Special Issue

Performance of Transportation Systems Subjected to Extreme Hydrodynamic Events

Message from the Guest Editors

Recent tsunamis, hurricanes, and flash floods have caused extensive damage to bridges and other civil infrastructure around the world. This widespread damage paralyzed entire transportation networks, hindering rescue efforts and recovery of communities. Given the projected increase in the frequency and intensity of storms and floods due to climate change, and the socio-economic importance of transportation systems, the vulnerability of such systems has become a major topic of interest. Therefore, the objective of this special issue is to invite cutting-edge original research that focuses on the performance of transportation infrastructure subjected to extreme flooding. Topics of interest include:

- Hydrodynamic loading on transportation infrastructure;
- Structural performance and failure modes caused by flooding;
- Impulsive and damming effects of debris on structures;
- Hydrodynamic scour of piers, abutments, and roadways;
- Computational fluid dynamics and fluid-structure interaction;
- Risk and resilience assessment methodologies; and
- Mitigation strategies at the structural and network level.

Guest Editors

Dr. Denis Istrati
Prof. Dr. Ian Buckle
Prof. Dr. Michael Scott

Deadline for manuscript submissions

closed (15 January 2023)

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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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