille, France

Deadline for manuscript
submissions:

closed (30 September 2021)

Message from the Guest Editor

Generally, in coastal and ocean waters, current velocity profiles are established by bottom friction and/or wind stress at the sea surface and are consequently depth-dependent. Ebb and flood currents due to the tide may have an important effect on water wave properties. In any region where the wind blows, the generated current affects the kinematics and dynamics of the surface water waves. For example, the current velocity profile at Columbia river mouth reported by Dong and Kirby (Proceedings of the 33rd Conference on Coastal Engineering, 2012) shows the existence of a strong vertical shear on the upper layer of the water flow near the free surface, which was high enough to affect the kinematics of water wave of wavelengths up to tens of meters.

Water waves on rotational flows have attracted much less attention than those on irrotational flows. The objective of this Special Issue is to increase our knowledge on the interaction between surface water waves and vortical flows.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Tony Clare

School of Natural and
Environmental Sciences,
Newcastle University, Newcastle
upon Tyne NE1 7RU, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed with Scopus, SCIE (Web of Science), GeoRef, Inspec, AGRIS, and other databases.

Journal Rank: JCR - Q1 (*Engineering, Marine*) / CiteScore - Q2 (*Ocean Engineering*)

Contact Us

*Journal of Marine Science and
Engineering* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/jmse
jmse@mdpi.com
X@JMSE_MDPI