

## Special Issue

# Numerical Simulation Techniques for Fluid Flows and Heat Transfer

### Message from the Guest Editor

This issue aims to present the latest research in the field of numerical methods related to the modelling of incompressible and compressible flows in which heat transfer processes occur, among others, as a result of phase changes or fuel combustion. It invites contributions from all researchers, academics, and industry practitioners engaged in the realm of computational fluid dynamics (CFD) and heat transfer. The purpose of this Special Issue is to present innovative solutions, novel algorithms, and simulation methodologies that will expand the knowledge in the field of energy conversion that occurs under the influence of fluid flow and heat transfer. Potential topics for submission include, but are not limited to:

- Numerical modelling of the flow in turbomachinery;
- Combustion modelling and simulation;
- Flow modelling in heat exchangers;
- Multiphase flow modelling;
- Conjugate heat transfer modelling;
- Applications of AI in fluid-flow and heat transfer simulations.

We eagerly anticipate your valuable contributions to this Special Issue, offering a platform for sharing knowledge and exchanging ideas of numerical simulation techniques for fluid flows and heat transfer.

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### Guest Editor

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### Deadline for manuscript submissions

15 September 2025



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## About the Journal

### Message from the Editor-in-Chief

*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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### Editor-in-Chief

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