

CALL FOR PAPERS

Bulletin of Biomathematics

Special Issue on *Mathematical and Data-Driven Approaches in Biological Systems*

The *Bulletin of Biomathematics* is delighted to announce a forthcoming Special Issue entitled *Mathematical and Data-Driven Approaches in Biological Systems*. This issue will feature selected high-quality contributions presented at the **International Conference on Mathematics, Data Science and Applications (ICMADS'25)** which will be held between August 29-31, 2025 at Necmettin Erbakan University, Konya, Türkiye.

Biological systems are complex, nonlinear, and dynamic in nature, and their study increasingly requires the integration of mathematical models and data-driven methodologies. Advances in computational techniques, machine learning, and statistical modeling are enabling new insights into processes ranging from molecular interactions and cellular signaling to population dynamics and ecosystem behavior. This Special Issue will provide a dedicated platform for showcasing recent developments in these directions, fostering cross-disciplinary dialogue between mathematicians, data scientists, and biologists.

This Special Issue aims to bring together contributions that not only advance theoretical and methodological frameworks but also demonstrate practical applications to real-world biological challenges. By uniting mathematics and data science with life sciences, we hope to stimulate innovative research directions and encourage collaboration across disciplines.

Topics of Interest include (but not limited to)

We welcome original research articles, methodological papers, and comprehensive reviews. Topics include, but are not limited to:

- Mathematical and computational modeling of biological and biomedical systems
- Dynamical systems, bifurcation theory, and stability analysis in biology
- Stochastic models, statistical methods, and uncertainty quantification
- Network theory and graph-based models in neuroscience, epidemiology, and systems biology
- Machine learning, artificial intelligence, and big data applications in life sciences

- Inverse problems, parameter estimation, and data assimilation in biological contexts
- Applications to epidemiology, disease modeling, population biology, and ecological systems

Important Dates

- **Submission Deadline:** 31 December 2025
- **Peer Review & Revision:** September 2025 – April 2026
- **Publication of Special Issue:** June 2026

Special Issue Guest Editors

- **Prof. Dr. Jesus M. Munoz-Pacheco**
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Submission Guidelines

- Only original contributions presented at ICMADS'25 will be considered.
- All submissions will undergo a rigorous peer-review process according to the journal's standards.
- Manuscripts should be submitted via the journal's online system by selecting the section as "**Special Issue – ICMADS'25**".

Submission Link:

<https://dergipark.org.tr/en/journal/4527/submission/step/manuscript/new>