

# Special Issue

## Dynamics and Differential Equations in Mathematical Biology

### Message from the Guest Editor

The first half of the 20th century can be seen as a golden age for the use of differential equations in the modeling of phenomena arising from the life sciences. At the same time, the research on the qualitative properties of the solutions of differential equations biologically oriented has stimulated the development of new mathematical concepts and theories. Some ideas in chaos theory were suggested using models inspired in biology. In addition, several conjectures (solved and unsolved) of mathematical interest arise from equations describing a biological phenomenon, such as the Wright conjecture.

This Special Issue focuses on the virtuous and endless encounters among modeling of natural phenomena, the theoretical questions arising from these models and the development of new concepts and theories.

Contributions are invited from those working in the mathematical modeling of biological phenomena using differential equations (partial, ordinary, delay or impulsive) and those who are interested in the development of the qualitative theory inspired by biologically oriented models.

We look forward to receiving your submissions.

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### Guest Editor

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### Deadline for manuscript submissions

closed (31 January 2025)



## Mathematics

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### 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.

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### Editor-in-Chief

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