Journal of *Memetic Computing*

**Call for Papers**

“Memetic Algorithms - Theory and Applications”

An ALIO/INFORMS 2010 Thematic Issue

**Manuscript submission:** September 30, 2010.

**Notification of acceptance/rejection:** December 30, 2010.

**Final manuscript submission:** March 31, 2011.

**Final decision:** June 30, 2011.

The ALIO-INFORMS International Meeting is the joint conference of the INFORMS International Conference and XV CLAIO, the biannual conference organized by ALIO. It will be held in Buenos Aires, Argentina in June 2010. At ALIO-INFORMS 2010, the attendees will exchange ideas on topics such as services, logistics and transportation, manufacturing, supply chain management, environment, natural resources, biotechnology, and healthcare. The meeting intends also to emphasize the importance of the relationship between basic research and the practice of OR/MS.

The aim of this special issue is to reflect the most recent advances in the field. Memetic algorithms are optimization, search, and learning techniques in which problem knowledge is intensely and clearly embedded into the algorithm itself. In many cases this means combining two algorithms in some way, inserting one local search algorithm into a higher level one, or using problem knowledge to define new operators, variables encoding or fitness/quality functions. Contributions are expected in the areas of operations research, management sciences, computer science, mathematics, and any potential area of application.

Papers are expected not only to include original research but also to provide actual results that are statistically assessed and that improve the present state of the art in the target domain. Topics of interest include (but are not limited to):

- Applications of operations research and management sciences;
- Basic theory for methods in OR/MS in optimization, search, and learning;
- Evolutionary and genetic algorithms, memetic extensions;
- Swarm intelligence algorithms (ACO, PSO, etc.);
- Tabu search, scatter search, variable neighborhood search, path relinking;
- Metaheuristic algorithms;
- Parallel algorithms, memetic extensions;
- Multiobjective memetic algorithms;
- Theoretical advances put to work in practical applications;
- Scalability studies of existing or new algorithms;
- Applications where problem knowledge is the main focus of the study.
Authors attending the ALIO/INFORMS 2010 meeting are all invited to send their full papers on the area of Memetic Algorithms, theory and applications in OR/MS.

**Instructions for authors:**

Manuscript should conform to the standard of the Memetic Computing journal as indicated in the Manuscript submission procedure of this journal. All submissions will be peer reviewed subject to the standards of international research, for novelty and originality. If parts of the work have been previously published, authors are requested to include a considerable extension of the work in the submitted journal paper. Electronic submissions must be in PDF format and should be prepared according to the journal guidelines. The submissions should be performed through the submission online system. Please specify on the first page of the manuscript that the article is intended for this thematic issue.

All enquiries on this special issue should be sent to Prof. María Urquhart. Prospective authors are also invited to send an email to Dr. Enrique Alba and Dr. Mauricio G. C. Resende indicating their interest in submitting a paper and the specific topics addressed in it.

**Guest Editors:**

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