

Special Issue

Mathematical Problems in Chemical Physics

Message from the Guest Editors

Chemical Physics offers the most fundamental view and employs the most fundamental investigation methods for investigation of the processes involving chemical transformations as well of the physical and chemical structure of matter. Many problems emerging in this field require application of versatile mathematical apparatus. This Special Issue aims to publish high-quality papers using mathematical methods to investigate various problems of Chemical Physics. Particular topics of interest include, but not limited to:

- chemical kinetics and catalysis
- reaction-diffusion systems
- chemically reacting flows
- chemistry of condensed matter
- nanomaterials in chemical physics
- instabilities, bifurcations, and deterministic chaos in chemically reacting systems
- purely mathematical investigations in mathematical methods related to chemical physics

An additional driving objective of the Special Issue is to identify mathematical problems that are important for progress but have not yet received the deserved attention from the mathematical community. The Editor will consider both theoretical and computational papers contributing to the Special Issue.

Guest Editors

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Deadline for manuscript submissions

31 December 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/139213

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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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Author Benefits

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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).