



Computational Fluid Dynamics: Modeling and Industrial Applications

Guest Editors:

Dr. Joel Guerrero

Department of Civil, Chemical, and Environmental Engineering (DICCA), University of Genoa, Via Montallegro 1, 16145 Genoa, Italy

Dr. Ping-Chen Wu

Department of Systems and Naval Mechatronic Engineering, National Cheng Kung University, No. 1, Daxue Road, East District, Tainan City 701, Taiwan

Dr. Eleni Douvi

Mechanical and Aeronautical Engineer, University of Patras, University Camp, 26504 Patra, Greece

Deadline for manuscript submissions:

31 March 2025

Message from the Guest Editors

Dear Colleagues,

Computational fluid dynamics (CFD) is an essential and rapidly growing branch of fluid mechanics that relies on numerical methods and high-performance computing to simulate the flow of liquids and gases. The simulation of fluid flows requires advanced numerical schemes and algorithms to solve these equations accurately and efficiently. These numerical techniques enable the simulation of complex fluid flows with high accuracy and efficiency using modern high-performance computers. CFD has numerous applications across diverse industries, such as aerospace engineering, automotive engineering, mechanical engineering, and electronics manufacturing.

This Special Issue aims to showcase the latest research and applications in this rapidly progressing field, providing a valuable resource for researchers, engineers, and students interested in CFD and its industrial applications.





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)