

# Special Issue

## Advances in Numerical Model and Methods for Magnetic Fluids

### Message from the Guest Editors

In the last few decades, magnetic fluids have become an area of broad interest, since these are new materials that open possibilities for their use in different areas. It is essential to know their magnetic and thermal properties and their behavior in case of exposure to external magnetic fields and exposure to different ambient temperatures. We are searching for papers on original approaches based on modern numerical and optimization techniques used to develop magnetic fluids models that are as realistic as possible.

Experimental support is desirable but not necessary. In addition, magnetic fluid models and their applications in engineering, medicine, etc., where the fusion of mathematics (numerical models) and computation (numerical methods) stimulate progress in magnetic fluid research, are also welcome. Practical applications that involve optimization methods adapted for use in the case of magnetic fluids to achieve better design results or characteristics are also welcome.

### Guest Editors

Dr. Marko Jesenik

Faculty of Electrical Engineering and Computer Science, University of Maribor, Maribor, Slovenia

Dr. Mislav Trbušić

Faculty of Electrical Engineering and Computer Science, University of Maribor, Maribor, Slovenia

### Deadline for manuscript submissions

closed (30 November 2024)



## Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/161149](https://mdpi.com/si/161149)

*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)





# Mathematics

---

an Open Access Journal  
by MDPI

---

**Impact Factor 2.2**  
**CiteScore 4.6**



[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,  
The Gateway, Leicester LE1 9BH, UK

---

### Author Benefits

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).