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## Editorial

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Nature inspired optimisation algorithms (NIOA) are a set of biological tools and methodologies to address complex real-world problems to which traditional approaches may not be very effective. Major constituents of NIOA are neural networks, evolutionary algorithms, swarm intelligence algorithms, fuzzy systems, and hybrid intelligent systems. The applications of NIOA include bioinformatics and computational biology, brain-machine interface, digital eco-systems, healthcare and medical engineering, multi-media security and cyber security, robotics, design and manufacturing, energy and environment and many more. This special issue titled ‘Nature inspired optimisation algorithms’, of *International Journal of Swarm Intelligence* will provide a systematic overview of state-of-the-art research in the field of nature-inspired algorithms. This special issue aim to serve as a forum for facilitating and enhancing information sharing among researchers, with themes including the development of advanced nature-inspired algorithms and/or applying existing ones for solving problems in real world complex systems. It offers readers the articles on advances in the understanding and utilisation of systems those are based on the principles of nature inspired optimisation. Emphasis is given to such topics as evolutionary algorithms, swarm intelligence-based algorithms, hybridisation of nature-inspired optimisation algorithms, review and comparative studies of nature-inspired optimisation algorithms, new methodologies inspired from learning

behaviour of social insects/evolution processes, theory and practice of nature-inspired algorithms in different domains, and real-world problem solving using nature-inspired algorithms.

This special issue comprises of some interesting and important articles on the applications of swarm intelligence and evolutionary computation to solve some of the diversified problem domains such as constrained optimisation problems, contextual recommender systems, and QFT controller and pre-filter for buck converter. Further, an article gives proof of concept and compromises for total memory optimiser. The articles are well described and are the real reflections of some recent advances of nature inspired algorithms. Both the theory and applications of the above mentioned techniques are very well covered in this special issue which show the efficiency of these methods. As guest editors, we wish that the research works covered under this special issue will be valuable for relevant readers/researchers working in the domain of NIOA. This special issue comprises the articles from both the single objective and multi-objective domain of nature inspired algorithms. We are thankful to our authors for their contribution as research article to this special issue. We also appreciate the reviewers who provide their reviews for the submitted papers. The technical standards and quality of published articles in this special issue is based on the strength and expertise of the reviewer board members who have been grossly involved in providing high quality reviews. Our special thanks go to the Editor-in-Chief of the *International Journal of Swarm Intelligence (IJSI)*, Dr. J.C. Bansal for all his continued guidance and input on the policies of the journal as well as for his volunteered significant time despite of his busy schedules.