

Special Issue

Numerical and Evolutionary Optimization

Message from the Guest Editors

The development of powerful search and optimization techniques is of great importance in science and engineering, particularly in today's world, which requires researchers and practitioners to tackle a variety of challenging real-world problems as technology becomes an ever-more-important aspect of everyday life. There are two well-established and widely-known fields that are addressing these issues: (i) traditional numerical optimization techniques and (ii) comparatively recent bio-inspired heuristics. Both of these fields have developed approaches with their unique strengths and weaknesses, allowing them to solve some challenging problems while sometimes failing in others. The aim of this SI is to collect papers on the intersection of numerical and evolutionary optimization. We strongly encourage the development of fast and reliable hybrid methods, that maximize the strengths and minimize the weaknesses of each underlying paradigm, while also being applicable to a broader class of problems. Moreover, this SI fosters the understanding and adequate treatment of real-world problems, particularly in emerging fields, such as health care and smart cities, among many others.

Guest Editors

Dr. Adriana Lara

Dr. Marcela Quiroz-Castellanos

Dr. Efrén Mezura-Montes

Prof. Dr. Oliver Schütze

Deadline for manuscript submissions

closed (31 July 2019)



Mathematical and Computational Applications

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.8



mdpi.com/si/14064

*Mathematical and
Computational Applications*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mca@mdpi.com

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





Mathematical and Computational Applications

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.8



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



About the Journal

Message from the Editorial Board

Mathematical and Computational Applications (MCA) is devoted to the dissemination of original research in the field of engineering, natural sciences and social sciences where mathematical and/or computational techniques are necessary for solving specific problems. The aim of the journal is to provide a medium by which a wide range of experience can be exchanged among researchers from diverse fields such as engineering (electrical, mechanical, civil, industrial, aeronautical, nuclear, etc.), natural sciences (physics, mathematics, chemistry, biology, etc.) and social sciences (administrative sciences, economics, political sciences, etc.).

Editors-in-Chief

Prof. Dr. Oliver Schütze

Departamento de Computacion, Cinvestav, Mexico City 07360, Mexico

Prof. Dr. Gianluigi Rozza

SISSA MathLab, International School for Advanced Studies, Office A-435, Via Bonomea 265, 34136 Trieste, Italy

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q2 (Mathematics, Interdisciplinary Applications) /
CiteScore - Q2 (Applied Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 24.9 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).