

# Special Issue

## Numerical Optimization: Algorithms and Applications

### Message from the Guest Editor

Optimization has a wide range of uses in science, engineering, economics, and industry. The practice of optimization depends not only on efficient and robust algorithms but also on good modeling techniques, careful interpretation of results and user-friendly software. The development and improvement of optimization techniques are of great significance for the study of corresponding science problems. The aim of this Special Issue is to report on the latest achievements and recent development in the algorithms and applications for optimization problems, including in largescale optimization techniques such as interior-point methods, inexact Newton methods, limited-memory methods and some numerical optimizations that are not limited. This Special Issue will collect high-quality original research articles as well as review articles in the above scope.

### Guest Editor

Dr. Xinguang Zhang

1. School of Mathematics and Information Sciences, Yantai University, Yantai 264005, China
2. Department of Mathematics and Statistics, Curtin University, Perth, WA 6845, Australia

### Deadline for manuscript submissions

31 August 2026



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/227789](https://mdpi.com/si/227789)

*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)





# Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)



## 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 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).