Preface

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Published online: 28 February 2014
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This special issue is dedicated to the Nostradamus conference (<http://nostradamus-conference.org>) selected papers presented at this event held in June 2013. Conference topics and thus selected papers as well are focused on soft-computing methods and its hybridization with unconventional algorithms and computing, namely with deterministic chaos.

Unconventional computation, especially soft computing methods and its applications, is a vitally important method in the engineering problem solution. Its use can be found in economy, natural sciences, engineering and generally science today. Examples of such applications can be seen in the world around us and of course in almost every scientific discipline, including such domains as in physics, such as BigData, astrophysics earth's atmosphere modeling and model parameter identification, and plasma reactor control; economy such as exchange rate and stock markets prediction and modeling; computer science such as evolutionary algorithms, its dynamics and complex networks, and nonlinear systems control (including deterministic chaos) and identification. The main aim of this issue is to introduce few interesting selected papers for students, academics and researchers to exchange their ideas and novel methods.

Papers of this issue have been carefully selected from Nostradamus conference area including: *Chaos, Evolution and Complexity* discussed topics from the field of evolutionary algorithms, deterministic chaos, its complex dynamics and mutual intersections of all three topics (chaos powered evolutionary

algorithms, engineering of mathematical chaotic circuits, etc.); then section *Nature-Inspired Algorithms and Nonlinear Systems* contained discussions about the use of bio-inspired algorithms on various problems (forecasting, EEG signal modeling, battleship game strategy, evolutionary synthesis of complex structures, etc.). In the section *Nonlinear and Predictive Control* and *Nonlinear Dynamics and Complex Systems* papers about controlling modeling and analysis of complex and nonlinear systems were discussed. The last section, *Various Topics*, contains few borderline papers that seem to be still interesting and belonging to the conference topics.

We would like to thank the members of the program committees and reviewers for their hard and professional work. We believe that this special issue dedicated to the Nostradamus conference papers represents high standard papers in the domain of soft computing methods, its unconventional hybridization and use.

Particular thanks are due as well to the conference (and thus automatically also to this special issue) main sponsors, IT4Innovations, VŠB-Technical University of Ostrava, MIR labs (USA), Centre for Chaos and Complex Networks (Hong Kong), Journal of Unconventional Computing (UK). Special thanks go to the Ministry of Education of the Czech Republic.

We would like to thank all the contributing authors and reviewers for their effort and believe that potential readers will find this issue interesting and enriching.

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