

Special Issue

Applied Turbulence in Coastal Sciences: From Physical to Biogeochemistry Processes

Message from the Guest Editor

Turbulence is omnipresent and even common whenever dealing with fluid flows, whether considering flowing through small scales domains, such as pipes, or through large scales ones, such as in the atmosphere and the ocean-surface boundary layers. Turbulence has a significant impact on the coastal dynamics processes, where its microstructure and transport properties crucially influence the water column properties from the physical and the biogeochemistry points of view. In addition, turbulence is important when considering fluxes and processes at the ocean-atmosphere interface, while marine and atmospheric turbulence play an important role in meteorology and climatology. On the other hand, solving turbulence remains today an important issue and a theoretical challenge. In most cases, a common approach consists, in general, of parameterizing the turbulence through semi-empirical formulations. The main goal of this Special Issue is aimed at building synergies between fundamental and applied approaches of turbulence, with special emphasis on the coastal environment in order to bring together different experts and models, including marine, atmospheric and climatological sciences.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

Editor-in-Chief

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