# Wednesday, November 25, 2015

9:00 – 9:30 Concert Hall (4F)

Opening Remark

9:30 – 10:30 Concert Hall (4F)

Chairperson: Takeshi Kawai (*Tokyo University of Science, Japan*) PL-01 **Carbon Nanomaterials at the Bio-Interface** 

Shanghao Li and Roger M. Leblanc

Department of Chemistry, University of Miami, U.S.A.

#### **Self-assembly Amphiphilic Systems 1**

11:00 – 12:30 Concert Hall (4F)

Chairperson: Renjie Zhang (Shandong University, China) Chairperson: Atsushi Takahara (Kyushu University, Japan)

K-01 **Viscoelastic Surfactant Gels** Haiqiao Wang and **Jingcheng Hao** 

Chemistry of Education Ministry, Shandong University, China

I-01 Gemini-Like Surfactants Formed in Aqueous Mixtures of Dicarboxylic Acids and Alkylamines

Hideki Sakai

Research Institute of Science and Technology, Tokyo University of Science, Japan

O-01 Glutaraldehyde Cross-linked Chitosan Hydrogels as template for Entrapment of Dyes and Their

**Controlled Release** 

Ng. Florence and H. Naorem

Department of Chemistry, Manipur University, India

O-02 Studies on the Aggregation Behaviour of Merocyanine Dye in Mixed Aqueous Organic Solvent Media

and Its Interactions with Some Ionic Surfactants

Seram Dushila Devi and Homendra Naorem

Department of Chemistry, Nagaland University, India

## **Self-assembly Amphiphilic Systems 2**

14:00 – 15:30 Concert Hall (4F)

Chairperson: Jingcheng Hao (Shandong University, China)

Chairperson: Eri Yoshida (Toyohashi University of Technology, Japan)

I-05 Photon Upconversion Systems Based on Molecular Self-assembly

Nobuo Kimizuka

Graduate School of Engineering, Center for Molecular Systems, Kyushu University, Japan

I-06 Heat- and pH Induced Self-assembly of Double Hydrophilic Block Copolymers in Aqueous Solutions

Pratap Bahadur

Department of Chemistry, VN South Gujarat University, India

O-09 Colloidal Dispersions of Titanate Nanosheets with Tunable Lateral Sizes Via the Exfoliation with a

**Homologous Series of Tetraalkylammonium Cations** 

Tosapol Maluangnont, Panumard Kaewmora, Warunee Maneerattanaamorn, Wipaphan Netrungruang,

Boonyawat Wuttitham, Tawan Sooknoi

King Mongkut's Institute of Technology, Thailand

O-10 Isothermal Micromotors Driven by Oxidation of Organic Fuels

Daigo Yamamoto, Tsuyoshi Takada, Masashi Tachibana, <u>Akihisa Shioi</u>, Kenichi Yoshikawa Department of Chemical Engineering and Materials Science, Doshisha University, Japan

#### Self-assembly Amphiphilic Systems 3

16:00 – 17:30 Concert Hall (4F)

Chairperson: Hideki Sakai (Tokyo University of Science, Japan)

Chairperson: Pratap Bahadur (VN South Gujarat University, India)

I-13 MAGIQ: Novel Bottom-up Process for Making Nanoemulsions

Keigo Kinoshita and Shigeru Deguchi

Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan

O-17 Effect of Methanol on Physicochemical Properties of Dodecyltrimethylammonium Bromide (DTAB)

in Aqueous Medium at Different Temperatures

<u>Sujit Kumar Shah</u>, Sujeet Kumar Chatterjee, Ajaya Bhattarai Department of Chemistry, M.M.A.M.C., Tribhuvan University, Nepal

O-18 Micelle Behavior of Pluronic P123 in Different Solvents

Guodong Zhang, Ronghua Jin, Zhiqing Zhang, Ting Zhou, Longli Zhang

Department of Chemistry, College of Science, China University of Petroleum, China

O-19 Aggregation and Disaggregation in Micellar Solutions Described by the Becker-Döring and

Generalized Smoluchowski Kinetic Equations: New Results

Alexander K. Shchekin, Ilya A. Babintsev, Loran Ts. Adzhemyan

St. Petersburg State University, Russia

O-20 Transport Properties and Ion Binding in Ionic Micellar Solutions by Numerical Methods

Nikolai Volkov, Nikolay Tuzov, Marina Kazantseva, Alexander Shchekin

St. Petersburg State University, Russia

### Dispersed and Colloidal Systems 1

11:00 – 12:30 Conference Room (L)-A (3F)

Chairperson: Koji Tsuchiya (Tokyo University of Science, Japan)

Chairperson: Toshio Sakai (Shinshu University, Japan)

K-02 Physical Stability Control of Charged Catanionic Vesicles Fabricated from Ion Pair Amphiphiles

An-Tsung Kuo, Cheng-Lin Tu, Yu-Min Yang, Chien-Hsiang Chang

Department of Chemical Engineering, National Cheng Kung University, Taiwan

I-02 Molecular Assemblies in Water/Supercritical Carbon Dioxide Mixtures as a Functional Green Solvent

Masanobu Sagisaka, Shinji Ono, Craig James, Atsushi Yoshizawa, Julian Eastoe

Graduate School of Science and Technology, Hirosaki University, Japan

O-03 Structure and Dynamics of Water Inside Reverse Micelles: Propagation of Surface Induced

Frustration Along Hydrogen Bond Networks

Biman Bagchi and Rajib Biswas

Solid State and Structural Chemistry Unit, Indian Institute of Science, India

O-04 Synthesis and Evaluation of Surface Properties, Antimicrobial Activity and Cytotoxicity of Ester and

**Amide Functionalized Pyridinium Amphiphiles** 

**Sukhprit Singh** and Vinay Chauhan

Department of Chemistry, Guru Nanak Dev University, India

#### **Dispersed and Colloidal Systems 2**

14:00 – 15:30 Conference Room (L)-A (3F)

Chairperson: Jong-Duk Kim (Korea Advanced Institute of Science and Technology (KAIST), Korea)

Chairperson: Masanobu Sagisaka (Hirosaki University, Japan)

I-07 Self-assembly of Nonionic Amphiphilic Molecules in Nonaqueous Media

Kenji Aramaki

Graduate School of Environment & Information Sciences, Yokohama National University, Japan

I-08 Emulsifier-free Water-in-Oil Emulsions

Toshio Sakai

Faculty of Engineering, Shinshu University, Japan

O-11 Self-aggregation Properties of Gemini Surfactants Containing Heterocyclic Headgroups

Avinash Bhadani, Kenichi Sakai, Hideki Sakai, Masahiko Abe

Research Institute for Science and Technology, Tokyo University of Science, Japan

O-12 Shape Effect on Sedimentation Velocity of Nanomaterial Suspension under Centrifugal Acceleration Chia-Wei Chang, Guan-Ming Huang, Ying-Chi Liao

Department of Chemical Engineering, National Taiwan University, Taiwan

## Dispersed and Colloidal Systems 3

16:00 – 17:30 Conference Room (L)-A (3F)

Chairperson: Kenji Aramaki (Yokohama National University, Korea) Chairperson: De-Hao Tsai (National Tsing Hua University, Taiwan)

I-14 Total Planarity and Local Curvature generation are the Keys for the Function of Bio membrane

<u>Kazutami Sakamoto</u>, Yuji Yamashita, Hiroyasu Ohtaka, Haruka Kuwahara, Kenichi Aburai, Hideki Sakai

Tokyo University of Science and Chiba Institute of Science, Japan

O-21 Solvent Induced Aggregates of Methylene Blue and Stabilization of the Dye Monomers or the Aggregates via Entrapment in Polymer Gel Network Material

Homendra Naorem

Department of Chemistry, Manipur University, India

O-22 Functional Amphiphilic Ionic Liquids: Self-Assemblies and Their Applications

**Liqiang Zheng** 

Key Laboratory of Colloid and Interface Chemistry, Shandong University, China

O-23 Effects of Alkyl Chain Length, Chain Asymmetry, and Cholesterol on the Ion Pair Amphiphile

Bilayers – A Molecular Dynamics Study

Fong-yin Huang, Ching-an Tian, Chen-hao Chen, Chi-cheng Chiu

Department of Chemical Engineering, National Cheng Kung University, Taiwan

O-24 Photo-Responsive Lyotropic Liquid Crystals Containing Azobenzene Derivatives

Koji Tsuchiya, Noriko Akagawa, Hirofumi Yajima, Hideki Sakai, Masahiko Abe

Institute of Science and Technology, Tokyo University of Science, Japan

#### **Cosmetics and Personal Care Products**

11:00 – 12:30 Conference Room (L)-B/C (3F)

Chairperson: Emiko Okamura (*Himeji Dokkyo University, Japan*) Chairperson: Kanjiro Torigoe (*Tokyo University of Science, Japan*)

K-03 Active Digital Microfluidic Paper Chips with Inkjet-printed Patterned Electrodes and their Point-of

Care Biomedical Application

Kwanwoo Shin, Jumi Lee, Youngjun Kim, Seunghwi Paek, Heedo Chae, Veasna Soum, Hyojin Ko, Oh-

Sun Kwon

Department of Chemistry and Institute of Biological Interfaces, Sogang University, Korea

I-03 Dynamic Process of Solid-Supported Bilayer Formation of Cationic Surfactant Vesicles

Takaya Sakai

Material Science Research Lab., Kao Corporation, Japan

O-05 Skin Imaging of *Psoriasis Vulgaris* Using an Electron Paramagnetic Resonance Spin-Probe

Kouichi Nakagawa, S. Minakawa, D. Sawamura, H. Hara

Graduate School of Health Sciences, Hirosaki University, Japan

O-06 Fragrance Delivery Through Microencapsulation

Takashi Sasaki

International Flavors & Fragrances Inc., Global R&D, U.S.A

#### **Biocolloids and Biointerfaces 1**

14:00 – 15:30 Conference Room (L)-B/C (3F)

Chairperson: Kenichi Sakai (*Tokyo University of Science, Japan*) Chairperson: Tsang-Lang Lin (*Nation Tsing-Hua University, Taiwan*)

I-09 Is Dual Scale Roughness a Necessary Condition for a Surface of Petal Effect?

Kuan-Yu Yeh, Kuan-Hung Cho, Yu-Hao Yeh, Arwut Promraksa, <u>Li-Jen Chen</u> Department of Chemical Engineering, National Taiwan University, Taiwan

## I-10 Surface and Self-assembling Properties of Peptide-based Surfactants

Tomohiro Imura, Toshiaki Taira, Dai Kitamoto

National Institute of Advanced Industrial Science and Technology (AIST), Japan

#### I-39 Novel Surfactants from Green Resources

Swapnil P. Sulakhe, Vrushali Dengle-Pulate, Asmita Prabhune, Sunil S. Bhagwat

Department of Chemical Engineering, Institute of Chemical Technology, Mumbai, India

#### **Biocolloids and Biointerfaces 2**

16:00 – 17:30 Conference Room (L)-B/C (3F)

Chairperson: Pramoch Rangsunvigit (Chulalongkorn University, Thailand)

Chairperson: Kwanwoo Shin (Sogang University, Korea)

# I-15 A Time-Resolved Small-Angle X-ray Scattering Study on the Interaction of Oppositely Charged Bicelles

Tsang-Lang Lin, Po-Wei Yang, Yuan Hu, U-Ser Jeng

Department of Engineering and System Science, National Tsing Hua University, Taiwan

# O-25 Biomass Derived Guerbet Surfactants for Biologically Significant Curved Phases: Thermotropic and Lyotropic Properties from Small-angle X-ray Scattering

ChiaYen Liew, Malinda Salim, N. Idayu Zahid, Rauzah Hashim

Department of Chemistry, Faculty of Science, University of Malaya, Malaysia

#### O-26 Biomimetic Bolaamphiphile Self-Assemblies for Catalyst and Sensors

Min-Chul Kim, Jinyoung Kwak, Sang-Yup Lee

Department of Chemical and Biomolecular Engineering, Yonsei University, Korea

#### O-27 Structural and Dynamical Study of Water in the Hydration Layer of Proteins and Micelles

Biman Bagchi, Rikhia Ghosh, Saikat Banerjee, Milan Hazra, Susmita Roy Solid State and Structural Chemistry Unit, Indian Institute of Science, India

## O-28 In Quest of the Role of Aromatic Aminoacids in Tuning Local Curvature of Biological Membranes

Gulmi Chakraborty, Swapan K. Saha

Department of Chemistry, University of North Bengal, India

#### **Household Products and Detergents 1**

11:00 – 12:30 Chairperson: Sumaeth Chavadej (*The Petroleum and Petrochemical College, Thailand*)

Chairperson: Junichi Kurawaki (*Kagoshima University, Japan*)

## K-04 Dilational Surface Rheology of Protein Solutions

Boris Noskov, Shi-Yow Lin, Giuseppe Loglio, Alesya Mikhailovskaya, Reinhard Miller, Olga Milyaeva,

Michail Tihonov

St.Petersburg State University, Russia

## I-04 Giant Vesicles Prepared by Photopolymerization-induced Self-assembly of Amphiphilic Random

**Block Copolymers** 

Eri Yoshida

Department of Environmental and Life Sciences, Toyohashi University of Technology, Japan

### O-07 Oily Soil Removal with O/W Emulsion System Using Fatty Alcohol as Oily Phase Substrates

Masaru Oya, Akihiro Fujimoto, Terumasa Tanaka, Noriyuki Hanawa

Yokohama National University, Japan

### O-08 Solid Fat Soil Detergency By Using Various Surfactant Systems

Jarussri Chanwattanakit, John F. Scamehorn, David A. Sabatini, Sumaeth Chavadej

The Petroleum and Petrochemical College, Chulalongkorn University, Thailand

#### **Household Products and Detergents 2**

14:00 - 15:30

Conference Room (M)-A/B (3F)

Conference Room (M)-A/B (3F)

Chairperson: Masaru Oya (Yokohama National University, Japan)

Chairperson: Rie Kakehash	(Osaka Municipal Technical Research Institute (	(OMTRI), Japan)
---------------------------	---	-----------------

I-11 Synergistic Effects of Tetrahydrofuran and Sodium Dodecyl Sulfate in Methane Hydrate Formation Pramoch Rangsunvigit, Atsadawuth Siangsai, Boonyarach Kitiyanan, Santi Kulprathipanja

Chulalongkorn University and Center of Excellence on Petrochemical and Materials Technology, Thailand

### I-12 Fabrication of Graphene from the Water Hexane Interface

Hicham Hamoudi

Qatar Environment & Energy Research Institute, Qatar

O-15 Spontaneous Emulsification of Triolein Induced by Mixed Micellar Solutions

<u>Chika Endo</u>, Yoshiko Ito, Chika Akabane, Yukihiro Kaneko, Norio Tobori, Hideki Sakai *Functional Materials Science Research Laboratories, R & D, Lion Corporation, Japan* 

O-16 Formulation Development and Characterization of Eucalyptus Globulus-loaded Antimicrobial

Microemulsions

<u>Sanggu Kim</u> and Wai Kiong Ng

Crystallization and Particle Science, Institute of Chemical and Engineering Sciences (ICES), Singapore

#### Others

17:00 – 17:30 Conference Room (M)-A/B (3F)

Chairperson: Tomohiro Imura (National Institute of Advanced Industrial Science and Technology (AIST), Japan)

Chairperson: Chi M. Phan (Curtin University, Australia)

I-16 Electroosmotic Flow on an Arbitrarily Charged Planar Surface

Hiroyuki Ohshima

Faculty of Pharmaceutical Sciences, Tokyo University of Science, Japan

O-29 Novel Acridinium Esters and the Chemiluminescence Enhancement

Manabu Nakazono and Shinkoh Nanbu

Graduate School of Pharmaceutical Sciences, Kyushu University, Japan

O-30 Branched-chain Glycosides: Biomimetic Amphiphilic Molecules as New Drug Carrier Systems

Noraini Ahmad, Conxita Solans, Rauzah Hashim Faculty of Science, University of Malaya, Malaysia

O-31 A Theoretical Interpretation for the Difference between Stability Constants of the Same Metal

**Complex by Different Analytical Methods** 

Toshio Nakashima, H. Waki, M.Toh

Faculty of Education and Welfare Science, Oita University, Japan

# Thursday, November 26, 2015

9:00 – 10:00 Concert Hall (4F)

Chairperson: Toyoko Imae (National Taiwan University of Science and Technology, Taiwan)

PL-02 Recent Development of Surface Forces Measurement

Kazue Kurihara

AIMR & IMRAM, Tohoku University, Japan

#### **Self-assembly Amphiphilic Systems 4**

10:30 – 12:30 Concert Hall (4F)

Chairperson: Françoise M. Winnik (*University of Montreal, Canada*) Chairperson: Yukishige Kondo (*Tokyo University of Science, Japan*)

K-05 Fluorine in Soft Matter Science: From Self-Assembled to Self-Ordering Systems

Marie Pierre Krafft

University of Strasbourg. Institut Charles Sadron (CNRS), France

I-17 Modification of Titanium Oxide Nanoparticles By Using Plasma in Liquid Processes and Their

**Applications to SALDI-MS** 

Tetsu Yonezawa and Hiroki Tsukamoto

Faculty of Engineering, Hokkaido University, Japan

I-18 Production and Self-assembling Properties of Glycolipid Biosurfactants

Dai Kitamoto, Tomotake Morita, Tokuma Fukuoka, Tomohiro Imura

National Institute of Advanced Industrial Science and Technology (AIST), Japan

O-33 Double-helical Au Nanowires Synthesized Using a Hydrogel Template Composed of Two

**Organogelators** 

Makoto Nakagawa, Yoshiro Imura, Takeshi Kawai

Tokyo University of Science, Japan

O-34 Uniform Janus Microparticles: Fabrication, Assembly, and Packing

Jin Woong Kim

Dept. of Applied Chemistry and Dept. of Bionano Technology, Hanyang University, Korea

### Self-assembly Amphiphilic Systems 5

14:00 – 15:30 Concert Hall (4F)

Chairperson: Marie Pierre Krafft (*Institut Charles Sadron (CNRS), France*) Chairperson: Katsuhiko Ariga (*National Institute for Materials Science, Japan*)

I-25 Drug-carrying Ability of Self-assemblies consisting of Amphiphilic Block Copolymers with Dendritic

Side Chains Toyoko Imae

National Taiwan University of Science and Technology, Taiwan

I-26 Highly Functional Monodispersed Nanoparticles: Their Novel Synthesis Method in the Liquid Phase

Kiyoshi Kanie, Masafumi Nakaya, Atsushi Muramatsu

 $In stitute\ of\ Multidisciplinary\ Research\ for\ Advanced\ Materials,\ Tohoku\ University,\ Japan$ 

O-41 Ingenious Preparation of Adsorbable Emulsion with Cationic Vesicles by the Three-phase Emulsion

**Technology and Its Properties** 

Yasutaka Enomoto, Yoko Imai, Kazuo Tajima Grad. Sch. Eng., Kanagawa Univ., Japan

O-42 Preparation of CO<sub>2</sub> responsive emulsions

Peipei Xu, Honghong Li, Dejun Sun

Key Laboratory of Colloid and Interface Chemistry, Shandong University, China

#### Self-assembly Amphiphilic Systems 6

16:00 – 17:30 Concert Hall (4F)

Chairperson: Hicham Hamoudi (Qatar Environment & Energy Research Institute, Qatar)

Chairperson: Kiyoshi Kanie (Tohoku University, Japan)

I-33 Hand-Operating Nanotechnology: Manual Molecular Manipulation at Interfaces

Katsuhiko Ariga

WPI-MANA, Natl. Inst. Mater. Sci. (NIMS), Japan

O-49 Investigations on the Entrapment of Some Molecules in Chitosan Based Gel Network Materials and

Their Release

<u>W. Binodkumar Singh</u> and H. Naorem Department of Chemistry, L H College, India

O-50 Classification of Surfactants Using the Phase Inversion Temperature: Extension of the Method for

**Comparing Ols** 

<u>Christel Pierlot</u>, Jesús Ontiveros, Marianne Catté, Valérie Molinier, Jean-Louis Salager, Jean-Marie Aubry *Université de Lille, France* 

O-51 Optimum Foams for Understanding Detergent Formulations

Pradipta Chattopadhyay and R. Arun Karthick

Department of Chemical Engineering, BITS-Pilani, India

O-52 Interaction Forces between Hydrophobic Surfaces in Water-Organic Solvent Binary Mixtures

Naoyuki Ishida, Kengo Terada, Hiroyuki Imanaka, Koreyoshi Imamura

Department of Applied Chemistry and Biotechnology, Okayama University, Japan

#### Nanoparticles and Nano-manipulation 1

10:30 – 12:30 Conference Room (L)-A (3F)

Chairperson: Atsushi Muramatsu (Tohoku University, Korea)

Chairperson: Limin Qi (Peking University, China)

K-06 Managing the Environmental Issues of Perfluoroalkylated Surfactants (e.g. PFOA, PFOS)

<u>Jean G. Riess</u> and Marie Pierre Krafft *Harangoutte Institute, France* 

I-19 Preparation of Stimulus-responsive Biocompatible Nanocapsules with Electro-capillary

**Emulsification Method** 

Masahiko Abe, Takeshi Endo, Kenichi Sakai, Hideki Sakai

Research Institute for Science and Technology, Tokyo University of Science, Japan

I-20 Peculiar Activity of Colloidal Bimetallic Au/Pd Alloy Nanoclusters

Raghu Nath Dhital, Sangita Karanjit, Masahiro Ehara, Hidehiro Sakurai

Graduate School of Engineering, Osaka University, Japan

O-35 The Bacterial Activities within a Floating Water Droplet on Oil Surface

Fariba Asadi, Chi M. Phan, Emmanuel Obanijesu

Department of Chemical Engineering, Curtin University, Australia

O-36 Catalytically Active Bimetallic Nanocrystals in the Presence of Clay

Dharmesh Varade, Kazutoshi Haraguchi

Institute of Engineering & Technology, Ahmedabad University, India

### Nanoparticles and Nano-manipulation 2

14:00 – 15:30 Chairperson: Jean G. Riess (*Harangoutte Institute, France*)

Chairperson: Sunil S. Bhagwat (Institute of Chemical Technology, Mumbai, India)

I-27 Flexible Transparent Conductive Thin Films Prepared by Irradiation with UV Light on Langmuir

Conference Room (L)-A (3F)

**Monolayers of Metal NPs** 

Takeshi Kawai

Tokyo University of Science, Japan

I-28 Controllable Fabrication and Properties of Functional Micro- and Nanostructure Arrays

Limin Qi

College of Chemistry and Molecular Engineering, Peking University

# O-43 Microwave Assisted Facile Green Synthesis of Silver Nanoparticles and Evaluation of their Cytotoxicity

Bini George, Priyanka R.N., Saranya K.S., M. Nageswar Reddy, Beena Mathew

School of Biological Sciences, Central University of Kerala, India

# O-44 Growth of High-Aspect-Ratio Twin Gold Nanorods in a Gelled Surfactant Solution Yoshiko Takenaka

Sustainable Chemistry RI, AIST and JST PRESTO, Japan

### Nanoparticles and Nano-manipulation 3

16:00 – 17:30 Conference Room (L)-A (3F)

Chairperson: Rauzah Hashim (*University of Malaya, Malaysia*)
Chairperson: Conxita Solans (*IQAC-CSIC and CIBER-BBN, Spain*)
I-34
Industrial Application of Micelles: Drag Reduction

Keijiro Taga, Yasushi Yamamoto, Shinji Tamano, Yohei Morinishi

Nagoya Institute of Technology, Japan

#### O-53 Purpose Oriented Customization of the Shape and Size of NPs: A Theoretical Venture

Banita Sinha, Tamal Goswami, Satadal Paul, <u>Anirban Misra</u> Department of Chemistry, University of North Bengal, India

# O-54 Novel Approach to Synthesize Hollow and Yolk-Shell Nanoparticles – Use of Polymeric Micelle Templates

Kenichi Nakashima

Graduate School of Science & Engineering, Saga University, Japan

# O-55 Preparation Thermoresponsive Silica Nanoparticles with Varied LCST and Application in O/W Pickering Emulsion

Zhiping Du, Wanxu Wang, Fangqin Cheng, Xiumei Tai, Xiaofeng Sun

Shanxi University and China Research Institute of Daily Chemical Industry, China

# O-56 Surface Modification of Porous Membrane using Electrospun Nafion Nanofibers for Redox-flow Battery

Jongok Won and Ho Seon Bnag

Department of Chemistry, Sejong University, Korea

## **Interfacial Phenomena 1**

10:30 – 12:30 Conference Room (L)-B/C (3F)

Chairperson: Chien-Hsiang Chang (National Cheng Kung University, Taiwan)

Chairperson: Yuji Yamashita (Chiba Institute of Science, Japan)

# K-07 Organic-Inorganic Hybrid Nanoparticles with Liquid-Crystalline Self-Organization Ability Kiyoshi Kanie

Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan

## I-21 A Study on the Adsorption Kinetics of Ionic Surfactants

Alvin Casandra and Shi-Yow Lin

Chemical Engineering Department, National Taiwan University of Science and Technology, Taiwan

#### 1-22 Biocompatible Polyion Complex Micelles Containing Thermo-responsive Binary Shells

<u>Shin-ichi Yusa</u>, Atsushi Nagae, Keita Nakai, Ryusuke Enomoto, Kazuhiko Ishihara, Yasuhiko Iwasaki *Graduate School of Engineering, University of Hyogo, Japan* 

## O-37 Superhydrophobic Bare Metal Surfaces

Ken Yamamoto, Hideyuki Takezawa, Satoshi Ogata

Keio University and Tokyo Metropolitan University, Japan

### O-38 Strategies for Printing Stable Liquid Lines on Partially Hydrophilic Substrate

Guan-Ming Huang, Tsung-Yen Tsou, Chia-Wei Chang, Ying-Chih Liao

#### **Interfacial Phenomena 2**

14:00 – 15:30 Conference Room (L)-B/C (3F)

Chairperson: Hidehiro Sakurai (Osaka University, Japan)

Chairperson: Shi-Yow Lin (National Taiwan University of Science and Technology, Taiwan)

I-29 Adsorption Characteristics of Nonionic Surfactants and/or Water on Solid Surfaces from Room-Temperature Ionic Liquids

Kenichi Sakai, Kohei Okada, Akihito Uka, Yosuke Onuma, Takeshi Misono, Masahiko Abe, Hideki Sakai

Research Institute for Science and Technology, Tokyo University of Science, Japan

### I-30 Alkylamide Amine Oxides as New Low Molecular Weight Gelators

Rie Kakehashi and Naoji Tokai

Osaka Municipal Technical Research Institute, Japan

O-45 Influence of the Charge, Hydrophobicity and Packing Density of Particles at Air/Aqueous Interfaces on the Interfacial Forces and the Physical Properties of the Interface

Cathy E. McNamee, Michael Kappl, Syuji Fujii, Shin-ichi Yusa, Hans-Juergen Butt

Shinshu University, Japan

O-46 A New Way of Optical Contact Angle Measurements Using a Needle-less Low Kinetic-energy Dosing System

Ming Jin, Martin Kirchner, Daniel Frese, Raymond Sandrine, Thomas Willers

KRÜSS GmbH, Germany

#### **Interfacial Phenomena 3**

16:00 – 17:30 Conference Room (L)-B/C (3F)

Chairperson: Hiroyuki Ohshima (Tokyo University of Science, Japan)

Chairperson: Shin-ichi Yusa (*University of Hyogo, Japan*)

I-35 Wettabilty and Antifouling Properties of Polyelectrolyte Brushes

Atsushi Takahara

WPI I2CNER, Kyushu University, Japan

O-57 Using the Holm Meridian for the Dynamic Measurement of Interfacial Tension in a Fully Enclosed System

System

Anita Hyde, Chi Phan, Yusuke Asakuma

Department of Chemical Engineering, Curtin University, Australia

O-58 **Dynamic Adsorption of Surfactants at the Air/Water Interface** 

Chi M. Phan

Department of Chemical Engineering, Curtin University, Australia

O-59 Surfactant Induced Surface Non-uniformities in Water-based Nanocomposite Coatings

Venkat Gundabala and Dhawal Mehta

Department of Chemical engineering, Indian Institute of Technology (IIT) Bombay, India

O-60 Tuning Interfacial Properties Using Fluorocarbon Gases—Potential of Fluorinated Surfactants in Lung Surfactant Substitute Design

Michael Sanchez, Phuc Nghia Nguyen, Alain Cagna, Marie Pierre Krafft

Teclis, parc de Chancolan, France

## Food Colloid and Emulsion Technology

10:30 – 12:30 Conference Room (M)-A/B (3F)

Chairperson: Keijiro Taga (Nagoya Institute of Technology, Japan) Chairperson: Amiya Kumar Panda (University of North Bengal, India)

K-08 Equilibrium Solubilities and Dissolution Rates of Soap Scums in Different Surfactant Solutions and

Chelants

Sumaeth Chavadej

The Petroleum and Petrochemical College, Chlalongkorn University, Thailand

# I-23 Bimodal Meso-/Macroporous Silica with Regulated Porosity and Hydrophobicity for Oil Absorption Yury Shchipunov

Far Eastern Department, Russian Academy of Sciences, Russia

### I-24 Morphological Effects of ZnO Nanoparticles on the Organic Photovoltaic Cells as an Electron Transport Layer

Seong-Geun Oh and Seho Oh

Department of Chemical Engineering, Hanyang University, Korea

# O-39 Up-scaling Cross-flow Membrane Emulsification and Polymerization, and In Situ Acoustic Characterization of the Produced Colloidal Dispersions

<u>Jaiyana Bux</u>, Mohamed Manga, Jeff Peakall, Simon Biggs, Timothy Hunter Institute of Particle Science and Engineering, University of Leeds, UK

# O-40 Generation of Nano-emulsions by Low-energy Methods and Use as Templates for the Design of Multifunctional Nanocarriers

**Conxita Solans** 

IQAC-CSIC and CIBER-BBN, Spain

#### Pharmaceutical and Drug Delivery System

14:00 – 15:30 Conference Room (M)-A/B (3F)

Chairperson: Dai Kitamoto (National Institute of Advanced Industrial Science and Technology (AIST), Japan)

Chairperson: Yury Shchipunov (Russian Academy of Sciences, Russia)

### I-31 The Surface Modification of Nanogel for Cellular Transport

Jong-Duk Kim

Department of Chemical & Biomolecular Engineering, KAIST, Korea

# I-32 Mobility, Location, and Kinetics of Membrane Binding and Delivery of Drugs by Solution-state <sup>19</sup>F and <sup>1</sup>H NMR

Emiko Okamura

Faculty of Pharmaceutical Sciences, Himeji Dokkyo University, Japan

# O-47 Gold Nanorods as a Mass Probe: Imaging Mass Spectrometry of Gold Ions Desorbed from Tissue Sections

Yasuo Niidome, Daiki Muko, Yuki Inoue, Takuro Niidome

Department of Chemistry and Bioscience, Kagoshima University, Japan

# O-48 Graphene Based Nanocapsules Capable of Burst Drug Release under Remote NIR Control Renjie Zhang

Shandong University, China

## **Environmental Applications of Colloids**

17:00 – 17:30 Conference Room (M)-A/B (3F)

Chairperson: Yasuo Niidome (*Kagoshima University, Japan*) Chairperson: Toshio Nakashima (*Oita University, Japan*)

#### O-61 Cloud Point Extraction of Coralene Red Dye: Thermodynamics and Parametric Study

Jigisha Parikh, Sachin Sakhare, Darshak Bhatt

Chemical Engineering Department, Sardar Vallabhbhai National Institute of Technology, India

# O-62 Visible-light Responsive Photocatalytic Properties of Au Nanorod / Ag / TiO<sub>2</sub> and SiO<sub>2</sub> / Au / TiO<sub>2</sub> Trilavered Nanoparticles

<u>Kanjiro Torigoe</u>, Yoshimasa Horiguchi, Kazuya Tobishima, Takeshi Endo, Kenichi Sakai, Hideki Sakai, Masahiko Abe

Department of Pure and Applied Chemistry, Tokyo University of Science, Japan

# O-63 Air/Liquid Self-assembly: An Elegant Way for Metal Oxide Nanoscale Heterostructures with Highly Selective Gas Sensing

Zhengfei Dai and Yue Li

Institute of Solid State Physics, Chinese Academy of Sciences, China

# Friday, November 27, 2015

9:00 – 10:00 Concert Hall (4F)

Chairperson: Naoyuki Ishida (Okayama University, Japan)

PL-03 Manipulating Structure and Function in Lyotropic Liquid Crystalline Architectures

Patrick G. Hartley

CSIRO Energy & Manufacturing Flagships, Australia

#### Self-assembly Amphiphilic Systems 7

10:30 – 12:30 Concert Hall (4F)

Chairperson: Cathy E. McNamee (*Shinshu University, Japan*) Chairperson: Takayuki Narita (*Saga University, Japan*)

K-09 Physicochemical Studies on Drug Loaded Second Generation Nanolipid Carriers

Manish Sapkota, Gourab Karmakar, Prasant Nahak, Pritam Guha, Biplab Roy, Suraj Koirala, Priyam Chettri,

**Amiya Kumar Panda** 

Department of Chemistry, University of North Bengal, India

I-38 Utilization of O<sub>3</sub> Oxidation for Gemini Syntheses

Tatsuo Oida, Makiko Goryoda, Huynh Ngoc Chau, Tokuzo Kawase

Kyoto Institute of Technology, Japan

O-67 pH-Dependant Secondary Structure, Fibril Formation and Surface Activity of Chaplin E

Mina Dokouhaki, Andrew Hung, Li Day, Sally Louise Gras

The University of Melbourne and CSIRO Food & Nutrition Flagship, Australia

O-71 Impact of Block Length and Temperature over the Interfacial Behavior of Poly(styrene)-block-

 $poly(ethylene\ oxide)\ Block\ Copolymers$ 

<u>Musa Kaleem Baloch</u>, Irfan Ullah, Muhammad Mustaqeem, Mohsan Nawaz Department of Chemistry, University of Sargodha Sub-campus Bhakkar, Pakistan

O-88 Novel Parameter to Replace the HLB Number: Development of Integrated Surfactant Potency (ISP)

Concept

Yuji Yamashita, Kuan Chun Chen, Chisato Indo, Tetsuji Hirao, Kazutami Sakamoto

Faculty of Pharmacy, Chiba Institute of Science, Japan

O-85 Strategy to Improve Physicochemical Properties of Ternary Mixture Components through Lipase

Interesterification

Siti Hazirah Mohamad Fauzi, Zaliha Omar, Norizzah Abd. Rashid

Product Development & Advisory Services, Malaysian Palm Oil Board, Malaysia

#### **Characterization of Colloids and Interfaces**

10:30 – 12:30 Conference Room (L)-A (3F)

Chairperson: Kenichi Nakashima (Saga University, Japan)

Chairperson: Chien-Hsiang Chang (National Cheng Kung University, Taiwan)

I-36 Discovery of Metal-lustrous Low-molecular-weight Organic Crystals

Yukishige Kondo

Faculty of Engineering, Tokyo University of Science, Japan

O-72 Fluoride Ion-induced Morphology, Interface, and Reactivity Change of Hydroxyapatite-supported

**Gold Nanoclusters Catalyst** 

<u>Setsiri Haesuwannakij</u>, Yumi Yakiyama, Hidehiro Sakurai

School of Physical Science, SOKENDAI, Japan

O-73 Orthogonal Analysis of Functional Gold Nanoparticles for Biomedical Applications

De-Hao Tsai, Yi-Fu Lu, Frank DelRio, Vincent A. Hackley

Department of Chemical Engineering, National Tsing Hua University, Taiwan

### O-75 Exfoliation of Graphite by Two-Step Intercalation of FeCl<sub>3</sub> and Primary Amines

Masaki Ujihara, Mahmoud Mohamed Mahmoud Ahmed, Toyoko Imae

National Taiwan University of Science and Technology, Taiwan

# O-76 The Microscopic Characteristics of the Interfacial Assembly of Surfactants in the Systems Achieving Ultra-low Oil/Water Interfacial Tension

Ying Li, Yange Sun, Hui Zhao, Dianrui Zhang, Yan Zhang

Ministry of Education, Shandong University, Japan

# O-77 Classification of Surfactants Using the Phase Inversion Temperature: Application to Mixtures of Surfactants

Maxime Rover, Jesús Ontiveros, Marianne Catté, Christel Pierlot

Université de Lille and IFMAS SAS, France

#### **General Papers in Colloid Science**

10:30 – 12:30 Conference Room (L)-B/C (3F)

Chairperson: Li-Jen Chen (National Taiwan University, Taiwan)

Chairperson: Takaya Sakai (Kao Corporation, Japan)

# I-37 Facile Synthesis and Luminescence Studies of Au and Ag Clusters Using Fatty-acid Based Benzenethiol Derivatives

<u>Junichi Kurawaki</u>, Hiroaki Okamura, Akiko Kaminaga, Yasuro Niidome, Takuya Ishida, Sunao Yamada *Graduate School of Science and Engineering, Kagoshima University, Japan* 

#### O-78 Fluorescence ON-OFF Regulation of Nile Red by Using Smart Polymeric Micelle of Poly(Acrylic Acidb-N-Isopropylacrylamide)

Min Min Yee, Miyabi Tsubone, Takuya Morita, Shin-ichi Yusa, Kenichi Nakashima

Graduate School of Science and Engineering, Saga University, Japan

#### O-79 Preparation, Structural Analysis and Application of Mono-alkylated Glycolipids Crystalline Twodimensionally Aligned on Solid Substrates

Shigesaburo Ogawa and Isao Takahashi

School of Science and Technology, Kwansei Gakuin University, Japan

# O-80 Differential Capacitance of the Electric Double Layer: The Interplay Between Ion Finite Size and Dielectric Decrement

Yasuya Nakayama and David Andelman

Department of Chemical Engineering, Kyushu University, Japan

### O-81 Electrokinetics of the Silica and Aqueous Electrolyte Solution Interface: Viscoelectric Model

<u>Wei-Lun Hsu</u>, Hirofumi Daiguji, David Dunstan, Malcolm Davidson, Dalton Harvie *Department of Mechanical Engineering, University of Tokyo, Japan* 

# O-82 Physico-chemical Characterization of Mixed Branched-chain Maltoside/ Co-Surfactants toward Formation of Vesicles

W. F. Nasuha W. Iskandar, Noraini Ahmad, Hairul Anuar Tajuddin, Rauzah Hashim

Faculty of Science, University of Malaya, Malaysia

# O-83 Developing Green Additives for the Stabilization of the Highly Concentrated Coal-Water Slurry Pramila K. Misra

School of Chemistry, Sambalpur University, India