

Special Issue

Mathematical Model and Numerical Method in Advanced Geotechnical Engineering and Geomechanics

Message from the Guest Editors

Basic and advanced mathematics are usually necessary in civil engineering and other complex scientific fields. There would be no bridges, tunnels, roads, buildings, dams, or most mechanical things if mathematics had not been used to establish principles, compute measurements and limits, investigate variants, prove concepts, etc. In reality, mathematics is required for almost all numerical methods, software, and design principles. More importantly, the preliminary design process makes extensive use of the concepts that mathematics has fundamentally established. Mathematics will undoubtedly continue to be employed throughout the centuries and into the future. This Special Issue is primarily interested in works that provide new mathematical modellings, new applications, or a mix of both that advance the understanding of real-world problems. Papers using the presently available numerical techniques must show substantial innovation in the resolution of real-world issues. Papers addressing novel mathematical techniques for the analysis of soil–structure interaction are especially encouraged.

Guest Editors

Dr. Tuan A. Pham

School of Energy, Geoscience, Infrastructure and Society, Heriot-Watt University, Edinburgh EH14 4AS, UK

Prof. Dr. Daniel Dias

Geotechnical Engineering, Grenoble Alpes University, 38400 Grenoble, France

Deadline for manuscript submissions

closed (15 August 2024)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.0



mdpi.com/si/161818

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

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





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.0



[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 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).