# **Special Issue**

# Theory and Application of Difference and Differential Equations in Life Sciences

## Message from the Guest Editors

Difference and differential equations have been applied in a wide range of fields including physics, chemistry, biology, ecology, epidemiology, economics, engineering, electronics, neural networks, and many other real-world fields. This Special Issue invites papers on innovative proposals of theory and the application of difference and differential equations in the life sciences. We encourage submissions that highlight the interplay between theoretical foundations and real-world applications, fostering a deeper understanding of complex phenomena in the life sciences. The scope of this Special Issue includes, but is not limited to, the following topics:

- Models and applications of difference equations;
- The qualitative behaviors of differential equations;
- Deterministic and stochastic population ecology;
- The stability and control of complex networks;
- The modeling and prevention of infectious diseases

### **Guest Editors**

Prof. Dr. Chunrui Zhang

Prof. Dr. Ming Liu

Dr. Xiaofeng Xu

### Deadline for manuscript submissions

31 January 2026



# **Mathematics**

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## **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

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