Special Issue

Advances in Computational Solid Mechanics and Scientific Computing

Message from the Guest Editors

Conducting experiments is generally quite complicated and expensive; therefore, the development of appropriate mathematical models and their solutions for the study of the static and dynamic behavior of civil, mechanical, and other engineering structures is significant concerning their applications. These problems are generally governed by linear/nonlinear differential equations which are not always possible to solve analytically. This deficiency compels us to search for various numerical/computational/artificial intelligence methods for understanding the behaviors of the said structural systems. In view of the above, the purpose of this Special Issue is to provide computationally efficient methods to investigate the static (bending) and dynamical behaviors (vibration, buckling) of various structures in general. The Special Issue will cover various advanced problems arising in the study of the static and dynamical behaviors of the nano, FG, and nano-FG structures considering various boundary conditions, existing and new higher-order shear deformation theories, complicating effects, non-classical continuum theories, as well as with material or geometrical uncertainties.

Guest Editors

Dr. Subrat Kumar Jena

Prof. Dr. Snehashish Chakraverty

Prof. Dr. Dineshkumar Harursampath

Dr. Francesco Tornabene

Deadline for manuscript submissions

closed (15 July 2024)

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

mdpi.com/si/141460

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

mdpi.com/journal/mathematics

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

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 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).

MDPI