

# Special Issue

## Computational Modelling and Artificial Intelligence in Biomedical Fluid Mechanics

### Message from the Guest Editor

Cardiovascular diseases (CVDs) are a leading cause of death in many countries. Computational modelling in biomedical fluid mechanics research enables a better understanding of the progression of CVDs and the specific markers that may indicate these diseases in patients. Computational methods have been employed across two decades, but recent developments in Artificial Intelligence (AI) and machine learning may significantly enhance the use and predictive power of these computational methods. This Special Issue welcomes articles dealing with the development of patient-specific models for CVD, computational fluid dynamics modelling of CVDs, machine learning techniques for the identification of specific markers and hidden variables that are early indicators of disease development, and integrative approaches that use patient data from imaging (e.g., CT scanning and MRI) and simulation outputs to support clinicians' diagnosis and surgical intervention decision making.

### Guest Editor

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### Deadline for manuscript submissions

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## Mathematics

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### Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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