



New Trends in Mathematical Modeling, Analysis and Optimization for Engineering and Mechanics

Guest Editors:

Dr. Pedro Navas

Department of Continuum
Mechanics and Structures, ETS
Ingenieros de Caminos,
Universidad Politécnica de
Madrid, 28040 Madrid, Spain

Dr. Bo Li

College of Engineering, Peking
University, Beijing 100871, China

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Message from the Guest Editors

Computational modeling has become essential in the engineering field in recent years for necessary analyses for real-life problems. Moreover, optimization techniques have arisen to improve results for several kinds of problems. Finally, in recent years, new techniques such as meshfree methodologies as well as novel finite element methods have emerged to complete a powerful range of tools capable of accurately reproducing the engineering mechanical problems of the 21st century.

This Special Issue focuses on new trends in engineering modeling, including but not limited to:

1. Optimization techniques in computational mechanics;
2. Meshfree techniques applied to engineering;
3. Novel constitutive modeling for engineering materials;
4. Computational analysis for mechanics and engineering;
5. Bio-inspired optimization algorithms for computational modeling;
6. Multiscale material modeling;
7. Multiphase formulations applied to engineering;
8. General new trends in computational mechanics.





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Prof. Dr. Francisco Chiclana
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Leicester LE1 9BH, UK

Message from the Editor-in-Chief

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Mathematics Editorial Office
MDPI, Grosspeteranlage 5
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