Special Issue

Modeling and Optimization of Complex Systems

Message from the Guest Editor

Complex systems are present in a wide range of domains, including manufacturing, transportation, communication networks, energy systems, logistics, biological processes, and socio-economic systems. These systems are often characterized by large scale. dynamic behavior, interdependencies, and uncertainty, making their modeling, analysis, and optimization particularly challenging. The aim of this Special Issue is to bring together recent advances in mathematical modeling, simulation, and optimization of complex systems, with an emphasis on approaches that can address real-world complexity and support decisionmaking. Contributions may focus on the development of novel mathematical frameworks, computational techniques, and optimization strategies, as well as on innovative applications in engineering, industry, and science. We welcome original research articles, review papers, and short communications that contribute to advancing the theory, methodology, and applications of modeling and optimization for complex systems. Applications across engineering, transportation, logistics, energy, telecommunications, and interdisciplinary domains are particularly encouraged.

Guest Editor

Dr. Smain Femmam

Networks & Communication Department, University Haute Alsace (UHA), Mulhouse, France

Deadline for manuscript submissions

30 April 2026



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/250773

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

mdpi.com/journal/mathematics





Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



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).

