

# Special Issue

## Advanced Computational Methods in Mechanics and Engineering

### Message from the Guest Editor

The use of numerical and computational methods plays an important role in enhancing the design and performance of engineered structures and systems.

This Special Issue on “Advanced Computational Methods in Mechanics and Engineering” aims to showcase the latest advancements and applications of computational techniques in various fields of mechanics and engineering. Topics of interest include, but are not limited to

- Advanced numerical methods for mechanical and engineering problems;
- Applying mathematical models in mechanical and engineering;
- Boundary element methods in computational mechanics;
- Differential equations and calculations in engineering problems;
- Modeling and numerical experiments in structural and civil engineering;
- Real and complex analysis for mechanical and engineering problems;
- Computational solutions for coupled problems;
- Optimization methods for engineering problems;
- Deep machine learning applications in computational mechanics;
- Structural dynamics and vibration analysis.

### Guest Editor

Prof. Dr. Arnulfo Luévanos-Rojas

Instituto de Investigaciones Multidisciplinaria, Universidad Autónoma de Coahuila, Torreón 27000, Coahuila, Mexico

### Deadline for manuscript submissions

closed (31 July 2024)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/188832](https://mdpi.com/si/188832)

*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).