THE TWENTIETH INTERNATIONAL SYMPOSIUM
ON
ARTIFICIAL LIFE AND ROBOTICS

(AROB 20th 2015)

AROB 20th ANNIVERSARY

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HISTORY

The AROB was founded in 1996 under the support of Science and International Affairs Bureau, Ministry of Education, Culture, Sports, Science and Technology, Japanese Government. Since then, the symposium organized by the AROB has been held every year at B-Con Plaza, Beppu, Japan except AROB 5th '00 (Oita), AROB 6th '01 (Tokyo) and AROB 18th '13 (Daejeon, Korea). The twentieth symposium will be held on January 21–23, 2015, at B-Con Plaza, Beppu, Japan.

OBJECTIVE

This symposium will bring together researchers to discuss development of new technologies concerning *artificial life and robotics* based on computer simulations and hardware designs of state-of-the-art technologies, and to share findings on how advancements in artificial life and robotics technologies that relate to artificial intelligence, virtual reality, and computer science are creating the basis for exciting new research and applications in various fields.

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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.

AROB Secretariat

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GENERAL SESSION TOPICS

Agent-based modelling
Artificial intelligence
Artificial life
Biological evolution
Biomedical Imaging
Bio-robot
Cognitive science
Complexity
Control techniques
Data mining
Evolutionary computations (Genetic algorithm)
Human-machine interaction and collaboration
Identification and Estimation
Learning
Mobile robots
Motion planning and navigation
Multi-agent systems
Neural networks
Robot vision and image processing
Sensor and multi-sensor data fusion
Swarm intelligence

ORGANIZED SESSION TOPICS

Applied bioinformatics for systems biology and medicine
Bio-inspired theory and applications
Biomimetic Machines and Robots
Complexity and Ultimacy
Construction Engineering and Management
Educational Technology and Applications
Estimation and control of mechatronic systems
Intelligent control and applications
Intelligent Control System and Artificial Life
Intelligent Robotics and Bioinspired Technology
Learning and Control
Protocomputing
Robot control and computer vision
Robustness and Complexity of Decentralized Systems
Soft Computing with Soft Data
System Sensing and Its Applications