

## Special Issue

# Hydrodynamics and Mixing Processes in Estuaries and Lagoons

### Message from the Guest Editor

Estuaries and lagoons represent some of the most dynamic interfaces on Earth, at the boundary between land and open sea, and support some of the most diverse and productive habitats. Their circulation is mainly determined by the fluvial inflow and the introduction of seawater through tidal currents and turbulent mixing. The nature of the mixing depends on the system's morphological characteristics, the magnitude of freshwater discharge, and tidal forcing. Therefore, the understanding of coastal system circulation and salinity patterns is a necessary step towards the development of sound management practices.

Contributions should focus on estuaries and lagoon circulation, transport and mixing, hydrodynamic and hydrographic characteristics (tidal propagation, tidal currents, tidal asymmetries, water salinity, water temperature), salt intrusion and freshwater inflow, mixing processes, stratification, transport timescales (residence time, freshwater fraction).

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### Guest Editor

Dr. Ana Picado

Department of Physics, CESAM, University of Aveiro, Aveiro, Portugal

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### Deadline for manuscript submissions

closed (10 August 2022)



## Journal of Marine Science and Engineering

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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.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi  
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