

THE TWENTY-FIRST INTERNATIONAL SYMPOSIUM ON
ARTIFICIAL LIFE AND ROBOTICS

(AROB 21st 2016)

AND

THE FIRST INTERNATIONAL SYMPOSIUM ON
BIOCOMPLEXITY

(ISBC 1st 2016)

ORGANIZED BY

International Society of Artificial Life and Robotics (ISAROB)

CO- ORGANIZED BY

The Institute of Electrical Engineers of Japan (IEEEJ, Japan)

The Institute of Electronics, Information and Communication Engineers (IEICE, Japan)

CO-OPERATED BY

The Society of Instrument and Control Engineers (SICE, Japan)

The Robotics Society of Japan (RSJ, Japan)

The Institute of Systems, Control and Information Engineers (ISCIE, Japan)

IEEE Robotics and Automation Society Japan Chapter

Japan Association for Omics-based Medicine (JSOM, Japan)

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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 twenty-First symposium will be held on January 20–22, 2016, 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.

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GENERAL SESSION TOPICS

Artificial intelligence
Artificial Life & Multi-agent systems
Artificial living
Chaos & Complexity
Cognitive Science
Control techniques
Data mining
Evolutionary computations (Genetic algorithm)
Human-machine interaction and collaboration
Learning
Mobile robots
Neural networks & Intelligent control
Robot vision and image processing
Sensor and multi-sensor data fusion

ORGANIZED SESSION TOPICS

Advanced and Intelligent Systems for Education
ART | SCI
Bio-inspired theory and applications
Biomimetic Machines and Robots
Elemental Technology for Vehicles
Intelligent Data Analysis
Intelligent Robotics and Mechatronics
Intuitive Human-System Interaction
Large scale social simulation: I. agent
Large scale social simulation: II. Network
Learning and Control
New trends in text processing
Protocomputing
Robot Control
Robotics with Intelligence and/or Informatics
Soft matters
System sensing and its applications
Visualizing Information: machine learning approaches