



## Applied and Computational Mathematics for Digital Environments, 2nd Edition

Guest Editor:

**Prof. Dr. Liliya Demidova**

Institute of Informational  
Technologies, Federal State  
Budget Educational Institution of  
Higher Education, MIREA—  
Russian Technological University,  
78, Vernadsky Avenue, 119454  
Moscow, Russia

Deadline for manuscript  
submissions:  
**closed (5 January 2024)**

### Message from the Guest Editor

Dear Colleagues,

This Special Issue covers optimizing real-world study and modeling using intelligent software and hardware based on math principles and modules. It presents practical implementations for software applications in "Industry 4.0" digital environments and considers scientific research and applied engineering tasks in the following areas:

- Building mathematical, structural, and information models of intelligent computer systems for monitoring and managing the parameters of digital environments;
- Software and mathematical technologies in the implementation of the intelligent monitoring and computer control of digital environments' parameters;
- Application of mathematical models, Internet of Things technologies, machine learning, and artificial intelligence for big data analysis of digital environments;
- Mathematical models and algorithms for identifying stable patterns between the parameters of digital environments and their complex and separate influence;
- Mathematical modeling, machine learning, and their implementation within the concept of "smart" digital environments.





## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

**Journal Rank:** JCR - Q1 (*Mathematics*) / CiteScore - Q1 (*General Mathematics*)

## Contact Us

---

*Mathematics* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/mathematics](http://mdpi.com/journal/mathematics)  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)  
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)