Special Issue

Computational Modelling and Analytical Framework for Medical Applications

Message from the Guest Editors

The Special Issue "Computational Modelling and Analytical Framework for Medical Applications" aims to summarize recent developments and trends in computational modeling and analytical frameworks for medical applications. The scope of this Special Issue covers the application of mathematical, computational, and statistical methods in order to understand and predict medical processes, develop new medical technologies, diagnose and treat diseases, and analyze medical data. It will provide a platform for interdisciplinary exchange between mathematicians, computer scientists, medical researchers, and engineers working in this field. The Special Issue will cover a wide range of topics including, but not limited to, the following:

- Medical image analysis and processing;
- Statistical learning for medical data analysis;
- Parameter identification for deterministic and stochastic systems;
- Medical device design and optimization;
- Predictive and personalized medicine;
- Medical decision-making and diagnosis;
- Simulation of medical procedures and treatments;
- Applications of machine learning and artificial intelligence in medicine;
- Big data analysis in medical research.

Guest Editors

Dr. Dumitru Trucu
Division of Mathematics, University of Dundee, Dundee DD1 4HN, UK

Prof. Dr. Raluca Eftimie
Department of Mathematics, University of Dundee, Dundee DD1 4HN, UK

Deadline for manuscript submissions

closed (30 September 2024)

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 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).