

## Special Issue

# Experimental and Numerical Investigation of Flow–Structure Interactions in Hydraulic, Coastal, and Ocean Engineering

### Message from the Guest Editors

This Special Issue focuses on advancing research into flow–structure interaction (FSI) phenomena in hydraulic, coastal, and ocean environments. The scope spans experimental, numerical, and hybrid methodologies to address challenges in fluid dynamics, structural resilience, and multiphysics modeling. Key topics include (1) wave–structure interactions, (2) sediment transport, (3) offshore/coastal infrastructure performance, and (4) extreme event impacts (e.g., storms, tsunamis). The purpose of this Special Issue is to foster interdisciplinary collaboration, bridge gaps between laboratory-scale experiments and field-scale simulations, and promote sustainable engineering solutions for fluid-driven systems. By linking hydrodynamic analyses to socio-economic metrics—such as cost–benefit assessments of nature-based solutions or policy-guided coastal management—this Issue advances tools for measuring and monitoring sustainability. It also highlights regulatory and technological innovations to balance ecological preservation with infrastructural demands, supporting integrated approaches to sustainable development in aquatic environments.

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### Guest Editors

Dr. Jinzhao Li

College of Civil Engineering, Hunan University, Changsha, China

Dr. Yilin Yang

School of Civil Engineering, Central South University, Changsha, China

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### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)

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## Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,  
Columbus, OH 43210, USA

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