Mathematical Modelling, Nonlinear Optimization, Nondimensionalization and Engineering Applications, 2nd Edition

Guest Editors:

Prof. Dr. Juan Francisco Sánchez-Pérez

Department of Applied Physics and Naval Technology, Technical University of Cartagena, 30203 Cartagena, Spain

Prof. Dr. Gonzalo García Ros

Department of Civil Engineering Department, Technical University of Cartagena, Paseo Alfonso XIII 52, 30203 Cartagena, Spain

Dr. Manuel Conesa

Department of Applied Physics and Naval Technology, Technical University of Cartagena, 30203 Cartagena, Spain

Deadline for manuscript submissions:
31 December 2024

Message from the Guest Editors

Dear Colleagues,

The main objective of this Special Issue is to solve the proposed mathematical model, which comprises complex systems of coupled or non-differential equations that represent the study problem, through novel methodologies, such as the use of dimensional analysis, nondimensionalization, numerical simulation techniques or optimization techniques, among others.

The scope of this Special Issue includes, but is not limited to, the following potential topics:

- Mathematical modeling for science and engineering applications;
- Numerical analysis;
- Mathematical and computational engineering;
- Numerical methods for science and engineering applications;
- Optimization and control in engineering applications;
- Dynamical systems;
- Mathematical physics;
- Analysis of PDEs;
- Classical analysis and ODEs;
- Mathematics in engineering and sciences studies;
- Teaching and assessment methodologies in science and engineering;
- STEM and mathematics education.

Special Issue

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

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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