iCeMS-RIKEN Joint Symposium on

Mesoscopic Chemical Biology

Integrated Chemical-Physical Systems Towards Cell Control

7 February 2014, Kyoto University iCeMS

9:30–9:50	Opening Remarks Susumu Kitagawa (Director, Kyoto University/iCeMS) Shin-ichi Sato (Kyoto University/iCeMS)
	<u>Session 1 (Chair: Hideki Hirori & Kaoru Sugimura)</u>
9:50–10:15	Akihiko Nakajima (University of Tokyo) How Do Cells Know in Which Direction to Move in Spatiotemporal Chemical Environments?
10:15–10:40	Tasuku Ueno (University of Tokyo) A Functional Small Molecule-Based Signal Perturbation System
10:40–11:05	Kaoru Sugimura (Kyoto University/iCeMS) Toward Understanding the Integration of Mechanical and Chemical Control of Morphogenesis
11:05–11:30	Yuki Sudo (Nagoya University) Photobiophysical Chemistry: What Should We Learn from Retinal Proteins?
11:30–11:55	Jun Ando (Osaka University/ERATO) Raman Microscopy for Visualizing Small Molecules in Live Cells
11:55–13:30	Lunch
	Session 2 (Chair: Kosuke Dodo & Mizuki Watanabe)
13:30–13:55	Yuichiro Hori (Osaka University) Development of Small Molecules with Fluorogenic Switches for Visualizing Protein Function and Localization
13:55–14:20	Takao Yamaguchi (Osaka University) Potential Use of an O-Nitrobenzoxadiazole (O-NBD) Unit for Eluorogenic Protein Labeling in Living Cells
14:20–14:45	Shin-ichi Sato (Kyoto University/iCeMS) A Small-Molecule Based Method for Live-Cell Imaging of an Endogenous RNA
14:45–15:10	Reiko Sakaguchi (Kyoto University/iCeMS) Guanosine Recognition bu Dissimilar tRNA Methultransferases
15:10–15:35	Hiroshi Abe (Hokkaido University) Synthetic Biology of Circular RNA
15:35–16:00	Coffee Break
	<u>Session 3 (Chair: Shuhei Furukawa & Ken-ichiro Kamei)</u>
16:00–16:25	Kosuke Dodo (RIKEN/ERATO) Cell Death Control Molecules
16:25–16:50	Shinya Hagihara (Nagoya University/ITbM) Chemical Approaches Toward Controlling Plant Growth
16:50-17:15	Yuma Yamada (Hokkaido University) MITO-Porter, Liposome-Based Nano Device for Mitochondrial Control
17:15-17:40	Hiroaki Onoe (University of Tokyo/ERATO) <i>Microfluidic Technology for Macroscopic Tissue Reconstruction</i>
17:40–17:50	Closing Remarks Kosuke Dodo (RIKEN/ERATO)
18:00-	Reception