Special Issue

Optimization Design and Simulation Analysis of Hydraulic Turbine

Message from the Guest Editors

This Issue aims to present and disseminate the latest advances in the theory, design, simulation, experimentation, operation, adjustment, and innovation of hydraulic turbines. The following explorations are warmly welcomed: novel turbine designs that address emerging engineering challenges; the enhancement of hydraulic performance, structural functionality, and operational stability; advanced design and optimization methods; turbine regulation; condition monitoring and fault diagnosis; and the development and application of variable-speed turbines and reversible turbines. Other recent research directions related to hydraulic turbines are also welcomed, such as the combination of machine learning and computational fluid dynamics, the spatiotemporal evolution of cavitation and sediment erosion, the intelligent control and automation of turbine regulation, novel materials and manufacturing processes, and development of eco-friendly turbines etc. All submissions should aim to enrich the relevant theories, contribute to achieving efficient and stable hydropower generation, and promote the development of clean energy and economic growth, while also improving ecological sustainability.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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