# EDITORIAL PREFACE

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The *International Journal of Swarm Intelligence Research* (IJSIR) has gone through four years. In November, 2008, I was contacted by IGI-Global Publisher to start up this new journal. At that time, there already has one journal that is dedicated to the researches on swarm intelligence, which is the *Journal of Swarm Intelligence* published by Springer with Prof. Marco Dorigo as its Editor-in-Chief. There were mainly two opinions on whether we should start up the second journal dedicated to swarm intelligence or not. One opinion is that we should focus on the existing journal so that we could put all our efforts to develop the one with higher and higher quality; the second opinion is that with the quick growth of the swarm intelligence community, it is deserved to have the second journal on swarm intelligence so that we could attract more and more researchers involved and provide one more platform to researchers to publish and/or exchange their research results. I favored the second opinion. After one year's preparation, the IJSIR inaugural issue was published in early of the year 2010. During these five years, the swarm intelligence community has seen its rapid growth, which can be witnessed by more journals developed, conference held, and papers published related to swarm intelligence. The journals that have been developed and gone into publication, which are dedicated to swarm intelligence, include the *Journal of Swarm and Evolution-*

*ary Computation*, which has been published by Elsevier since 2011; the *International Journal of Swarm Intelligence and Evolutionary Computation*, which has been published by OMICS Publishing Group since 2012; the *International Journal of Swarm Intelligence*, which has been published by the INDERSCIENCE Publishers since 2013. The conferences that have been held all around the world, in which swarm intelligence is, at least, one of the big constituents, include the *IEEE Congress on Evolutionary Computation, the Genetic and Evolutionary Computation Conference, the International Conference on Swarm Intelligence since 2010, the IEEE Symposium on Swarm Intelligence since 2003, ANTS International Conference (or Workshop) on Swarm Intelligence since 1998, the International Conference on Swarm Intelligence Based Optimization*, and etc. The number of papers published, that are related to swarm intelligence, has also undergone a rapid growth continuously. According to the scholar.google.com by searching on "particle swarm", which is one of swarm intelligence algorithms, it finds 118,000 items.

In this issue, there are three papers. In the paper "*Modeling and Cohesiveness Analysis of Midge Swarms*" authored by Dr. Kevin M. Passino, a midge swarm model was introduced to represent individual midge motion dynamics, sensing abilities, and flight rules. Mathematical analysis of the model provided insight why

cohesive swarm behavior can be formed by individual midge sensing characteristics and flight rule. In the paper "*List Based Optimizers - Experiments and Open Questions*" by Dr. Maurice Clerc, a predefined short list of numbers, if used cyclically, was verified to be able to replace random number generator for any iterative stochastic optimization algorithm, which is extremely useful when algorithms need to be implemented in hardware. For the paper "*Introduction to Fireworks Algorithm*", the fireworks algorithm, which is a new swarm intelligence algorithm developed in 2010, was introduced and reviewed. The fireworks algorithm was inspired by fireworks explosion. In the paper, the authors introduced and discussed several versions of fireworks algorithm including the multi-objective fireworks algorithm and the graphic processing unit (GPU) based fireworks algorithm.

With the publishing of this issue, the IJSIR will be four year older and will be moving into its fifth year. At this time, I would like to thank all the Associate Editors, all the Editorial Board members, and all the reviewers. Without their dedicated efforts, the quality of the journal can't be guaranteed. I would like to take this opportunity to thank all the authors. It is them that make the journal go so far and be a reality. I would also like to thank all readers. Without you, the journal won't survive. I am also grateful to the team at IGI Global Publishers who worked diligently with me throughout the process of editing and production of each issue of the journal. By moving into its fifth year, I look forward to working with you all to further develop and improve the IJSIR journal. With your continued supports, I am confident that the IJSIR journal can make continued successes and serve the swarm intelligence community better and better.

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