



## Numerical Simulation Techniques for Fluid Flows and Heat Transfer

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Deadline for manuscript  
submissions:

**closed (15 September 2025)**

### 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:

1. Numerical modelling of the flow in turbomachinery;
2. Combustion modelling and simulation;
3. Flow modelling in heat exchangers;
4. Multiphase flow modelling;
5. Conjugate heat transfer modelling;
6. 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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## Editor-in-Chief

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## Message from the Editor-in-Chief

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