

# The 2nd Workshop on Bio-inspired Energy-Efficient Information Systems

March 2nd, 2016  
Sanjo Conference Hall, The University of Tokyo

## Scope

Next Generation Nano-Micro Devices and Systems for Energy-Efficient Information Processing Division of Institute for Innovation in International Engineering Education (IIIEE) was founded in 2012 as a part of social cooperation program with IBM Japan, Ltd. to provide solutions towards realization of energy-efficient and sustainable society through basic research on energy-efficient information processing utilizing nano-/micro-device technologies and education of graduate students of related areas. The aims of this workshop are to introduce the scope of the social cooperation program and to provide an excellent opportunity to discuss bio-inspired energy-efficient information systems.

## Plenary speakers

Heike Riel (Director, Physical Science, S&T, IBM Research)

*"Towards Next Generation of Computing"*

Kazuyuki Aihara (Professor, Inst. of Industrial Science, The University of Tokyo)

*"Bio-inspired Computation by the Uncomputable: Examples of Chaotic and Quantum Neural Networks"*

## Invited speakers

Akira Hirose (Professor, Dept. EEIS, The University of Tokyo)

*"Quantum and classical wave processing based on complex-valued neural networks"*

Spike Narayan (Director, S&T, IBM Research - Almaden)

*"Center for Machine Intelligence ? Enabling real time learning"*

Tadashi Shibata (Professor Emeritus, Dept. EEIS, The University of Tokyo)

*"A Nano-Device-Based Brain System Mimicking the Processing in the Mind"*

Yasuo Kuniyoshi (Professor, Dept. Mechano-Informatics, The University of Tokyo)

*"Simulating Embodied Human Brain Development"*

Takayuki Osogami (IBM Research - Tokyo)

*"Dynamic Boltzmann Machine"*

## Date and Place

**Date:** March 2nd, 2016, 13:00-18:00

**Place:** Sanjo Conference Hall 2F, The University of Tokyo

**Contact:** all@webpark1846.sakura.ne.jp

(A. Hirose, R. Nakane, G. Tanaka : IIIEE, Univ. of Tokyo)

**URL:** <http://eeip.t.u-tokyo.ac.jp/workshop20160302/index.html>

