

Preface

Bio-Inspired Computing: Theories and Applications (BIC-TA) is one of the flagship conferences on Bio-Computing bringing together the world's leading scientists from different areas of Natural Computing. Since 2006, the conferences have taken place at Wuhan (2006), Zhengzhou (2007), Adelaide (2008), Beijing (2009), Liverpool and Changsha (2010), Malaysia (2011), and India (2012). Following the successes of previous events, The Eighth International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2013) is being organized and hosted in China by Anhui University of Science and Technology, from 12th to 14th July, 2013. BIC-TA 2013 aims to provide a high-level international forum for researchers with different backgrounds working in the related areas to present their latest results and exchange ideas. The conference has four main sections: Evolutionary computing, Neural computing, DNA computing, and Membrane computing. In order to integrate these sections, the conference organizers invited some experts from different areas of Bio-Inspired Computing to give plenary talks. In this conference, more than 500 conference papers were received while 145 papers were recommended to be published in the Springer book series of *Advances in Intelligent Systems and Computing* and 60 papers were recommended to be published in *SCI Journal*, the adopting rate was not more than 30 %. Additionally, the growing trend in Emergent Systems has resulted into the inclusion of two other closely related fields, namely Complex Systems, and Computational Neuroscience, in the BIC-TA 2013 event.

BIC-TA 2013 has attracted a wide spectrum of interesting research papers on various aspects of Bio-Inspired Computing with a diverse range of simulation applications, theories, and techniques within the domain. We much hope that this publication will become an important reference source to many students, researchers, and academics in their educational, research, and professional activities.

The authors are to be commended for their valuable contributions. The editors would like to express their sincere gratitude to the reviewers, track chairs, and program committee members, who have done justice to the entire review process and have helped to maintain the quality and clarity of presentation of the papers.

We would like to acknowledge the members of the BIC-TA 2013 organizing committee for their efforts in organizing the conference. The organizing committee

benefited from the support it received from the School of Anhui University of Science and Technology. We would also like to thank the members of the BIC-TA steering committee, especially Linqiang Pan and Xu Jin, for their guidance and advice. We are indebted to the members of the BIC-TA program committee and additional reviewers for their diligent and careful reviewing which led to valuable improvements in the accepted papers. Finally, we would like to thank all the presenters and authors for their active participation at BIC-TA 2013, which made the conference a success. Special thanks are given to Springer-Verlag for his encouragement and help to our work. We would like to acknowledge here once again all the college and co-workers who contributed to the success of this interesting and stimulating conference.

It is envisaged that the BIC-TA conference series will continue to grow and include relevant future research and development challenges in this field of Computing.

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