27th iCeMS International Symposium

Self-Assembly Science for Unlocking Life's Secrets

DAY 1

Thursday, October 2

Registration 12:15 - 13:00

Welcome and Opening Remarks - Motonari Uesugi, iCeMS Director, Kyoto University 13:00 - 13:10

SESSION 1

CHAIR Daishi Fujita & Sooyeon Kim			
13:10 - 13:40	Carl Brozek , Department of Chemistry and Biochemistry, University of Oregon Surface Chemistry of Porous Nanocrystals		
13:40 - 14:10	Yumi Yakiyama , Graduate School of Engineering, the University of Osaka From Flexibility to Function: Structures and Properties of Molecular Crystals		
14:10 - 14:40	Masahiko Yoshimura , iCeMS, Kyoto University Material Approach to Understand and Recreate Cellular Nanoscale Micro-Environments		
14:40 - 15:10	Masateru Ito, iCeMS, Kyoto University Crack Control in Polymer Thin Films		
15:10 - 15:40	Yasuko Osakada , SANKEN, the University of Osaka Development of Photo-Functional Nanomaterials with New Properties and Their Application to Bioscience		

SESSION 2

CHAIR	Ganesh Pandian	Namasiyayam	& Tomoko Inosa
CHAIR	Guilesti Pullululi	NulliuSivuvulli	& TUTTOKO ITIOSE

16:00 – 16:30	Shunsuke F. Shimobayashi , CiRA, Kyoto University Lighting Up the Nanoscale Architecture within Intracellular Condensates
16:30 - 17:00	Yusuke Himeoka , Universal Biology Institute, the University of Tokyo Towards a Theory of Transitions between Life and Non-Life: Cell Death and the Hardness of Assembling Complex Chemical Reaction Systems
17:00 - 17:30	Mao Hori , Institute of Integrated Research, Institute of Science Tokyo Self-Assembly Around RNA: From Mechanistic Insights to Applications
17:30 - 18:00	Kohei Sato , Graduate School of Science and Technology, Kwansei Gakuin University Fully Synthetic Membrane Channels and Transporters with Advanced Functions

18:30 - 19:00	Transfer to iCeMS Networking
19.00 _	iCeMS Networking

iCeMS Networking 19:00

Self-Assembly Science for Unlocking Life's Secrets

DAY 2

Friday, October 3

8:30 - 9:00 Registration

SESSION 3

9:00 - 9:30 Megumi Mukoyoshi, Graduate School of Science, Kyoto University
 Development of Novel PGM-p-Block Metal Alloy Nanoparticles
 9:30 - 10:00 Yukari Katsura, Center for Basic Research on Materials, NIMS
 Crystal Structure Simulator: An Interactive Web Tool for Inorganic Crystal Structure Design
 by Assembling Atomic Delaunay Tetrahedra

10:00 – 10:30 **Takahiro Kosugi**, Institute for Molecular Science, National Institutes of Natural Sciences Nature-Inspired Computational Design Strategy for Rational Control of Protein Complexes

BREAK - 15 min

SESSION 4

CHAIR Yuichi Taniguchi & Sayuri Motani

10:45 – 11:15 **Tomonori Tamura**, Graduate School of Engineering, Kyoto University Mapping Neurotransmitter Receptor Interactome in the Live Mouse Brain

11:15 – 11:45 **Takanobu A. Katoh**, Graduate School of Medicine, the University of Tokyo

Exploring Mechanical Signals via Cilia through Developing Advanced Microscopies:

From Sensing Extracellular Mechanical Information to Regulation of Biological Functions

11:45 – 12:15 **Misa Arizono**, the Hakubi Center for Advanced Research, Kyoto University *Thinking Outside the Neuron*

12:15 – 12:45 **Yumi Konagaya**, Center for Biosystems Dynamics Research, RIKEN

Multiplexed Immunohistochemistry Reveals Dynamic Cell Cycle Regulation

Coupled with Intestinal Stem Cell Differentiation

LUNCH BREAK - 60 min

PLENARY SESSION

CHAIR Jun Suzuki

13:45 – 14:30 **James C. Liao**, President, Academia Sinica

A Tale of Two Carbons: Design and Evolutionary of CO2 and CH3OH Conversions

CLOSING

14:30 – 14:35 **Closing Remarks - Motonari Uesugi**, iCeMS Director, Kyoto University 14:35 – 14:40 **Group Photo**

iCeMS TOUR - 75 mir