

**THE FIFTEENTH INTERNATIONAL SYMPOSIUM  
ON  
ARTIFICIAL LIFE AND ROBOTICS**

**(AROB 15th '10)**

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### **HISTORY**

This symposium was founded in 1996 by the support of Science and International Affairs Bureau, Ministry of Education, Culture, Sports, Science and Technology, Japanese Government. Since then, this symposium has been held every year at B-Con Plaza, Beppu, Oita, Japan except in Oita, Japan (AROB 5th '00) and in Tokyo, Japan (AROB 6th '01). The Fifteenth symposium will be held on 4– 6 February, 2010, at B-Con Plaza, Beppu, Oita, Japan. This symposium invites you all to discuss development of new technologies concerning Artificial Life and Robotics based on simulation and hardware in the twenty first century.

### **OBJECTIVE**

The objective of this symposium is the development of new technologies for artificial life and robotics which have been recently born in Japan and are expected to be applied in various fields. This symposium will discuss new results in the field of artificial life and robotics.

### **GENERAL SESSION TOPICS**

Artificial brain research	Artificial intelligence
Artificial life & Brain science	Chaos & Cognitive science
Control & Techniques I	Control & Techniques II
Evolutionary computations	Intelligent control & Modeling
Human-machine cooperative systems	Image processing I
Image processing II	Innovative computations
Mobile vehicles I	Mobile vehicles II
Multi-agent systems	Neural networks
Robotics I	Robotics II
Robotics & Bipedal robot	Robotics & Application
Pattern recognition	Virtual reality

## ORGANIZED SESSION TOPICS

System sensing and control	MOT and interdisciplinary research
Learning control and robotics	Analysis and implementation of nonlinear systems
Control and automata	Computer vision and robotics
Soft robotics	Intelligent control and applications
Intelligent system and applications	Biomimetic machines and robots
Robot control	Bio-symphony
Intelligent systems	Intelligent robots
Artificial intelligent	Embracing complexity in natural intelligence
Intelligent classification	Intelligent signal processing
Intuitive human-system interaction	Special environment localization and navigation
Molecular computing	Real time methods for structural change detection of ongoing time series data
Bio-inspired theory and applications	Artificial application & Artificial and green technology II
Brain-like intelligence and biomedical applications	
Artificial application & Artificial and green technology I	
Machine learning and computer vision	

## COPYRIGHTS

Accepted papers will be published in the proceeding of AROB and some of high quality papers in the proceeding will be requested to re-submit their papers for the consideration of publication in an international journal ARTIFICIAL LIFE AND ROBOTICS. All correspondence related to the symposium should be addressed to AROB Secretariat.

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