Special Issue

Recent Advances in Hydraulic Machinery and Its Application in Marine Engineering

Message from the Guest Editors

As an important branch of hydraulic machinery, ocean fluid machinery plays an indispensable role in the development of marine resources and the construction of marine engineering. A thorough exploration of the internal flow state of ocean fluid machinery has significant academic value and practical implications.

- Advances in numerical simulation and experimental techniques for analyzing internal flows in marine hydraulic machinery.
- Insight into the complex flow patterns and turbulence characteristics within marine pumps, turbines, and other related equipment.
- Investigations into the influence of internal flow mechanisms on the performance, efficiency, and reliability of marine fluid machinery.
- Innovations in design optimization and material selection to enhance the internal flow characteristics and overall performance of marine fluid machinery.
- Studies on the interaction between internal flows and structural dynamics in marine fluid machinery, and its impact on operational stability and safety.
- Cross-disciplinary approaches that integrate fluid dynamics, mechanical engineering, and materials science to address challenges in marine fluid machinery design and operation.

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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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