

# Special Issue

## Finite Element Modeling in Mechanical Systems

### Message from the Guest Editors

The aim of this Special Issue is to provide an opportunity for international researchers to share and review recent advances used in finite element modeling in computational friction contact mechanics. Numerical modeling presents many challenges in mathematics, mechanical engineering, computer science, computers, etc. The finite element method applied in solid mechanics was designed by engineers with the idea of being able to simulate numerical models in order to reduce the design costs for prototypes, tests and measurements. The method was initially validated only by measurements, but which gave encouraging results. After the discovery of the Sobolev spaces, the results mentioned above were obtained, and today, numerous researchers are working on improving this method.

Some of the method's application fields in the domain of mechanics of the solid include mechanical engineering, machine and device design, civil engineering, aerospace and automotive engineering, robotics, etc...

---

### Guest Editors

Prof. Dr. Nicolae Pop

Prof. Dr. Marin Marin

Prof. Dr. Sorin Vlas

---

### Deadline for manuscript submissions

closed (30 June 2024)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/159485](https://mdpi.com/si/159485)

*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).