

Call for Papers

Special issue on “Metaheuristics”

Guest Editors:

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The Metaheuristics International Conference (MIC) series was established in 1995 and the one in Cartagena (Colombia) in 2019 is its thirteenth edition. MIC is the main event focused on the progress of the area of metaheuristics and their applications. This special issue of the *International Transactions in Operational Research* (ITOR) will be primarily dedicated to extended versions of papers presented at the 13th Metaheuristics International Conference (MIC 2019) (<https://mic2019.uniandes.edu.co/>). However, submission will also be open to the entire metaheuristics community.

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

- New algorithmic developments and hybrid metaheuristics.
- Industrial applications, and challenging new problems arising in the fields of big data, machine learning, analytics, bioinformatics, transportation and logistics, just to cite a few.
- New research challenges, theoretical developments, implementation issues, in-depth experimental studies.
- The interface of metaheuristics with other disciplines, such as agent-based models, integer programming (mathheuristics), constraint programming, machine learning, among others.

An important note concerning submissions on metaphor-inspired metaheuristics. Although the past has shown that nature can be a rich source of inspiration for algorithms in optimization and control, the last years have witnessed an abuse of drawing inspiration from natural phenomena or man-made processes. We require that algorithms (other than well-established ones such as evolutionary algorithms) must be described in metaphor-free language. This facilitates their conceptual comparison to existing algorithms. Moreover, it facilitates highlighting the algorithmic contributions to the literature. Papers on such algorithms will only be published if the provided evidence gives very good reasons to do so.

The deadline for submissions is January 31, 2020. Although we strongly encourage authors who attended the 13th Metaheuristics International Conference (MIC 2019), to be held in Cartagena (Colombia) on July 28-31 of 2019, this Call for Papers is also open and welcomes submissions from the entire community of academics and practitioners. Each paper will be peer-reviewed according to the editorial policy of ITO, published by the International Federation of Operational Research Societies (IFORS). Papers should be original, unpublished, and not currently under consideration for publication elsewhere. They should be prepared according to the instructions to authors that can be found in the journal homepage (<https://onlinelibrary.wiley.com/page/journal/14753995/homepage/forauthors.html>). 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.

Other inquiries should be sent directly to any of the Guest Editors in charge of this issue: Andrés L. Medaglia (amedagli@uniandes.edu.co), Jorge E. Mendoza (jorge.mendoza@hec.ca), Celso Ribeiro (celso@ic.uff.br), Rubén Ruiz ([rruiz@eio.upv.es](mailto:r Ruiz@eio.upv.es)), Juan G. Villegas (juan.villegas@udea.edu.co).