

Special Issue

Advanced in Simulation and Applications of High-Performance Turbomachinery

Message from the Guest Editors

Turbomachinery plays a pivotal role in various energy-related sectors, from power generation and aerospace to automotive industries. In the context of the current energy transition, the optimization of turbomachinery components, including compressors, turbines, and pumps, holds high strategic significance. This optimization is indispensable for bolstering energy efficiency and safeguarding environmental sustainability. Computational fluid dynamics (CFD) simulations have become indispensable in analyzing, designing, and optimizing turbomachinery systems. Gas turbines, steam turbines, wind turbines, thermal dynamics, combustion, and compressors represent integral aspects within this Special Issue, given their substantial contributions to energy generation and utilization. This Special Issue aims to foster discussions, share insights, and promote collaboration among academia, industry, and research institutions in advancing energy-focused turbomachinery simulations.

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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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