

**The 72nd Divisional Meeting of Division of Colloid and Surface
Chemistry**

- Life Science and Colloid·Interface Chemistry -

**Presentation Program of International Symposium
September 21 (Tue), 2021**

Online

Room A

9:00-9:10 Opening address

9:10-10:00

Chair : Takanori Takiue (Kyushu University), Hideki Sakai (Tokyo University of Science)

5A01 [Keynote Lecture] Novel polymer micelles as new modality drugs (¹University of Tsukuba) ○
Yukio Nagasaki¹

10:10-11:50

Chair : Eri Akiyama (Kao Corporation), Syuji Fujii (Osaka Institute of Technology)

5A02 [Invited Lecture] Wetting behavior and adhesion of soft and swollen polymer networks
(¹University of Kentucky, ²Universität Jena, ³Case Western Reserve University)○Jonathan
Pham¹, Zhuoyun Cai¹, Artem Skabeev², Svetlana Morozova³, Justin Glover¹

5A03 [Invited Lecture] Application of a cashew-based oxime in metal extraction (¹Curtin University,
²Institute of Materials Science, ³The University of Da Nang, ⁴University of Hyogo) ○Chi M
Phan¹, Son A Hoang², Hoang M Nguyen³, Cuong V Nguyen¹, Anita E Hyde¹, Shin-ichi Yusa⁴

5A04 Alginate-stabilized gold nanoparticles prepared in microwave-induced plasma in liquid process
with long-term storage stability for potential biomedical applications (¹Hokkaido University) ○
Haoran Liu¹, Kai Ikeda¹, Mai T Nguyen¹, Tetsu Yonezawa¹

5A05 Effect of surface oxide on the sintering of copper fine particles stabilized surfactant molecules
in printed electronics (¹Hokkaido University) ○Rintaro Tokura¹

13:00-13:50

Chair : Kiyoshi Kanie (Tohoku University), Ken-ichi Iimura (Utsunomiya University)

5A06 [Keynote Lecture] How polymer brushes behave in complex environments (¹University of
Newcastle, ²University of Sheffield) ○Erica Wanless¹, Hayden Robertston¹, Kasimir Gregory¹,
Edwin Johnson^{1,2}, Grant Webber¹

14:00-15:20

Chair : Kenichi Sakai (Tokyo University of Science), Ryo Murakami (Konan University)

5A07 [Invited Lecture] Yielding to stress: the effect of interparticle interactions on how Pickering
emulsions flow (¹Massey University) ○Catherine Whitby¹

5A08 [Invited Lecture] Various aspects of iodine transfer polymerization in aqueous dispersed systems (¹Rajamangala University of Technology Thanyaburi) ○Amorn Chaiyasat¹

5A09 Synthesis of Pt/Ag solid solution alloy nanoparticles on liquid polymer by co-sputtering (¹Hokkaido University) ○Mingbei Zhu¹, Mai T Nguyen¹, Tetsu Yonezawa¹

15:40-16:30

Chair : Syuji Fujii (Osaka Institute of Technology), Lok K Shrestha (NIMS)

5A10 [Keynote Lecture] Colloidal clusters from confined self-assembly: structure – thermodynamics – formation kinetics (¹Friedrich-Alexander University Erlangen-Nuremberg) ○Nicolas Vogel¹

16:40-18:20

Chair : Yuki Sugiyama (Shiseido Co., Ltd.), Takanori Takiue (Kyushu University)

5A11 [Invited Lecture] Adhesive micropatterning of highly-concentrated colloidal thin layers (¹AIST) ○Yasuyuki Kusaka¹

5A12 [Invited Lecture] Complex self-assembly behavior of core-shell microgels at liquid interfaces (¹The University of Edinburgh) ○Marcel Rey¹

5A13 High aspect ratio silver nanowires as top transparent conducting electrodes (¹Hokkaido University, ² NIMS) ○Min J Saw¹, Mai T Nguyen¹, Naoto Shirahata², Tetsu Yonezawa¹

5A14 Decrease in linear charge density of polyelectrolyte by random side-chain modification allows effective protein sequestration in complex coacervate phase. (¹Kyushu University) ○Biplab KC¹, Teruki Nii¹, Takeshi Mori¹, Yoshiki Katayama¹, Akihiro Kishimura¹

18:20-18:30 Closing remarks

Room B

10:10-11:50

Chair : Shin-ichi Yusa (University of Hyogo), Mika Iga (Nippon Paint Co., Ltd.)

5B01 [Invited Lecture] Analysis of particle contact and amorphous structure of titania using interparticle charge-transfer excitation (¹Hokkaido University) ○Bunsho Ohtani¹, Yang Shen¹, Guangyi Chen¹, Mai Takashima¹

5B02 [Invited Lecture] Adsorptive removal of antibiotic using novel adsorbent based on core-shell CeO₂@SiO₂ nanoparticle synthesized from rice husk (¹Vietnam National University) ○Tien D Pham¹, Thi M A Le¹, Thi M Q Pham¹

5B03 Sensitivity enhancement of lateral flow immunoassay through magnetic enrichment using multifunctional nanocomposite probes (¹JAIST, ²Nippon Steel Chemical & Material Co., Ltd.) ○The S Le¹, Sizun He¹, Mari Takahashi¹, Yasushi Enomoto², Yasufumi Matsumura², Shinya Maenosono¹

5B04 Water-soluble complex formed from fullerene and biocompatible diblock copolymer containing pendant glucose (¹University of Hyogo) ○Kohei Kitano¹, Shin-ichi Yusa¹

14:00-15:30

Chair : Shiori Kubo (AIST), Naoyuki Ishida (Okayama University)

5B05 [Invited Lecture] Conformational transitions of poly (N-isopropylacrylamide) layers on silica in alcohols and binary solvents (¹Okayama University)

○Naoyuki Ishida¹, Koreyoshi Imamura¹

5B06 [Invited Lecture] Using light and heat to control viscosity of surfactant self-assemblies, from wormlike micelles to vesicles and beyond (¹Monash University) ○Rico Tabor¹

5B07 [Invited Lecture] Driving droplets on liquid repellent surfaces via light-driven marangoni propulsion (¹Chung-Ang University, ²University of Ioannina, ³Osaka Institute of Technology) ○ Sanghyuk Wooh¹, Hyesun Hwang¹, Periklis Papadopoulos², Syuji Fujii³

16:40-18:20

Chair : Cathy McNamee (Shinshu University), Kiyoshi Kanie (Tohoku University)

5B08 [Invited Lecture] Beyond the Hofmeister series: a theory of buffer specific effects (¹University of Cagliari) ○Drew Parsons¹

5B09 [Invited Lecture] Change in the forces between two charged surfaces in aqueous surfactant solutions by a liquid flow (¹Shinshu University) ○Cathy McNamee¹, Hayato Kawakami¹

5B10 Facile synthesis of hollow α -Fe₂O₃ microspheres by hydrothermal method (¹Utsunomiya University) ○Md S Hossain¹, Takeshi Furusawa¹, Masahide Sato¹

5B11 Preparation of polyion complex (PIC) micelles between oppositely charged diblock copolymers bearing phosphorylcholine groups (¹University of Hyogo) ○Thao T Pham¹, Shin-ichi Yusa¹

Room C

10:10-11:50

Chair : Masumi Villeneuve (Hiroshima University), Tetsu Yonezawa (Hokkaido University)

5C01 [Invited Lecture] Sensing ability and formation criterion of fluid supported lipid bilayer coated graphene field-effect transistors (¹National Taiwan University) ○Ling Chao¹

5C02 [Invited Lecture] Soft opt mechanical devices consisting of photothermal conversion rare-earth nanoparticles with wavelength selectivity (¹Kumamoto University) ○Satoshi Watanabe¹

5C03 Speed reversal of a camphor disk depending on the depth of a surfactant aqueous phase (¹Hiroshima university) ○Xu Yu¹, Satoshi Nakata¹

5C04 Femtosecond laser excited THz wave from Cu/Cu₂O interface (¹Hokkaido University, ²Academia Sinica) ○Yuen-ting R Chau¹, Hsin-hui Huang², Mai T Nguyen¹, Koji Hatanaka², Tetsu Yonezawa²

14:00-15:20

Chair : Taku Ogura (Cosmos Technical Center Co., Ltd.), Lok K Shrestha (NIMS)

5C05 [Invited Lecture] Self-assembled fullerene nanomaterials for energy storage, sensing and beyond (¹NIMS, ²The University of Tokyo) ○Lok K Shrestha¹, Katsuhiko Ariga^{1,2}

5C06 [Invited Lecture] Surface freezing of cetyltrimethylammonium chloride – hexadecanol mixed adsorbed film at dodecane-water interface (¹Hiroshima University, ²TU Berlin) ○ Hiroki Matsubara¹, Michael Gradzielski²

5C07 Preparation and characterization of polyion complex (PIC) micelles with random copolymers (¹University of Hyogo) ○ Shukanta Bhowmik¹, Shin-ichi Yusa¹

16:40-18:10

Chair : Naoyuki Ishida (Okayama University), Ryo Murakami (Konan University)

5C08 [Invited Lecture] Effects of particle roughness on the rheology and structure of capillary suspensions (¹KU Leuven) ○ Erin Koos¹

5C09 [Invited Lecture] Self-assembly and interactions of bacterial lipids (¹University of Bristol) ○ Wuge H. Briscoe¹

5C10 [Invited Lecture] Encapsulation, retention and triggered release of low molecular weight active ingredients (¹University of Leeds) ○ Olivier Cayre¹