Program 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 1-0	Are All of Sulfate End-Groups Localized at Particle Surfaces Prepared by Emulsion
	Polymerization of Styrene with Potassium Persulfate?
	Masayoshi Okubo
	Nanjing Tech University, China
19:45 1-0	2S On the Advances of Particle Formation Mechanism in the Heterophase
	Polymerization
	<u>Henmei Ni</u>
	Southeast University, China
20:10 1-0	3S Effect of Chain Transfer to Polymer in Conventional and Living Emulsion
	Polymerization
	Hidetaka Tobita
	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
		Kiyoshi Suzuki, 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 , Masayoshi Tokuda ^{1,2} , Mitsuyoshi Yamane ¹ , Stuart C. Thickett ^{2,3} ,
		Per B. Zetterlund ³
		¹ Kobe University, Japan; ² The University of New South Wales, Australia;
		³ The University of Tasmania, Australia
9:50	2-03S	Advanced Emulsion Polymerization with a Tiny Amount of Low CMC Surfactant
		Haruyuki Ishii, Hitoshi Nakazawa, Naoto Kuwasaki, Motohiro Ishii, Mikio Konno,
		Daisuke Nagao
		Tohoku University, Japan
10:15	2-04A	Polymerizable/Reactive Surfactants in Emulsion Polymerization
		Chi Tao, Takuro Kimura, Asako Ogasawara, Kei Shiohara, Masatake Joyabu,
		Keiichi Fujise
		DKS Co. Ltd., Japan

10:35 **Break**

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10:50 2-05S	Morphology Control in Polymer Nanocomposite Particles, Controlled Radical
	Polymerization vs Free Radical Polymerization
	Alex van Herk ^{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
	Yingwu Luo, Kun Yan, Yulong Guo, Jie Mao
	Zhejiang University, China
11:40 2-07S	Synthesis of Nano-particles and Nano-capsules via Iodide Ion (I ⁻) Catalyzed Living
	Radical Polymerization
	Atsushi Goto
	Nanyang Technological University, Singapore

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

Chair: Tatsuo Taniguchi

12:05

13:30	2-08S	Development of Novel Materials from Polymerization of Pickering Emulsion and
		High Internal Phase Emulsion Templates
		Lei Lei, He Zhu, Shiping Zhu
		McMaster University, Canada
13:55	2-09S	Synthesis of Multi-Component Polymer Particles with Smart Properties through a
		Controlled Semi-Batch Emulsion Polymerization
		Chun Ho Yam, Cheng Hao Lee, Yuen Shan Siu, Kin Man Ho, Pei Li
		The Hong Kong Polytechnic University, China
14:20	2-10S	Preparation of Unimolecular Star-shaped Polymer Particles by RAFT Dispersion
		Polymerization
		Seigou Kawaguchi, 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
		Masaru Nagai, Jun Huang, Wei Huang
		Nanjing Tech University, China

15:05 Break

Chair: Atsushi Goto

15:20	2-12S	Enable New Function for Polysaccharide Microspheres and Preparation of New
		Products
		Guanghui Ma, 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, Reiko Saito
		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
		Yuki Ogura ² , Hirotomo 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

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
		Yuta Taoka, Keisuke Morikawa, Yoriko Imaoka, Masato Nakamae
		Kuraray Co. Ltd., Japan
16:50		Break
		Chair: Kiyoshi Suzuki
19:00		

Chair: Kiyoshi Suzuki

19:00

Poster Session

21:00

End of Day 2

DAY 3 March 9 (9:00 - 20:00)

Chair: Seigo Kawaguchi

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	Fabrication of Biocompatible/Biodegradable Microspheres from Curable Polylactic
		Acid-Based Copolymers
		Kamonchanok Thananukul ¹ , Chariya Kaewsaneha ¹ , Atitsa Petchsuk ² , Wilairat Supmak ² ,
		Pakorn Opaprakasit 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
		In Woo Cheong, Lone Saifullah, Miri Kim, Jeong In Ahn
		Kyungpook National University, Korea
10:15	3-04B	Preparation of Gigaporous Polymeric Microspheres Stabilized by Aqueous
		Two-Phase System
		Weiqing Zhou, Juan Li, Xiangming Na, Guanghui Ma
		Chinese Academy of Sciences, China

10:30 **Break**

Chair: Guanghui Ma

10:45 3-05S	Evidence of Presence of Long Chain Fatty Acid Soaps on Hevea Natural Rubber
	Latex Particles for Stabilization
	Nut Churinthorn ¹ , Jitladda Sakdapipinich ¹ , <u>Chee-Cheong Ho</u> ²
	¹ Mahidol University, Thailand; ² University of Tunku Abdul Rahman, Malaysia
11:10 3-06S	Pickering Emulsion Templated Capsules: Preparation and Controlled Release
	Hang Jiang, To Ngai
	The Chinese University of Hong Kong, China

11:35	3-07B 3-08B	Selection of Dispersants via Adhesion Force Study and Preparation of Stable Graphene Dispersion Suguna Perumal, Hyang Moo Lee, In Woo Cheong Kyungpook National University, Korea Preparation and Characterization of Chitosan Dispersed Poly(lactic Acid) Blending and Grafting with Graphene Oxide Composites
		Siti Noor Kamilah Mohamad ¹ , Irmawati Ramli ¹ , Nor Azowa Ibrahim ¹ , Luqman Chuah Abdullah ¹ , Nor Hashimah Mohamed ² ¹ Universiti Putra Malaysia, Malaysia; ² Malaysia Nuclear Agency, Malaysia
12:05		Lunch Meeting (Wel-Aossa, Aossa, 3F)
		Chair: Syuji Fujii
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
13:55	3-10B	Shinshu University, Japan Molecular Design of Polydimethylsiloxane(PDMS)-Based Photo-Curable Polymer and Its Effect on Mechanical Properties
		Gwajeong Jeong, Hyunseung Yang, Seong-Dae Park, Woo-Sung Lee
14.10	3-11A	Korea Electronics Technology Institute, Korea Nanocomposite Microgels Formed by Seeded Emulsion Polymerization of Styrene in
14.10	J-11A	the Presence of Hydrogel Microspheres
		<u>Takumi Watanabe</u> ¹ , Song Chihong ² , Kazuyoshi Murata ² , Takuma Kureha ¹ ,
		Daisuke Suzuki ¹
14:30	3-12B	¹ Shinshu University, Japan; ² National Institute for Physiological Sciences, Japan Easy Removal of Hg ²⁺ from Wastewater by Biodegradable Gelatin-Chitosan (GC)
14.50	J-12D	Hydrogel Particles
		Saifullah Lone, 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
		Tetsuya Yamamoto ¹ , Yuya Takahashi ¹ , Katsumasa Uematsu ¹ , Kenji Arakawa ²
		¹ Nagoya University, Japan; ² Hiroshima University, Japan
15:05		Break
15:20	3-14S	Chair: Daisuke Suzuki Light-Driven Delivery of Materials Using Liquid Marble
13.20	5-148	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	Fabrication of Metal Layers on Photo-curable Polymers for 3D Printing Materials
		Hyunseung Yang, Minji Ha, Gwajeong Jeong, Seong-Dae Park, Woo-Sung Lee
16:00	3-16A	Korea Electronics Technology Institute, Korea Sub-Micron Silicon/SAN@Natural Graphite Self-Assembly Composite and Its
10:00	3-10A	Application in Li-Ion Batteries
		Zhoulu Wang, Xiang Liu
		Nanjing Tech University, China
16:20	3-17B	Biomimetically Engineered Demi-Bacteria Potentiate Vaccination Against Cancer
		Wei Wei, Guanghui Ma Chinese Academy of Sciences, China
		Chair: Hidetaka Tobita
16:35	3-18S	Anisotropic Hybrid Polymer Particles with Well Defined Morphologies
		Pramuan Tangboriboonrat, Waraporn Wichaita, Narissara Sudjaipraparat,
		Sukanya Nuasaen, Chariya Kaewsaneha
		Mahidol University, Thailand

17:00 3-19S	The Fourth Generation of Emulsion Polymerization: from the Past, to the Future
	Jung Hyun Kim
	Yonsei University, Korea

17:25 Break

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

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	A Facile Method for Preparation of Monodisperse Cylindrical Polystyrene Particles
	Wei Li, Toyoko Suzuki, Hideto Minami
	Kobe University, Japan
P-02	Application of Spongy Cellulose Particles to Encapsulations
	Taro Omura, Kaori Imagawa, Toyoko Suzuki, Hideto Minami
	Kobe University, Japan
P-03	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-04	Double Emulsion Templated Microspheres with Hierarchical Porous Structures:
	A Candidate for Trapping Virus-Like Particles
	Xiangming Na, Jianjun Guo, Tong Li, Hong Ding, Weiqing Zhou, Guanghui Ma
D 05	Chinese Academy of Sciences, China
P-05	Stereocomplexed Polylactide-Based Nanocapsules for Controlling the Release Behavior of
	Encapsulated Molecules Sayako Ogita, Yui Sakamoto, Takaichi Watanabe, Tsutomu Ono
	Okayama University, Japan
P-06	Fabrication of Particle-Stabilized Bubbles and Their Light-Induced Locomotions
F-00	Masaya Ito ¹ , Hisato Kawashima ¹ , Hiroyuki Mayama ² , Yoshinobu Nakamura ¹ , Syuji Fujii ¹
	Osaka Institute of Technology, Japan; ² Asahikawa Medical University, Japan
P-07	Polymeric Microspheres Cross-Linked with Rotaxane Structure
1-07	Seina Hiroshige ¹ , Takuma Kureha ¹ , Jun Sawada ² , Daisuke Aoki ² , Toshikazu Takata ² ,
	Daisuke Suzuki ¹
	¹ Shinshu University, Japan; ² Tokyo Institute of Technology, Japan
P-08	Non-Spherical Hollow Latex Particles as White Pigment in Paint Film
	Narissara Sudjaipraparat, Chariya Kaewsaneha, Sukanya Nuasaen, Pramuan Tangboriboonrat
	Mahidol University, Thailand
P-09	High Functionalization of CNTs and Resin Composite Material by Using Polymer Particles
	Naoya Toyoda, Tetsuya Yamamoto
	Nagoya University, Japan
P-10	Preparation of Dye-Incorporated Polystyrene Particles
	Natalya Sankova, Viktoriya Semeykina, Ekaterina Parkhomchuk
	Boreskov Institute of Catalysis, Novosibirsk State University, Russia
P-11	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-12	Preparation of Asymmetric Composite Particles Supporting Nanoparticles for Self-Propelled
	Motion
	Nozomi Shigeta, Haruyuki Ishii, Daisuke Nagao
D 12	Tohoku University, Japan
P-13	Simple and Mass Fabrication of Monodisperse Dimpled Sub-Microparticles Using Free Micro Mixer
	Yusuke Kawai, Tetsuya Yamamoto Nagoya University Japan
	Nagoya University, Japan

P-14 Self-Healable Polymers for Anti-Corrosive Coatings

Sumin Yun, Sunghwan Ju, Jaeil Park, In Woo Cheong

Kyungpook National University, Korea

P-15 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-16 Pickering Emulsion Stabilized by Oppositely Charged Nanoparticles

Kuan-Ting Lin, To Ngai

The Chinese University of Hong Kong, China

P-17 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-18 Fabrication of Ordered Structure Incorporating Gold Nanoparticles for Highly Sensitive Detection of Chemical Components

Ayumi Yahata, Haruyuki Ishii, Daisuke Nagao

Tohoku University, Japan

P-19 Synthesis of Block Copolymers for Polymer/Carbon Allotropes Composites

Hyang Moo Lee, Jae Il Park, In Woo Cheong

Kyungpook National University, Korea

P-20 **Synthesis of Block Copolymer Coated Iron Oxide Nanoparticles for Kinetic Hydrate Inhibition** Ye Won Bae, Kyuchul Shin, In Woo Cheong

Kyungpook National University, Korea

P-21 Preparation of Polystyrene/SiO₂/polydopamine Core/shell Composite and Its Application in Lithium-ion Batteries

Aoning Wang, Xiang Liu

Nanjing Tech University, China

P-22 **Exploiting the Pliability and Lateral Mobility of Pickering Emulsion for Enhanced Vaccination** Yufei Xia, Guanghui Ma

Chinese Academy of Sciences, China

P-23 Development of Immunolatex Particles for Malaria Detection

Supang Sripraphot¹, Duangporn Polpanich², Pramuan Tangboriboonrat¹

¹Mahidol University, Thailand; ²National Science and Technology Development Agency, Thailand

P-24 Enhancing CO₂ Capture using Robust Superomniphobic Membranes

Florian Geyer, Clarissa Schönecker, Hans-Jürgen Butt, Doris Vollmer

Max Planck Institute for Polymer Research, Germany

P-25 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

The Hong Kong Polytechnic University, China;

²East China University of Science and Technology, China

P-26 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

P-27 Improved Electrical and Optical Characteristics of PEDOT:PSS via Acid Solution-Processed Ultrafiltration

Youngno Kim, Hangyeol Cho, Jin-geun Lee, Wonseok Cho, Jung Hyun Kim

Yonsei University, Korea

P-28 **PEDOT:PSS** Hybridization on Graphene Film for Flexible and Transparent Thermoelectric Generator

<u>Chanil Park</u>, Soeun Im, Yunryeol Kim, Wonseok Cho, Jung Hyun Kim Yonsei University, Korea

P-29 Preparation of Micrometer-size Poly(Methyl Acrylate) Particles by Utilizing Microsuspension Iodine Transfer Polymerization (ms ITP): Simulation and Experiment

<u>Chujuan Huang</u>¹, Nobuko Yamashita², Amorn Chaiyasat³, Xiang Liu¹, Masayoshi Okubo^{1,2,3}

¹Nanjing Tech University, China; ²Kobe University, Japan; ³Rajamangala University of Technology Thanyaburi, Thailand

P-30 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-31 Uniformed Size Porous mPEG-PLGA Microspheres for SCT Sustained Release

Yi Wei, Guanghui Ma

Chinese Academy of Sciences, China

P-32 Strange Seeded Emulsion Copolymerization Behavior of Hydrophobic Monomer and Hydrophilic Monomer

Ayaka Yamaguchi, Maria Kawaguchi, Kiyoshi Suzuki

University of Fukui, Japan

P-33 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-34 Development of the Novel Cationic Vesicles with High Potential for Ingredient Delivery and Stability

Naoyuki Hirata¹, Eiichi Takakuwa², Nobuhiro Kato¹, Haruma Kawaguchi^{1,3}

¹WAMILES COSMETICS Inc., Japan; ²COSMEDIA LABORATORIES Co., Ltd., Japan; ³Kanagawa University, Japan

P-35 Highly Absorbing Superabsorbent Polymer via Iodide-Mediated Controlled Radical Polymerization

<u>Toru Miyajima</u>¹, Yusuke Matsubara¹, Hiroto Komatsu², Yu Yamaguchi², Kazumitsu Suzuki¹, Michihiko Miyamoto²

¹SDP Global Co., Ltd., Japan; ²Godo Shigen Co., Ltd., Japan

P-36 Properties of Urethane Acrylate Hybrid Emulsion

Eri Hatakeyama, Ryousuke Kawasaki, Masaji Saitou

Japan coating resin Corporation, Japan

P-37 Development of Soft-Rigid Layer Core-Shell Microsphere Using Polybutadiene and Inorganic Materials

Shoji Nagaoka¹, Hideo Sakurai¹, Yangwon Kang², Tomohiro Shirosaki¹, Maki Horikawa¹, Naoya Ryu¹, Makoto Takafuji², Hirotaka Ihara²

¹Kumamoto Industrial Research Institute, Japan; ²Kumamoto University, Japan

P-38 **Soft Nanoparticle Flotation Collectors**

Xiaofei Dong^{1,2}, Qiaoling Hu¹, Robert Pelton²

¹Zhejiang University, China; ²McMaster University, Canada

P-39 Durability Study of Asphaltene Reinforced LDPE/HDPE Composites under UV-Irradiation and Local Weathering Exposure

Mohammad N. Siddiqui, Halim H. Redhwi, Muhammad Younas

King Fahd University of Petroleum & Minerals, Saudi Arabia

P-40 Preparation of Sponge-like SAN Copolymer Particles and Their Application in Supercapacitors

Yan Feng, Zhoulu Wang, ZeMin Mao, <u>Xiang Liu</u> Nanjing Tech University, China