

Special Issue

The Numerical Simulation of Fluid Flow

Message from the Guest Editors

Almost every energy production process involves fluid flow. This ranges from the most obvious, like air through wind turbine blades or fuel flow in an internal combustion engine, to a secondary though still essential role like lubrication in a mechanical power transmission hub. This Special Issue aims to focus on the practical application of available methodologies and models rather than the presentation of new numerical methods. Topics of interest include, but are limited to:

- Simulation of turbomachinery performance;
- Aerodynamics;
- Compressible flow: compressors, turbochargers, steam turbines, ejectors, etc.;
- Fluid flow in complex geometries: valves, pumps, motors, actuators, etc.;
- Multiphase flows: open channels (flumes, weirs, etc.), cavitation, bubbles, mist, annular flows, etc.;
- Air flow in wind turbines, buildings, etc.;
- HVAC (heating, ventilation, and air conditioning);
- Passive and active control of boundary layer detachment;
- Computational aeroacoustics;
- Microfluidics;
- Tribology.

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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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