

Special Issue

Design and Optimization of Fluid Machinery, 2nd Edition

Message from the Guest Editors

Fluid machinery refers to fluid as the working medium for energy conversion machinery. With the emergence of artificial intelligence, machine learning, and various advanced optimization algorithms, the design and optimization of fluid machinery has re-emerged in the research community. In particular, with the help of CFD technology, people can observe the abnormal flow phenomenon in fluid machinery more intuitively and achieve rapid design and automatic optimization of fluid machinery structures by setting different optimization objectives. Potential topics include but are not limited to the following:

Design and optimization of fluid machinery;
Cavitation performance and its control;
Numerical simulation of transient flow and instabilities;
Flow-induced vibration in fluid machinery;
Advanced optimization algorithm;
Application of artificial intelligence and machine learning in optimization;
Innovative technologies for flow control;
Suppression of unsteady flow.

Guest Editors

Dr. Leilei Ji

Prof. Dr. Ramesh Agarwal

Dr. Yang Yang

Deadline for manuscript submissions

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Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

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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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR
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