Special Issue

Mathematical Modeling and Analysis of Problems in Ecology, Epidemiology and Oncology

Message from the Guest Editors

Mathematical models play pivotal roles in understanding the complex dynamical interactions between biological populations, infectious disease outbreaks, and cancer therapies. Understanding the mechanism of action of these biological interactions will help to develop effective therapeutic regimens, preventing population extinction, and controlling infectious disease outbreaks. This Special Issue aims to provide a forum for exchanging ideas and tools among scientists in various areas of mathematical biology. We invite original and review papers dedicated to the analysis and applications of dynamical systems derived from population biology, epidemiology, and oncology. Potential contributions may include but are not limited to:

- Derivations of new mathematical and computational models in ecology, epidemiology, and oncology;
- Qualitative or quantitative analysis of the models arising from mathematical biology;
- Numerical investigations of mathematical models with clinical, experimental, or field data;
- Review articles or survey of mathematical tools in the study of mathematical biology.

Guest Editors

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Deadline for manuscript submissions

closed (31 August 2024)

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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.

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