

Special Issue

Fluvial Hydraulics Affected by River Ice and Hydraulic Structures

Message from the Guest Editor

In winter, river ice forms when the water temperature declines to freezing. The formation of ice cover in rivers is an important phenomenon that affects fluvial hydraulics compared to that under open flow conditions. As a consequence, the winter operation of ice-covered rivers has to be changed. In the past 30 years, with the growing interest in fluvial hydraulics under ice-covered flow conditions, some progress has been made. Some cutting-edge research on all aspects of fluvial hydraulics under ice-covered flow conditions has been published. However, a more comprehensive understanding of the impact of ice cover on fluvial hydraulics is required. This Special Issue calls for renewed contributions that improve knowledge of this theme, including but not limited to the impacts of ice cover/jam on sediment transport and local scour/deformation of the riverbed. Research works regarding the effects of river ice on the operation of hydropower plants and channel navigation are welcome. Contributions regarding the impacts of ice cover on environmental and aquatic systems will be also included.

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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