

Special Issue

Mathematical Modeling and Data Science for Biology and Medicine

Message from the Guest Editor

This Special Issue is intended to be an attempt to reach these still mysterious matters observed in living things from mathematics. Here is a list of examples of biological questions to which a new mathematical approach is expected. New concepts, models, analysis, predictions, and applications are welcome. - Biological reactions caused by several interactions of stimulations; - Analysis of the multisensing effect in multi-scale biological events; - Communications between heterogeneous cells, reactions to organs, and their interactions; - Biological homeostasis through a reaction network and its breakdown; - The role of the microenvironment in the malignancy of cancer cells; - Mathematical modeling of signal transmission, cross-talks of signals inside and outside cells; - Data science methods to detect biological mechanisms, and applications; - New diagnosis and therapy using mathematical methods; - New mathematical concepts motivated by bio/medical events with applications; - Dealing with social data of healthcare and decease to construct mathematical models for predictions.

Guest Editor

Prof. Dr. Takashi Suzuki

Center for Mathematical Modeling and Data Science, Osaka University,
Osaka 560-8531, Japan

Deadline for manuscript submissions

15 April 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.0



mdpi.com/si/97743

Mathematics
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

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





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.0



[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 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).