

# *IEEE Transactions on Systems, Man, Cybernetics - Part B*

## **Call for Papers:**

Special Issue on  
Memetic Algorithms

## **Important Dates:**

Manuscript submission: May 1, 2005  
Notification: July 15, 2005

One of the recent growing areas in Evolutionary Algorithm (EAs) research is *Memetic Algorithms* (MAs). MAs are population-based meta-heuristic search methods inspired by Darwinian principles of natural evolution and Dawkins notion of a meme defined as a unit of cultural evolution that is capable of local refinements. Recent studies on MAs have revealed their successes on a wide variety of real world problems. Particularly, they not only converge to high quality solutions, but also search more efficiently than their conventional counterparts. In diverse contexts, MAs are also commonly known as hybrid EAs, Baldwinian EAs, Lamarckian EAs, cultural algorithms and genetic local search.

The aim of this special issue is to reflect the most recent advances in the field, and increase the awareness of the computing community at large on this effective technology. In particular, we endeavor to demonstrate the current state-of-the-art in the theory and practice of MAs. Topics of interests include (but are not limited to):

- novel competitive, collaborative and cooperative frameworks of MAs,
- analytical and/or theoretical studies that enhance our understanding of the behaviors of MAs,
- using multiple memes or local searchers or exact methods,
- adaptive MAs (e.g., meta-Lamarckian and meta-Baldwinian),
- hybridizations with exact and/or approximate methods,
- asymptotic global convergence analyses and/or complexity analyses of MAs,
- optimization in discrete, continuous and dynamic problems using MAs,
- multi-objective optimization using MAs,
- real-world applications of MAs.

All electronic submissions must be made through the Manuscript Central web site: <http://smcb-ieee.manuscriptcentral.com/>. Manuscripts should conform to the standard format of the IEEE Transactions on System, Man, Cybernetic - Part B as indicated in the [Information for Authors](#). **Please also include a note that the paper is intended for the special issue by either entering author comments to the editor during the submission process or putting the information on the first page of your submission.** This is crucial to ensuring that your paper is routed correctly.

### **Guest Editors:**

Dr. Yew Soon Ong

School of Computer Engineering, Nanyang Technological University

Blk N4, 2b-39, Nanyang Avenue, Singapore 639798

Tel : +65-6790-6448, Fax: +65-6792-6559, E-mail: [asysong@ntu.edu.sg](mailto:asysong@ntu.edu.sg)

Dr. Natalio Krasnogor

School of Computer Sciences and IT, University of Nottingham

10 Robinson Gardens, Clifton (NG118RU), Nottingham, United Kingdom

Tel : +44-0115-878-1981, E-mail: [Natalio.Krasnogor@nottingham.ac.uk](mailto:Natalio.Krasnogor@nottingham.ac.uk)

Dr. Hisao Ishibuchi

Department of Industrial Engineering, Osaka Prefecture University

1-1 Gakuen-cho, Sakai, Osaka 599-8531, Japan

Tel : +81-72-254-9350, Fax: +81-72-254-9915, E-mail: [hisaoi@ie.osakafu-u.ac.jp](mailto:hisaoi@ie.osakafu-u.ac.jp)