## The SPIRITS International Symposium -Shaping Self-Assembled Mesoscale (Bio)Materials with Microengineering-

28<sup>th</sup>/March/2019 (Thu)

@iCeMS Main Building Seminar Room, Kyoto University

## Program

9:20-9:30: Opening Remarks, Shuhei Furukawa

Chairperson: Hiroshi Uji-i

9:30-10:00: Josep Puigmartí-Luis (ETH, Switzerland)

Chemistry and materials synthesis employing bioinspired conditions at low Reynolds numbers

10:00-10:30: Ryuji Kawano (TUAT, Japan)

Artificial Cell Membrane System Integrated by Microfluidic Technologies

<u>Chairperson: Reiko Sakaguchi</u> 10:30-11:00: Tomoko Inose (Hokkaido Univ., Japan) Nanoparticle engineering towards highly efficient drug delivery systems and SERS-based bio-sensing

11:00-11:30 Alexandre Legrand (iCeMS, Kyoto Univ., Japan) Self-assembled porous soft matters

11:30-13:00: Lunch

Chairperson: Gavin Craig

13:00-13:30: Yoko Sakata (Kanazawa Univ., Japan)

Synthesis of a kinetically-stable shape-persistent belt-shaped complex, metallonanobelt, by reversible self-assembly processes

13:30-14:00 Daniel Packwood (iCeMS, Kyoto Univ., Japan) Machine learning for surface-assisted molecular self-assembly Chairperson: Kaoru Sugimura

14:00-14:30: Ye Zhang (OIST, Japan)

Regulate Hippo Signalling via Lipid-raft-targeted Molecular Assembly for Ovarian Cancer Treatment

14:30-15:00: Ibuki Kawamata (Tohoku Univ., Japan)

Programming DNA reaction-diffusion system for pattern formation in hydrogel medium

15:00-15:30: Coffee Break

Chairperson: Satoshi Horike

15:30-16:00: Daisuke Tanaka (Kwansei Gakuin Univ., Japan) Elucidation of the Crystalization Process of Pillared-Layer Metal-Organic Frameworks Using Microreactors

16:00-16:30: Ken-ichiro Kamei (iCeMS, Kyoto Univ., Japan)

Recapitulation of the cellular microenvironments: Towards re-creation of living systems into a chip

<u>Chairperson: Daishi Fujita</u> 16:30-17:00: Keisuke Morishima (Osaka Univ., Japan) Construction and Functional Emergence of Bioactuated MicroNanoSystem and Living Machined Wet Robotics

17:00-17:30 Salvador Pané (ETH, Switzerland) Magnetically Driven Small-Scale Machines

17:30-17:40: Closing Remarks, Ken-ichiro Kamei