



Computational Fluid Dynamics II

Guest Editors:

Dr. Mostafa Safdari Shadloo

CORIA UMR 6614, Normandie
University, F-76000 Rouen,
France

**Prof. Dr. Mohammad Mehdi
Rashidi**

Institute of Fundamental and
Frontier Sciences, University of
Electronic Science and
Technology of China, Chengdu
610054, China

Dr. Alessio Alexiadis

School of Chemical Engineering,
University of Birmingham,
Birmingham B15 2TT, UK

Deadline for manuscript
submissions:

closed (31 December 2024)

Message from the Guest Editors

This Special Issue focuses on computational fluid dynamics (CFD) research with an emphasis on its recent advancements and its use in many industrial/academic applications. Papers ranging from new physical modeling and discoveries to the correct treatment of difficulties inherent in numerical modeling of fluid flow systems are invited for submission. These include, but are not limited to, the following areas: (i) correctly and effectively modelling physical boundary conditions; (ii) mass and energy conservation (iii) realistically treating complicated physical phenomena; (iv) extendibility to dealing with more multiphysics phenomena, such as magnetohydrodynamics (MHD), electrohydrodynamics (EHD), non-Newtonian flows, phase changes, nano-fluids, etc.; and (v) the extension of the aforementioned methodologies to three-dimensional modeling and massively parallel computing in order to handle real-life problems is of particular interest. This Special Issue also welcomes related novel inter-/multi-disciplinary works in the emerging area of mechanical and chemical processes and energy engineering.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)