

Numerical Algebra, Control and Optimization

Dear Friends and Colleagues,

We would like to cordially invite you to contribute to the following open special issue on the topic of *New Computational Methods for Challenging Engineering Problems*. Please find below further information about this special issue.

We look forward to receiving your contributions.

Journal: Numerical Algebra, Control and Optimization (ESCI, Scopus, ISSN 2155-3289)

Special Issue: “New Computational Methods for Challenging Engineering Problems”

Submission System Opens: December 15, 2021

Paper Submission Deadline: March 15, 2022

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Final Decision: October 31, 2022

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Guest Editors: Necati Özdemir, Gerhard Wilhelm Weber, Burcu Gürbüz, İbrahim Küçükkoç

Special Issue Guidelines: https://www.aims sciences.org/journal/2155-3289/NACO_Guidelines

Submission Link:

https://ef.msp.org/submit_new.php?j=aims_naco&cr=ExcessivelyStrokeUnderstandingExhibited

Description:

The use of heuristic and meta-heuristic algorithms in an artificial way helps effectively solve many challenging real-world problems. In comparison to mathematical models and combinatorial optimization techniques, these algorithms are efficient in terms of the computational times. However, the development of computational technology and artificial intelligence techniques made it possible to get the optimal solutions to many challenging problems. This has triggered the development of new mathematical methods and algorithms, aiding to solve some of the most complicated and hard problems in various engineering fields.

This special issue aims to present new trends in mathematical methods and intelligent algorithms with an emphasis on applied sciences. The topics of the special issue include, but are not limited to:

- Linear and nonlinear programming
- New heuristic and meta-heuristic algorithms
- Multi-objective optimization
- Optimization and control
- Engineering applications of artificial intelligence
- Combinatorial optimization
- Industrial applications of new optimization methods
- Energy systems modelling and optimization
- Fractional calculus and its applications
- Population dynamics and conservation biology

Numerical Algebra, Control and Optimization

- Mathematical biology
- Stability analysis of systems

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