Special Issue

Computational Fluid Dynamics and Modeling for Hydraulic Engineering

Message from the Guest Editors

This Special Issue explores the latest innovations and applications of computational fluid dynamics (CFD) and modeling within the field of hydraulic engineering. CFD technology is essential for solving complex fluid flow problems and is a key tool for understanding fluid dynamics and interactions in hydraulic engineering. This Special Issue will cover the latest CFD techniques, modeling approaches, and practical applications in hydraulic engineering problems.

Objectives: To analyze the latest developments in CFD and modeling within hydraulic engineering; To present case studies showcasing new CFD techniques and modeling methods; To evaluate the effectiveness of CFD in solving hydraulic engineering problems and suggest future research directions.

Topics of Interest: Recent advancements in CFD techniques applied to hydraulic engineering; Modeling approaches for multiphase fluid flows; Fluid dynamic analysis of hydraulic structures; Flood prediction and management using CFD; Numerical modeling of complex river and channel flows; Coastal engineering applications of CFD, such as wave–structure interactions and coastal erosion modeling.

Guest Editors

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Deadline for manuscript submissions

20 November 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/218137

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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