

# CALL FOR PAPERS

## Special Session on Biomimetics and Bionics Robotics

to be held in the frame of  
IECON 2013 - The 39<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society  
10<sup>th</sup> - 13<sup>th</sup> of November 2013, Austria Center, Vienna, Austria



### TOPIC OF THE SPECIAL SESSION

The special session aims to bring researchers in the quickly emerging field of Bioinspiration and Robotics.

Making biologically inspired intelligent robots requires understanding the biological models as well as advancements in different interdisciplinary areas of research. Biomimetics and Bioinic research approaches incorporate materials and techniques drawn from naturally made substances, and resemble biological systems in structure and/or function as necessary. The evolving of such emerging, interdisciplinary field of Bioinspired Robots focuses on making nature as a model of inspiration that would immensely: Help conscious abstraction of new principles and ideas; Foster innovative design collections; Find out new techniques and functionalities; Seek new paradigms and intelligent & efficient methods; Develop new materials and actuators at nature's scale; Design new streams of intelligent machines, robots, systems, devices, algorithms, etc. The session enables researchers in the field to present their new findings and contribute to latest developments.

### SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10<sup>th</sup> to 13<sup>th</sup> November 2013.

### Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



Topics of interest include, but are not limited to:

- Biomechatronics and Robotics
- Bioinspiration and Smart Sensors
- Bioinspiration: learning techniques and computational intelligence
- Bioinspiration and Actuators
- Bioinspiration and Smart MEM/NEM Materials for Robots
- Bionics robots
- Bionic human and artificial muscles
- Mind controlled Bionic Limbs

### **SUBMISSION OF PAPERS**

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

### **THE CONFERENCE**

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.