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Scour around Offshore Structures: Process, Evolution and Protection

Guest Editors:

Prof. Dr. Xuguang Chen

College of Engineering, Ocean University of China, Qingdao 266000, China

Prof. Dr. Fayun Liang

Department of Geotechnical Engineering, Tongji University, 1239 Siping Road, Shanghai 200092, China

Deadline for manuscript submissions:

closed (20 February 2024)

Message from the Guest Editors

The scour of sediments around offshore structures by wave currents is the most important factor contributing to their failure. Seabed soil is constantly liquefied and re-consolidated in complex marine environments, resulting in continuous changes in the properties of seabed soil. Traditional scour protection measures mostly exist along the river pile scour protection measures, which cannot be effective in the long term in hydrodynamic and soil environments. Therefore, revealing the scouring mechanism under the coupling of the seabed soil, sediment, and wave–current are crucial for the design and protection of offshore structures. In this Special Issue, we invite submissions on scour mechanisms and scour protection methods for offshore hydraulic structures in order to solve this problem under the complex fluid–structure–soil interaction and develop effective scour protection methods. This Special Issue will cover research on scour macroscopic mechanisms, scour protection methods, scour model tests, and numerical simulations of scour for offshore structures. New findings, methods, tools, and improved models for other studies of water–soil systems are welcome.



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Special Issue



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Dr. Jean-Luc PROBST

Laboratory of Functional Ecology and Environment, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, France

Message from the Editor-in-Chief

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Water Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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