Special Issue

Transient Flows: Mathematical Models, Laboratory Tests, Protection Elements and Systems

Message from the Guest Editor

Transient flows represent a field of research that has advanced greatly in the last few decades. However, there are still many aspects of transient flows that require further research. Transient flows result from sudden changes in flow conditions in pipeline systems because of planned or accidental maneuvers. Failures related to the effects of transient flows can lead to major accidents and significant damage to pipeline systems. At present, transient flows analysis is a fundamental part of the design of fluid systems. In recent years, considerable progress has been made due to developments in computer science, numerical models, and novel analysis techniques. This Special Issue focuses on all advancements related to transient flows, mathematical simulations, new analysis techniques, computational fluid dynamics (CFD), laboratory tests, protection elements and systems against water hammer, innovative strategies for controlling water hammer, hydraulic transients with entrapped air, hydraulic transients with water column separation, the consequences and risks of hydraulic transients, etc. This Special Issue aims to collect novel research related to transient flows in any subject.

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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