

Designing Bioinspired Robots Editorial

Editorial

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This *IJARS* issue is dedicated to a new international conference series, which has been promoted by ENEA and IARP (International Advanced Robotics Programme). The first conference, entitled Bio-inspired Robotics, was held on 14th-15th May 2014 at the ENEA's Frascati Centre. The conference was dedicated to young researchers and scholars with promising ideas, methods and products for innovation and technology transfer in the field of service robots with bio-inspired design and operation.

The conference, which is aimed at starting a thematic series, was the first event in a series that will be centered on robotics research. It was inspired by the imitation of solutions and functionalities in biological systems with their adaptation to external environments. The on-line proceedings of the 2014 Bio-inspired Robotics Conference contained 25 papers, which were selected for oral presentation after review. These papers covered relevant areas, ranging from the mimesis to single and group intelligence, and from actuation systems to learning procedures.

The 2014 conference organizers wish to address their highest acknowledgement to *IJARS*, the *International Journal of Advanced Robotics Systems*, for hosting special issue with a selection of the best presented papers. Such papers aim to give a platform to the works that were presented at the conference. After a regular peer review by high-level international *IJARS* referees, extended revised versions of the selected papers were requested. With this, the young authors were stimulated to further refine and improve the presented results in order to be accepted. In

this respect, the opportunity offered by *IJARS* allowed many authors to develop previous ideas and explore them from different perspectives, with support and encouragement from their organizations. The occasion has also been valuable for correcting, whenever needed, preliminary approaches, which could not take out the fundamental ideas that inspired former studies. Within the conference programme, the Best Paper Awards were given to Dr. Claudia Snels from ENEA and Dr. Federico Renda from Scuola Superiore Sant'Anna, Pisa, whose papers are included in this issue, as well as Dr. Alessio Franchi from Polytechnic University of Milan. This special journal issue has been obtained as a result of a second review process and selection. However, all papers that were accepted for Bio-inspired Robotics 2014 were of a good quality, with interesting content that would be suitable for journal publication and thus, it was hard to decide the selection.

The organizers of the 2014 Bio-inspired Robotics Conference hope that the established cooperation between ENEA and *IJARS* will continue for the series of conferences, especially for the programme of YRRC (Young Researchers Robotics Conference), in the next edition.

We would like to express our gratitude to the members of the International Programme Committee of 2014 Bio-inspired Robotics Conference for their enthusiastic participation in the success of the event and for this special issue, namely Prof. Geoff Pegman (Chairman), Prof. William Hamel (Vice-Chairman), Prof. Etienne Dombre, Prof. Mun-Sang Kim, Prof. Manuel Armada, Prof. Andrzej Maslowski and Prof. Dirk Lefeber.

Our gratitude goes to the authors who have contributed to the success with very interesting papers in several subjects, covering many fields of bio-inspired service robots. Additionally, we would like to thank them for their cooperation in revising papers in due time, in agreement with reviewers' comments. We are grateful to the reviewers for the time and effort they have spent in evaluating the papers within a planned schedule, which has led to the publication of this special issue.

We thank the ENEA Centre in Frascati, Italy, for hosting the 2014 Bio-inspired Robotics Conference event. We would like to thank our colleagues for their help at the ENEA Centre in Frascati and at the LARM Laboratory of Robotics and Mechatronics of the University of Cassino. We would also like to thank the auspices of IARP (International Advanced Robotics Programme).

Finally, we thank the publisher and editorial staff of this journal and, particularly, Ms. Natalia Reinic and Ms. Viktorija Zgela, for helping to publish this special issue.

We are grateful to our families since, without their patience and comprehension, it would not be possible for us to organize the 2014 Bio-inspired Robotics Conference and this journal special issue.