





Special Issue Reprint

Wave/Current-Structure-Seabed Interactions around Offshore Foundations

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With the global surge in the exploration of ocean resources, there has been a significant increase in the construction of offshore infrastructure, including offshore platforms and wind turbines, over the past few decades. However, these engineering structures are prone to occasional destruction or damage due to harsh offshore environments. Therefore, ensuring the safety of marine infrastructure heavily relies on a profound understanding and comprehensive evaluation of the coupling effects between waves, currents, structures, and the seabed. The primary objective of this Special Issue is to present recent advances in the field of wave/current-structure-seabed interactions around offshore foundations. Authors are encouraged to submit articles that encompass experimental, numerical, theoretical, and applied approaches, aiming to enhance the understanding and refinement of complex physical processes involving waves/currents, foundations, and marine sediments. The scope of this Special Issue encompasses various research areas, including, but not limited to, the following: Fluid-soil-structure interactions around offshore foundations; Scour around offshore foundations; Wave-induced seabed liquefaction; Physical and numerical modeling for geohazard and offshore geotechnics; Hydrodynamic loads on offshore structures; Assessment and mitigation of foundation instabilities; Soil characteristics and constitutive model for marine sediments; Offshore foundation design.



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