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Call for Papers

Special issue on "Metaheuristics: Recent Advances and Applications"

Guest Editors
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The special issue "*Metaheuristics: Recent Advances and Applications*" of the *International Transactions in Operational Research* (ITOR) will be focused on recent progress in Metaheuristics, covering different aspects from applications to new research challenges. It is open to original contributions from the entire community of academicians and practitioners, as well as to extended and properly revised versions of papers accepted at the *14th Metaheuristics International Conference* (MIC 2022).

Papers covering all aspects of metaheuristic research and applications are welcome, including (but not limited to):

- metaheuristics such as tabu search, simulated annealing, iterated local search, variable neighborhood search, memory-based optimization, dynamic local search, evolutionary algorithms, memetic algorithms, ant colony optimization, variable neighborhood search, particle swarm optimization, scatter search, and path relinking;
- techniques that enhance the usability and increase the potential of metaheuristics;
- empirical and theoretical research in metaheuristics, including large-scale experimental analyses, algorithm comparisons, new experimental methodologies, engineering methodologies for metaheuristic algorithms, search space analysis, and theoretical insights into properties of metaheuristics;
- high-impact and innovative applications of metaheuristics in fields such as bioinformatics, electrical and mechanical engineering, telecommunications, sustainability, business, scheduling and timetabling;
- contributions to the combination of metaheuristics with other techniques;

- contributions to the use of metaheuristics in machine learning and deep learning for finetuning and neural architecture search, and vice versa; and
- challenging applications areas.

Each paper will be peer-reviewed according to the editorial policy of ITOR (http://www3.interscience.wiley.com/journal/118505725/home), published by the International Federation of Operational Research Societies – IFORS. Papers should be original, unpublished, and not currently under consideration for publication elsewhere. Manuscripts should be prepared according to the instructions to authors that can be found on the journal homepage. Authors should upload their contributions using the submission site http://mc.manuscriptcentral.com/itor, indicating in their cover letter that the paper is intended for this special issue and listing the novel contributions considering the related literature.

An important note concerns submissions on metaphor-inspired metaheuristics. The Guest Editors invite authors of manuscripts based on metaphor-inspired metaheuristics (other than well-established ones such as evolutionary algorithms) to use a metaphor-free language. This also facilitates their conceptual comparison to other existing algorithms, as well as highlighting the algorithmic contributions to the literature.

The deadline for submissions is March 15, 2023. Other inquiries should be sent directly to any of the Guest Editors of this special issue: Luca Di Gaspero (luca.digaspero@uniud.it), Paola Festa (paola.festa@unina.it), Amir Nakib (nakib@u-pec.fr), Mario Pavone (mpavone@dmi.unict.it), and Mauricio Resende (resendem@amazon.com).