

Special Issue

CFD Modelling of Turbulent Free Surface Flows

Message from the Guest Editors

Computation of free surfaces is very complex because of the continuous change in the location of fluid particles. This Special Edition aims to highlight research on improvements in special methods developed for the computation of free surface flows. Although the Modelling of Turbulent Free Surface Flows has been an extensively studied issue for a very long time and many answers have been found, a huge number of problems are still open, and a number of new interesting numerical techniques are constantly emerging contributing to ever-more accurately simulating Turbulent Free Surface Flows. This can include research studies on the capillary and wetting phenomena in free surface flows, geophysical free surface flows (rivers, lakes, glaciers, and ocean), hydraulic jumps, diffraction of water waves induced by fluid structure interaction, sloshing dynamics and vortical structures. This Special Issue aims to gather original research, review, and state-of-the-art articles focused on modelling the free surface flows following numerical approaches.

Keywords: free surface flows; computational methods; waves; fluid structure interaction; hydraulic jumps; diffraction

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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