# **Special Issue**

# Advanced Numerical and Computational Methods for Engineering and Applied Mathematical Problems, 2nd Edition

# Message from the Guest Editors

This Special Issue, as a follow-up to the successful first edition "Advanced Numerical and Computational Methods for Engineering and Applied Mathematical Problems" aims to publish state-of-the-art fundamental development for these advanced numerical methods, prospective research directions, and applications for engineering and applied mathematical problems. Topics include, but are not limited to, the following topics:

- Meshfree methods:
- Particle methods;
- Machine learning methods;
- Smoothed particle hydrodynamics;
- Peridynamics;
- Material point method;
- Strong-form collocation meshfree methods;
- Stabilized collocation methods:
- Generalized finite difference methods:
- Method of fundamental solutions (MFS):
- Boundary element methods;
- Integration-based meshfree methods;
- Localized radial basis functions methods:
- Characterization and stabilization of numerical instabilities:
- Other advanced numerical methods;
- Applications of meshfree methods, machine learning methods and other numerical methods for different areas.

## **Guest Editors**

Prof. Dr. Lihua Wang

Prof. Dr. Benny Yiu-Chung Hon

Dr. Sheng-Wei Chi

## Deadline for manuscript submissions

31 July 2025



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# **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

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