The Twentieth International Symposium on Artificial Life and Robotics 2015 (AROB 20th 2015), B-Con Plaza, Beppu, Japan, January 21-23, 2015

MESSAGES



Hiroshi Tanaka

General Chair

Professor, Tokyo Medical and Dental University

Hiroshi Janaka

It is my great pleasure and honor to welcome you all to the International Symposium on Artificial Life and Robotics (AROB 20th 2015). This year AROB Symposium celebrates 20th anniversary. We are very pleased for this symposium to have continued for such a long time, successfully to provide the attendants with useful opportunities for their studies. In order to continue AROB symposium attracting for coming future decades, we should make sustained efforts for AROB symposium to be ever stimulating and inspiring all the attendants for developing their studies. In organizing this year AROB symposium, we are in debt to many Japanese academic associations such as SICE, RSJ, IEEEJ, IEICE, ISCIE and JSOM. I would like to express my sincere thanks to all of those who make this symposium possible.

As is needless to say, Alife (bio-complex systems) or biologically-inspired Robotics approach now attracts wide interests as a new paradigm of science and engineering. For example, the bio-complex systems methodology is now increasing its importance as a theoretical dynamical systems approach, to clarify the cancer progression mechanism or to explore the efficient reprogramming method of cells/tissues in regeneration medicine (iPS cells). Furthermore, study of "synthetic biology" is now developed in the attempt to synthesize life in wetware or re-design existing, natural biological systems (bacteria) for useful purposes.

Also in the biologically-inspired robotics field, rapid progresses in various types of robot systems have been remarkable such as bipedal humanoid, multi-agent robots. Also in real world, nursing care robot is gradually being in practice. Furthermore, in wider sense, "molecular robots", small DNA-based platform which identify receptors in cell surface and target the cells causing diseases is expected to achieve drug-like function within human body.

These examples show the Alife and biologically-inspired Robotics approach are exerting a wide influence on the development of a new paradigm for next generation of science and engineering. We hope this symposium becomes a forum for exchange of the ideas of the attendants from various fields, who are interested in the future possibility of Alife and biologically-inspired Robotics approach. I am looking forward to meeting you in Beppu, Oita.



Hee-hyol Lee
Program Chair
Professor, Waseda University

It is my great pleasure to commemorate the 20th Anniversary International Symposium on Artificial Life and Robotics (ISAROB). The ISAROB was started in 1996 at B-Con Plaza, Beppu, Japan, to develop new frontier of artificial life, robotics, complexity, medicine, and their related fields. During this period, the number of papers published was about 3,700 and the number of participants was a total of roughly 4,500 people who came from about 20 countries.

This ISAROB 20th 2015 consists of 1 plenary speech, 1 invited session, 16 organizing sessions, 23 general sessions, and 1 poster session. This time, 218 papers are published and 260 peoples, who come from 10 countries, attend on this international symposium. The ISAROB is being supported by a host of researchers and engineers. I would like to take this time to thank you for all researchers and engineers.

The brilliant papers presented in the ISAROB are able to submit to the international journal: AROB. All papers submitted to the journal go through a peer-review process. Also, the quality of our journal depends heavily on support from referees. Thanks once again, for all of referees of our journal.

We are wishing continued outstanding success of our ISAROB.

I am going to look forward to my meeting with all of you again.