Special Issue

River Channel Hydraulics, Fluvial Dynamics and Re-Opening Floodplains

Message from the Guest Editor

The modelling of open channel flows and sediment transport involves modelling the flow at the floodplain areas covered with dwellings, vegetation; furthermore, the model should include longitudinal and transversal hydraulic structures such as flood levees, bed drops and weirs, etc. In many cases, these situations require special modelling techniques and/or the adaptation of standard one- or two-dimensional (1D, 2D) flow models.

This Special Issue welcomes the submission of research on experimental, numerical, or field applications, as well as research on the following topics:

Special techniques in open channel–floodplain modelling;
Modelling of hydraulic structures on streams, both longitudinal and transversal;
2D modeling and hydraulic characteristics (roughness, obstacles, etc.);
Approaches at re-connecting rivers to floodplains;
Special hydraulic issues, such as flow regime transitions, hydraulic jump, boundary layers, etc;
Modelling combined pressurized and free surface flow;
Measurements at streams, providing data for model calibration;
Sediment transport modelling.

Guest Editor

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Message from the Editor-in-Chief

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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