Special Issue

Hydrodynamic Modeling and Observational Techniques in Coastal and Estuarine Regions

Message from the Guest Editors

Coastal and estuarine hydrodynamic processes are closely related to nearshore material transport, changes in coastline and bathymetry, the survival of marine life, infrastructure construction, and communications and transportation. With the development of hydrodynamic modeling and artificial intelligence, the research outcomes of the effects of physical oceanography on nearshore processes, forcing mechanisms, and structures have become increasingly substantial. The focus of this Special Issue is on hydrodynamic modeling and observational techniques in coastal and estuarine regions. This Special Issues invites the submission of novel research in this field. Topics of interest may include (but are not limited to) the following: (1) the theory, observations, and hydrodynamic modeling of coastal and estuarine processes; (2) estuarine and coastal sediment transport dynamics and the evolution of sedimentary geomorphology; (3) coastal and offshore marine disasters; (4) fluid–structure interactions; (5) environmental and ecological effects in estuarine and coastal zones; and (6) applications of artificial intelligence in offshore dynamics.

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Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.
We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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