

Special Issue

Hydraulic and Transient Performances of Pumped-Storage Units

Message from the Guest Editor

Pumped-storage units have gradually become the focus in the hydropower field owing to their importance to sustainable development and the utilization of clean and renewable energy. As the most complex variety of hydraulic machinery, reversible pumped-storage units display significant hydraulic instability and transient characteristics, which has attracted significant interest in the hydropower field. This Special Issue will cover a wide range of disciplines as follows:

- Hydraulic stability of pumped-storage unit including hump, S-shape characteristic and pressure fluctuations etc.;
- Transient characteristics of pumped-storage unit using numerical and experimental methods;
- Hydraulic loss and energy conversion mechanism of pumped-storage unit;
- Water hammer and water column separation in pumped-storage hydraulic system;
- Flow characteristics and control of pumped-storage unit using numerical and experimental methods;
- Flow-induced vibrations of pumped-storage unit using numerical and experimental methods[...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/water/special_issues/K544HPJ607

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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