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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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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