

CIAiS International Symposium 2017

Research and Education Consortium for Innovation of Advanced Integrated Science

Monday, February 27, 2017 13:30-19:00

Fukutake Hall, The University of Tokyo

Opening 13:30-13:50

Chair: Yasuyuki Yokono

13:30-13:50

Welcome Address

Shigeo Maruyama

Consortium Director, The University of Tokyo

Opening Address

Yoichiro Matsumoto

Executive Director, RIKEN

Opening Address

Keiji Yamamoto

Program Officer, Japan Science and Technology Agency

Keynotes 13:50-15:30

Chair: Junji Yumoto, Hitoki Yoneda, Shigeo Maruyama

13:50-14:30

Nanooptics- and microfluidics-based physical implementation of natural intelligence

Toshiharu Saiki

Department of System Design Engineering, Keio University

14:30-15:10

Toward next-generation wireless communication by combining nanomaterials with microsystems

Erik Einarsson

Department of Electrical Engineering, University at Buffalo,
The State University of New York

15:10-15:30

Direct synthesis of colored SWNT thin films

Esko I. Kauppinen

Department of Applied Physics, Aalto University

Poster 15:30-16:00

Chair: Hiroharu Tamaru

15:30-16:00

Poster Session & Break

Next-generation Researchers 16:00-17:00

Chair: *Masato Koashi, Junji Yumoto, Toshiharu Saiki, Ryo Miyake*

16:00-16:15 **Construction of non-Markovian coarse-grained models based on the Mori-Zwanzig formalism**

Yuta Yoshimoto

Department of Mechanical Engineering, School of Engineering,
The University of Tokyo

16:15-16:30 **Ultraviolet light source for high-resolution photoelectron spectroscopy**

Junko Omachi

Institute for Photon Science and Technology, School of Science,
The University of Tokyo

16:30-16:45 **Protein-lipid interactions induce heterogeneous diffusion of a peripheral protein on a lipid membrane surface**

Eiji Yamamoto

School of Integrated Design Engineering, Graduate School of Science and
Technology, Keio University

16:45-17:00 **One- and Two-Dimensional Semiconductor Nanostructures Towards Optoelectronic Device Applications**

Xiao-Mei Zhang

Department of Chemical Engineering, Graduate School of Engineering,
Tokyo Institute of Technology

Closing 17:00-17:10

Chair: *Norikatsu Mio*

17:00-17:10 **Closing Remarks**

Hitoki Yoneda

Institute for Laser Science, The University of Electro-Communications

Poster 17:10-17:40

Chair: *Hiroharu Tamaru*

17:10-17:40 Poster Session & Break

Social Gathering 17:40-19:00

Chair: *Yuta Yoshimoto, Junko Omachi, Eiji Yamamoto, Xiao-Mei Zhang*

17:40-19:00 Social Gathering

Poster Session

Poster No.	Name	Institution	Affriation	Presentation Title
1	Takuma Hori	The University of Tokyo	Department of Mechanical Engineering	Simulation of Gas Transport with Surface Diffusion in Nanoporous Materials
2	Weixin Fu	Waseda University	School of advanced science and engineering	Low temperature heterogeneous bonding of PEEK and Pt
3	Daisuke Yuhara	Keio University	Department of Mechanical Engineering	Analysis of Phase Equilibrium Conditions for Methane Hydrate Using Molecular Dynamics Simulation
4	Tatsuya Yamashita	Keio University	Department of Mechanical Engineering	Cleaning with bubbles: Effect of dissolved oxygen on ultrasonic cleaning
5	Hiroyuki Kuwae	Waseda University	Graduate school of advanced science and engineering	Suppression of external quantum efficiency roll-off of nanopatterned organic-light emitting diodes at high current densities
6	Akira Mizutani	The University of Tokyo	Department of Applied Physics	Reduction of Thermal Damage during Laser Cutting of Carbon Fiber Reinforced Plastic
7	Yurina Michine	The University of Electro-Communications	Institute for Laser Science	Ozone Assisted Gas Grating for ultra-high power laser system
8	Ming Liu	The University of Tokyo	Department of Mechanical Engineering	High Temperature Surface Enhanced Raman Scattering of Single-Walled Carbon Nanotubes
9	Keigo Otsuka	The University of Tokyo	Department of Mechanical Engineering	Purely semiconducting single-walled carbon nanotube arrays obtained after water-assisted electrical burning of metallic tubes
10	Aru Suemasa	The University of Electro-Communications	Institute for Laser Science	Highly stable lasers for Space Gravitational Wave detector
11	Seungju Seo	The University of Tokyo	Department of Mechanical Engineering	Lamination of Vertically Aligned Single-Walled Carbon Nanotube Forests on Perovskite Solar Cells via Membrane Filter Transfer Method
12	Il Jeon	The University of Tokyo	Department of Mechanical Engineering	The Solution to Stability and Cost in Perovskite Solar Cells by All-Carbon Approach
13	Tomotake Yamakoshi	The University of Electro-Communications	Institute for Laser Science	Dynamics of ultracold atoms in an amplitude-modulated parabolic optical lattice
14	Shotaro Kitajima	The University of Electro-Communications	Institute for Laser Science	Ultrashort pulse laser based on new ceramic materials
15	Hongxiang Lin	The University of Tokyo	Department of Mechanical Engineering	Comparison of Time Reversal and Interferometry Alternative for Photoacoustic Tomography on the Ring-array Sensors
16	Yasunari Suzuki	The University of Tokyo	Department of Applied Physics	An Efficient Analysis for Quantum Error Correction under Coherent Noise based on Free-Fermionic Formalism
17	Seungchul OH	The University of Tokyo	Department of Mechanical Engineering	Thermal Evaluation of MEMS Radiator Using Near-field Effect in Multi-layered Structure
18	Akihisa Kondo	The University of Tokyo	Department of Applied Physics	Construction of the time-correlated single photon counting system for the observation of enhancement of spontaneous emission
19	Shohei Hodota	The University of Tokyo	Department of Mechanical Engineering	Numerical simulation of red blood cell flow in coronary microcirculation
20	Kyohei Watanabe	The University of Tokyo	Photon Science Center	Measurement of small optical absorption of periodically poled nonlinear crystal
21	Hiroki Tanaka	Keio University	Graduate school of Science and Technology	Technical Visit of European Laser Institutes
22	Yasutaka Nakajima	Keio University	School of Integrated Design Engineering	Fabrication of PDMS/silver composite micro line structures by using 522 nm femtosecond laser