

Special Issue

Advanced Mathematical Programming and Applications in Operations Research

Message from the Guest Editor

Advanced mathematical programming plays a critical role in solving complex decision-making and optimization challenges within operations research. This field encompasses a wide range of methods, including linear and nonlinear programming, integer programming, and stochastic models, that are used to address real-world problems across various sectors such as supply chain management, finance, and transportation. Recent advancements in computational tools and algorithms have enabled the development of more sophisticated models that can handle larger datasets, dynamic environments, and multi-objective scenarios. In particular, hybrid approaches that combine mathematical programming techniques with data mining, machine learning, and heuristic methods have shown great promise in improving solution quality and decision efficiency. We invite researchers and practitioners to submit original research that explores the development, application, and theoretical contributions of advanced mathematical programming in operations research. Submissions showcasing practical implementations and case studies that solve real-world problems are highly encouraged.

Guest Editor

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Deadline for manuscript submissions

20 February 2026



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/220694

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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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