

Preliminary Program for ASEPFPM 6

(As of Jan. 5, 2018)

Happiring Hall, Fukui, Japan

March 7 – 10, 2018

Presentation time, S: Invited, 25 min. (20 + 5)

A: 20 min. (15 + 5), B: 15 min. (10 + 5)

DAY 1 March 7 (19:00 – 20:45)

Chair: Hidetaka Tobita

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| 19:00 | | Opening Remarks Mamoru Nomura, Honorable Chairperson |
| 19:20 | 1-01S | Are All of Sulfate End-Groups Localized at Particle Surfaces Prepared by Emulsion Polymerization of Styrene with Potassium Persulfate? <u>Masayoshi Okubo</u> Nanjing Tech University, China |
| 19:45 | 1-02S | On the Advances of Particle Formation Mechanism <u>Henmei Ni</u> Southeast University, China |
| 20:10 | 1-03S | Effect of Chain Transfer to Polymer in Conventional and Living Emulsion Polymerization <u>Hidetaka Tobita</u> University of Fukui, Japan |
| 20:35 | | Announcement |
| 20:45 | | End of Day 1 |

DAY 2 March 8 (9:00 – 21:00)

Chair: Masayoshi Okubo

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| 9:00 | 2-01S | Interesting Behavior and Kinetics of Cyclic Siloxanes Ring-opening Polymerization in Acid Emulsion <u>Kiyoshi Suzuki</u> , Daisuke Ishiguro, Shun Okubo, Tomohiro Miyazaki, Hidetaka Tobita University of Fukui, Japan |
| 9:25 | 2-02S | Preparation of Polymer Particles Containing Reduced Graphene Oxide Stabilized by Poly(ionic liquid) <u>Hideto Minami</u> ¹ , Mitsuyoshi Yamane ¹ , Masayoshi Tokuda ¹ , Stuart C. Thickett ² , Per B. Zetterlund ³ ¹ Kobe University, Japan; ² The University of Tasmania, Australia; ³ University of New South Wales, Australia |
| 9:50 | 2-03S | Advanced Emulsion Polymerization with a Tiny Amount of Low CMC Surfactant <u>Haruyuki Ishii</u> , Hitoshi Nakazawa, Naoto Kuwasaki, Motohiro Ishii, Daisuke Nagao, Mikio Konno Tohoku University, Japan |
| 10:15 | 2-04A | Polymerizable/Reactive Surfactants in Emulsion Polymerization Chi Tao, Takuro Kimura, Asako Ogasawara, <u>Kei Shiohara</u> , Masataka Joyabu, Keiichi Fujise DKS Co. Ltd., Japan |
| 10:35 | | Break |

Chair: Hideto Minami

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| 10:50 | 2-05S | Morphology Control in Polymer Nanocomposite Particles, Controlled Radical Polymerization vs Free Radical Polymerization <u>Alex van Herk</u> ^{1,2} , Olessya Loiko ^{1,2} , Hans Heuts ² , Mohammad Amin Moradi ² , Alexander William Jackson ¹ , Wendy Rusli ¹ ¹ Institute of Chemical Engineering Sciences, Singapore; ² Eindhoven University of Technology, Netherlands |
| 11:15 | 2-06S | RAFT Emulsion Polymerization: Fundamentals and Emerging Functional Materials <u>Yingwu Luo</u> Zhejiang University, China |
| 11:40 | 2-07S | Synthesis of Nano-particles and Nano-capsules via Iodide Ion (I⁻) Catalyzed Living Radical Polymerization <u>Atsushi Goto</u> Nanyang Technological University, Singapore |

12:05

Lunch Meeting (Wel-Aossa, Aossa, 3F)

Chair: Tatsuo Taniguchi

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| 13:30 | 2-08S | Development of Novel Materials from Polymerization of Pickering Emulsion and High Internal Phase Emulsion Templates <u>Shiping Zhu</u> McMaster University, Canada & Chinese University of Hong Kong, Shenzhen, China |
| 13:55 | 2-09S | Synthesis of Multi-Component Polymer Particles with Smart Properties through a Controlled Semi-Batch Emulsion Polymerization <u>Pei Li</u> The Hong Kong Polytechnic University, China |
| 14:20 | 2-10S | Preparation of Unimolecular Star-shaped Polymer Particles by RAFT Dispersion Polymerization <u>Seigou Kawaguchi</u> , Sumika Sato, Keita Ohba, Moriya Kikuchi Yamagata University, Japan |
| 14:45 | 2-11A | Two-step Reprecipitation Method with Size and Zeta-Potential Controllability for Synthesizing Semiconducting Polymer Nanoparticles <u>Masaru Nagai</u> , Jun Huang, Wei Huang Nanjing Tech University, China |

15:05

Break

Chair: Atsushi Goto

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| 15:20 | 2-12S | Enable New Function for Polysaccharide Microspheres and Preparation of New Products <u>Guanghui Ma</u> , Wei Wei, Jie Wu, Weiqing Zhou Chinese Academy of Sciences, China |
| 15:45 | 2-13B | Hollow Silica Particles Synthesized with Perhydropolysilazane in W/O Emulsion Kaoru Kuramochi, Hana Kiyosawa, <u>Reiko Saito</u> Tokyo Institute of Technology, Japan |
| 16:00 | 2-14B | Emulsifier Having Reactive Group in Its Bulky Counter Ion: Its Interfacial Properties and Behavior in Emulsion Polymerization <u>Yuki Ogura</u> ² , Hiroto Maeda ¹ , Yuta Saito ² , Koutarou Kanetaki ² , Chuken O ² , Atsushi Kameyama ¹ , Haruma Kawaguchi ¹ ¹ Kanagawa University, Japan; ² Nippon Nyukazai Co., Ltd., Japan |

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| 16:15 | 2-15A | Structural Control of Hydrogel Microparticles Using Aqueous Two Phase Separation within Emulsion Droplets <u>Takaichi Watanabe</u> , Ibuki Motohiro, Tsutomu Ono Okayama University, Japan |
| 16:35 | 2-16B | Properties of Polyvinyl Acetate Emulsion Having New Type of High Molecular Weight Polyvinyl Alcohol <u>Yuta Taoka</u> , Keisuke Morikawa, Yoriko Imaoka, Masato Nakamae Kuraray Co. Ltd., Japan |

16:50

Break

Chair: Kiyoshi Suzuki

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| 19:00 | Poster Session |
| 21:00 | End of Day 2 |

DAY 3 March 9 (9:00 – 20:00)

Chair: Seigo Kawaguchi

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| 9:00 | 3-01S | Preparation of Liquid Core Nanocapsules Containing Photochromic Dyes by Polymerization of O/W Emulsion Monomer Droplets Obtained through Phase Inversion Temperature Emulsification <u>Tatsuo Taniguchi</u> ¹ , Yosuke Tsuru ¹ , Michinari Kohri ¹ , Keiki Kishikawa ¹ , Masaki Hayashi ² ¹ Chiba University, Japan; ² NOF Corporation, Japan |
| 9:25 | 3-02S | Preparation of Biocompatible/Biodegradable Microspheres from Curable Polylactic Acid-Based Copolymers for Biomedical Applications Kamonchanok Thananukul ¹ , Atitsa Petchsuk ² , <u>Pakorn Opaprakasi</u> ¹ ¹ Thammasat University, Thailand; ² National Science and Technology Development Agency, Thailand |
| 9:50 | 3-03S | Photo-Sensitive Copolymers Containing Spironaphthoxazine and Colloidal Particles Prepared Therefrom <u>In Woo Cheong</u> Kyungpook National University, Korea |
| 10:15 | 3-04B | Preparation of Gigaporous Polymeric Microsphere Stabilized by Aqueous Two-Phase System <u>Weiqing Zhou</u> , Guanghui Ma Chinese Academy of Sciences, China |

10:30

Break

Chair: Guanghui Ma

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| 10:45 | 3-05S | Effect of Latex Stability on Natural Rubber Latex Film Morphology <u>Chee-Cheong Ho</u> , Nut Churinthorn and Jitladda Sakdapipinich Universiti Tunku Abdul Rahman, Malaysia |
| 11:10 | 3-06S | Pickering Emulsion Templated Capsules: Preparation and Controlled Release To Ngai <u>To Ngai</u> The Chinese University of Hong Kong, China |
| 11:35 | 3-07B | Selection of Dispersants via Adhesion Force Study and Preparation of Stable Graphene Dispersion <u>Suguna Perumal</u> , Hyang Moo Lee, In Woo Cheong Kyungpook National University, Korea |

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| 11:50 | 3-08B | Preparation and Characterization of Chitosan Dispersed Polylactic Acid Nanocomposite Grafted/Blended with Graphene Oxide Nanoparticles <u>Siti Noor Kamilah Mohamad</u> Universiti Putra Malaysia, Malaysia |
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12:05 **Lunch Meeting** (Wel-Aossa, Aossa, 3F)

Chair: Syuji Fujii

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| 13:30 | 3-09S | Self-Organization of Soft Hydrogel Microspheres at the Air/Water Interfaces <u>Daisuke Suzuki</u> , Masaya Takizawa, Yuka Sazuka, Haruka Minato Shinshu University, Japan |
| 13:55 | 3-10B | Molecular Design of Polydimethylsiloxane(PDMS)-Based Photo-Curable Polymer and Its Effect on Mechanical Properties <u>Gwajeong Jeong</u> , Hyunseung Yang, Seong-Dae Park, Woo-Sung Lee Korea Electronics Technology Institute, Korea |
| 14:10 | 3-11A | Nanocomposite Microgels Formed by Seeded Emulsion Polymerization of Styrene in the Presence of Hydrogel Microspheres <u>Takumi Watanabe</u> ¹ , Song Chihong ² , Kazuyoshi Murata ² , Takuma Kureha ¹ , Daisuke Suzuki ¹ ¹ Shinshu University, Japan; ² National Institute for Physiological Sciences, Japan |
| 14:30 | 3-12B | Easy Removal of Hg²⁺ from Wastewater by Biodegradable Gelatin-Chitosan (GC) Hydrogel Particles <u>Saifullah Lone</u> , In Woo Cheong Kyungpook National University, Korea |
| 14:45 | 3-13A | Application of Polymeric Particle Prepared by Polymerization without Surfactant and Influence of Its Wastewater on Microbes <u>Tetsuya Yamamoto</u> ¹ , Katsumasa Uematsu ¹ , Yuya Takahashi ¹ , Kenji Arakawa ² ¹ Nagoya University, Japan; ² Hiroshima University, Japan |

15:05 **Break**

Chair: Daisuke Suzuki

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| 15:20 | 3-14S | Light-Driven Delivery of Materials Using Liquid Marble Hisato Kawashima ¹ , Hiroyuki Mayama ² , Yoshinobu Nakamura ¹ , <u>Syuji Fujii</u> ¹ Osaka Institute of Technology, Japan; ² Asahikawa Medical University, Japan |
| 15:45 | 3-15B | Facile Preparation of Metal Layers on Photo-curable Polymeric Surfaces for 3D Printing <u>Hyunseung Yang</u> , Gwajeong Jeong, Seong-Dae Park, Woo-Sung Lee Korea Electronics Technology Institute, Korea |
| 16:00 | 3-16A | Sub-Micron Silicon/SAN Natural Graphite Self-Assembly Composite and Its Application in Li-Ion Batteries <u>Zhoulu Wang</u> , Xiang Liu Nanjing Tech University, China |
| 16:20 | 3-17B | Biomimetically Engineered Demi-Bacteria Potentiate Vaccination Against Cancer <u>Wei Wei</u> , Guanghui Ma Chinese Academy of Sciences, China |

Chair: Hidetaka Tobita

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| 16:35 | 3-18S | Anisotropic Hybrid Polymer Particles with Well Defined Morphologies <u>Pramuan Tangboriboonrat</u> , W. Wichaita, N. Sudjaipraparat, S. Nuasaen, C. Kaewsaneha Mahidol University, Thailand |
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| 17:00 | 3-19S | The Fourth Generation of Emulsion Polymerization: from the Past, to the Future <u>Jung Hyun Kim</u> Yonsei University, Korea |
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17:25 **Break**

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| 19:00 | Banquet (Yours Hotel, 4F) Including ceremony of Student's Award selected from Poster Session | |
| 21:00 | End of Day 3 | |

DAY 4 **Post-Conference Tour**

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| 9:00 | JR Fukui Station: East exit (the opposite exit from Happiring Hall) |
| | Eiheiji Temple, Lunch at Kagetsu-Rou, Fukui Prefectural Dinosaur Museum |
| 16:00 | JR Fukui Station |

Poster Session

DAY 2, March 8

19:00 – 21:00

Chair: Kiyoshi Suzuki

The names with double underline are the candidates for Students' Award.

- P-01 **Preparation of Micrometer-size Poly(Methyl Acrylate) Particles by Utilizing Microsuspension Iodine Transfer Polymerization (*ms* ITP) : Simulation and Experiment**
Chujuan Huang¹, Nobuko Yamashita², Xiang Liu¹, Masayoshi Okubo^{1,2}
¹Nanjing Tech University, China; ²Kobe University, Japan
- P-02 **Preparation of Dye-Incorporated Polystyrene Particles**
Natalya Sankova, Viktoriya Semeykina, Ekaterina Parkhomchuk
Novosibirsk State University, Boreskov Institute of Catalysis SB RAS, Russia
- P-03 **Role of “HITENOL AR” Reactive Surfactant in Emulsion and Miniemulsion Polymerization**
Asako Ogasawara¹, Kei Shiohara¹, Masatake Joyabu¹, Keiichi Fujise¹, Eric S. Daniels², Mohamed S. El-Aasser²
¹DKS Co. Ltd., Japan; ²Lehigh University, USA
- P-04 **A Facile Method for Preparation of Monodisperse Cylindrical Polystyrene Particles**
Wei Li, Toyoko Suzuki, Hideto Minami
Kobe University, Japan
- P-05 **Application of Spongy Cellulose Particles to Encapsulations**
Taro Omura, Kaori Imagawa, Toyoko Suzuki, Hideto Minami
Kobe University, Japan
- P-06 **Synthesis of Element-Block Polymer Particles Containing Phosphate Group by Stabilizer-Assisted Polymerization-Induced Self Assembly**
Haruka Hanochi, Nobuaki Nishizawa, Yoshinobu Nakamura, Syuji Fujii
Osaka Institute of Technology, Japan
- P-07 **Double Emulsion Templated Microspheres with Hierarchical Porous Structures: A Candidate for Trapping Virus-Like Particles**
Xiangming Na, Guanghui Ma
Chinese Academy of Sciences, China
- P-08 **Uniformed Size Porous mPEG-PLGA Microspheres for SCT Sustained Release**
Yi Wei, Guanghui Ma
Chinese Academy of Sciences, China
- P-09 **Stereocomplexed Polylactide-Based Nanocapsules for Controlling the Release Behavior of Encapsulated Molecules**
Sayako Ogita, Yui Sakamoto, Takaichi Watanabe, Tsutomu Ono
Okayama University, Japan
- P-10 **Strange Seeded Emulsion Copolymerization Behavior of Hydrophobic Monomer and Hydrophilic Monomer**
Ayaka Yamaguchi, Maria Kawaguchi, Kiyoshi Suzuki
University of Fukui, Japan
- P-11 **Nanoemulsions: Formation, Stability and Relation between Droplet Size and Kinematic Viscosity of Continuous Phase**
Ritik Shah, Vimal Kumar
Indian Institute of Technology Roorkee, India
- P-12 **Fabrication of Particle-Stabilized Bubbles and Their Light-Induced Locomotions**
Masaya Ito¹, Hisato Kawashima¹, Hiroyuki Mayama², Yoshinobu Nakamura¹, Syuji Fujii¹
¹Osaka Institute of Technology, Japan; ²Asahikawa Medical University, Japan
- P-13 **Synthesis of Polymeric Microspheres Cross-Linked by Rotaxane Networks**
Seina Hiroshige¹, Takuma Kureha¹, Jun Sawada², Daisuke Aoki², Toshikazu Takata², Daisuke Suzuki¹
¹Shinshu University, Japan; ²Tokyo Institute of Technology, Japan

- P-14 **Non-Spherical Hollow Latex Particles as White Pigment in Paint Film**
Narissara Sudjaiprapat, Chariya Kaewsaneha, Sukanya Nuasaen, Pramuan Tangboriboonrat
 Mahidol University, Thailand
- P-15 **High Functionalization of CNTs and Resin Composite Material by Using Polymer Particles**
Naoya Toyoda, Tetsuya Yamamoto
 Nagoya University, Japan
- P-16 **Analysis on Magnetophoretic Properties of Magnetic Composite Particles toward Precise Separation of Target Components**
Natsuki Kohama, Haruyuki Ishii, Mikio Konno, Daisuke Nagao
 Tohoku University, Japan
- P-17 **Preparation of Asymmetric Composite Particles Supporting Nanoparticles for Self-Propelled Motion**
Nozomi Shigeta, Haruyuki Ishii, Daisuke Nagao
 Tohoku University, Japan
- P-18 **Simple and Mass Fabrication of Monodisperse Dimpled Sub-Microparticles Using Free Micro Mixer**
Yusuke Kawai, Tetsuya Yamamoto
 Nagoya University, Japan
- P-19 **Self-Healable Polymers for Anti-Corrosive Coatings**
Sumin Yun, Sunghwan Ju, Jaeil Park, In Woo Cheong
 Kyungpook National University, Korea
- P-20 **Stable Graphene Alcoholic Dispersions with P(PEGMA-r-DMA) and P(GlyMA-r-DMA) Copolymers**
Kum Ju Baek, Suguna Perumal, In Woo Cheong
 Kyungpook National University, Korea
- P-21 **Emulsion Stabilized by Oppositely Charge Nanoparticles**
Kuan Ting Lin, To Ngai
 The Chinese University of Hong Kong, China
- P-22 **Inverse Pickering Miniemulsion Templated Silica Submicron Capsules and Solvent-Triggered Release**
Hang Jiang, Liangzhi Hong, To Ngai
 The Chinese University of Hong Kong, China
- P-23 **Studying the Anticorrosive Properties of Composite Nickel Coatings Containing Microcapsules with a Corrosion Inhibitor**
Kholkin Oleg Sergeevich, Kurbatov Andrey Petrovich, Galeyeva Alyna Kulbaevna, Kokhmetova Saule Talgatovna, Sertaeva Zhanylys Orynbekovna
 Center of Physico-Chemical Methods of Research and Analysis, Kazakhstan
- P-24 **Fabrication of Ordered Structure Incorporating Gold Nanoparticles for Highly Sensitive Detection of Chemical Components**
Ayumi Yahata, Haruyuki Ishii, Daisuke Nagao
 Tohoku University, Japan
- P-25 **Synthesis of Block Copolymers for Polymer/Carbon Allotropes Composites**
Hyang Moo Lee, Jae Il Park, In Woo Cheong
 Kyungpook National University, Korea
- P-26 **Synthesis of Block Copolymer Coated Iron Oxide Nanoparticles for Kinetic Hydrate Inhibition**
Ye Won Bae, In Woo Cheong
 Kyungpook National University, Korea
- P-27 **Development of the Novel Cationic Vesicles with High Potential for Ingredient Delivery and High Stability**
Naoyuki Hirata¹, Eiichi Takakuwa², Nobuhiro Kato¹, Haruma Kawaguchi^{1,3}
¹WAMILES COSMETICS Inc., Japan; ²COSMEDIA LABORATORIES Co., Ltd., Japan;
³Kanagawa University, Japan

- P-28 **Highly Absorbing Superabsorbent Polymer via Iodide-Mediated Controlled Radical Polymerization**
Toru Miyajima¹, Yusuke Matsubara¹, Hiroto Komatsu², Yu Yamaguchi², Kazumitsu Suzuki¹, Michihiko Miyamoto²
¹SDP Global Co., Ltd., Japan; ²Godou Shigen Co., Ltd., Japan
- P-29 **Preparation of Polystyrene-SiO₂-polydopamine Core/shell Composite and Its Application in Lithium-ion Batteries**
Aoning Wang, Xiang Liu
 Nanjing Tech University, China
- P-30 **Biomedical Tailoring Pickering Emulsion for Enhanced Vaccinations**
Yufei Xia, Guanghui Ma
 Chinese Academy of Sciences, China
- P-31 **Development of Immunol latex Particles for Malaria Detection**
Supang Sripraphot, Duangporn Polpanich, Pramuan Tangboriboonrat
 Mahidol University, Thailand
- P-32 **Synthesis Method of Urethane Acrylate Hybrid Emulsion**
Eri Hatakeyama, Ryousuke Kawasaki, Masaji Saitou
 Japan Coating Resin Corporation, Japan
- P-33 **Comparison between Arabic Gum and Arabic Gum-Graft-Acrylonitrile Copolymer in Reducing the Concentration of Some Heavy Metals in Water Samples**
Khaled Elgendy, Dina Abd Elaleem
 Zagazig University, Egypt
- P-34 **Enhancing CO₂ Capture using Robust Superomniphobic Membranes**
Florian Geyer, Clarissa Schönecker, Hans-Jürgen Butt, Doris Vollmer
 Max Planck Institute for Polymer Research, Germany
- P-35 **Temperature Sensitive Microspherical Hydrogels using Silica Nanoparticles as Multifunctional crosslinking points**
Md. Ashraful Alam¹, Makoto Takafuji^{2,3}, Yutaka Kuwahara², Hirotaka Ihara^{2,3}
¹Noakhali Science and Technology University, Bangladesh; ²Kumamoto University, Japan; ³Kumamoto Institute for Photo-Electro Organics, Japan
- P-36 **Development of Soft-Rigid Layer Core-Shell Microspheres using Polybutadiene and Inorganic Materials**
Shoji Nagaoka^{1,2,3}, Hideo Sakurai¹, Yangwon Kang², Tomohiro Shirosaki^{1,3}, Maki Horikawa^{1,3}, Naoya Ryu¹, Makoto Takafuji^{2,3}, Hirotaka Ihara^{2,3}
¹Kumamoto Industrial Research Institute, Japan; ²Kumamoto University, Japan; ³PHOENICS, Japan
- P-37 **Soft Nanoparticle Flotation Collectors**
Xiaofei Dong^{1,2}, Robert Pelton², Zhengke Wang¹, Qiaoling Hu¹
¹Zhejiang University, China; ²McMaster University, Canada
- P-38 **Multiple Carbon Dots-Crosslinked Polyethyleneimine Nanogels with Ultra-Bright Fluorescence for Tracking Intracellular Gene Delivery**
Yuan Yao¹, Dechao Niu^{1,2}, Cheng Hao Lee¹, Yan-Juan Gu¹, Ki Lui¹, Pei Li¹
¹The Hong Kong Polytechnic University, China; ²East China University of Science and Technology, China
- P-39 **Design and Synthesis of Multifunctional Nanocomposites Enabling Magnetic Targeting and Photoacoustic Imaging for Photothermal Therapy**
 Jinfeng Liao, Liangyu Zhou, Pei Li
 The Hong Kong Polytechnic University, China