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Design and Optimization of Fluid Machinery

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Deadline for manuscript submissions:
closed (20 March 2024)

Message from the Guest Editors

Dear Colleagues,

Fluid machinery refers to fluid as the working medium for energy conversion machinery. Due to the wide application range, diverse applicable environment, and complex structure of fluid machinery, it is difficult to meet the changeable operating conditions through a fixed structure. Therefore, to maximize the structural performance of fluid machinery, it is necessary to optimize the structural parameters of fluid machinery on the basis of fully understanding the internal flow law of fluid machinery.

This Special Issue seeks high-quality original research focusing on the latest novel advances regarding the design and optimization of fluid machinery.

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.

Dr. Leilei Ji
Prof. Dr. Ramesh Agarwal

Guest Editors

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Special Issue

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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.

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