

# Special Issue

## Mathematical Biology: Modeling, Analysis, and Simulations, 2nd Edition

### Message from the Guest Editor

Mathematical biology has been an area of wide interest in recent decades, since the modeling of complicated biological processes became able to create analytical and computational approaches to many different bio-inspired problems, coming from different branches such as population dynamics, molecular dynamics in cells, neuronal and heart diseases, the cardiovascular system, genetics, etc. Mathematical and computer science have come to work interactively to contribute to the better understanding of the biological phenomena. We seek papers on insightful approaches to treat the basic relationships between species in population dynamics and implementations of many species interactions in complex networks to model natural ecosystems. Further, any other kind of models and their applications in neuroscience, genetics, cellular and molecular dynamics, heart diseases, etc. and where the fusion of mathematics and computation help in the progress in biological problems are welcome.

### Guest Editor

Prof. Dr. Ricardo Lopez-Ruiz

Department of Computer Science and Systems Engineering, Faculty of Science, University of Zaragoza, 50009 Zaragoza, Spain

### Deadline for manuscript submissions

closed (31 December 2023)



## Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/102384](https://mdpi.com/si/102384)

*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).