

The 2nd International Symposium on Chemistry of Nanomaterials

2nd International Symposium on
Chemistry of Nanomaterials (2nd ISCN)

March 28th – 29th, 2019

Venue: WPI-MANA Auditorium, NIMS, Namiki, Tsukuba

March 28th, 2019

Opening

9:30 - *Greetings from Symposium Chair*
Takayoshi SASAKI, Director, MANA, NIMS

Morning Session

9:35 - 10:15 *2D-Nano Drug Delivery Systems for Nanomedicine (Keynote lecture)*
Jin-Ho CHOY, Chair Professor, ITREN, Dankook University, South Korea

10:15 - 10:45 *Exploration of 2D Hydroxide Nanosheets and Their Hetero-Assemblies with Emergent Properties (MANA Invited Talk)*
Renzhi MA, Group Leader, MANA, NIMS

10:45 - 11:05 Group Photo and Coffee Break

11:05 - 11:35 *Band Structure and Tunable HER Activity of TiO₂ Nanosheet through Theoretical Aspect (Invited Talk)*
Wei ZHOU, Associate Professor, Tianjin University, China

11:35 - 11:55 *Activation and Deactivation of ϵ -Caprolactone Polymerization in Aluminum Complexes*
Khamphee PHOMPHRAI, Dean, PI, School of Molecular Science and Technology, VISTEC, Thailand

11:55 - 12:15 *Temperature-dependent Electronic Structure of Bixbyite α -Mn₂O₃ and the Importance of a Subtle Structural Change on Oxygen Electrocatalysis*
Joel HENZIE, MANA Senior Researcher, MANA, NIMS

12:15 - 13:25 **Lunch**

Afternoon Session

13:25 - 13:55 *New and Unusual Types of Layered Zeolite-like Silicates Templated by Choline (Invited Talk)*
Barbara GIL, Group leader, Jagiellonian University in Krakow, Poland

13:55 - 14:15 *Sustainable production of high value-added chemicals and fuels from renewable resources using heterogeneous catalysts and electrocatalysts*
Chularat Wattanakit, Lecturer, VISTEC, Thailand

14:15 - 14:35 *Recent Developments in Materials Design of Layered Titanates and Silicates*
Yusuke IDE, Group Leader(acting), MANA Senior Researcher, MANA, NIMS

14:35 - 14:50 Coffee Break

14:50 - 15:20 *High Efficiency Bulk Thermoelectric Materials for Thermoelectric Energy Conversion: New Chalcogenides (Invited Talk)*
Sung-Jin KIM, Professor, Ewha Womans University, South Korea

15:20 - 16:00 *Publishing in Wiley Materials Science Journals (Special Talk)*
Lulu MA, Dr., Editor of Small, Solar RRL, Advanced Materials, Advanced Energy Materials, Advanced Engineering Materials

16:00 - 17:30 Poster Session

17:30 - 19:30 **Banquet** at the Melting Pot Café, WPI-MANA building NIMS: FREE

March 29th, 2019

Morning Session:

9:30 - 10:10 *Photochemical Reactions in Nano Spaces, Possible Effects of Nano Confinements (Keynote lecture)*

Makoto OGAWA, Professor, VISTEC, Thailand

10:10 - 10:40 *Graphene Materials: Preparation, Applications and Commercialization (Invited Talk)*

Zhaoping LIU, PI, Ningbo Institute of Materials Technology & Engineering, China

10:40 - 10:55 Coffee Break

10:55 - 11:25 *Design and Engineering of Active Sites for Efficient Solar Fuel Production (MANA Invited Talk)*

Jinhua YE, PI, Group Leader, MANA, NIMS

11:25 - 11:45 *Unsaturated Mn(II)-Centered [Mn(BDC)]_n Metal–Organic Framework with Strong Water Binding Ability and Its Potential for Dehydration of an Ethanol/Water Mixture*

Sareeya Bureekaew, Lecturer, VISTEC, Thailand

11:45 - 12:05 *2D Inorganic Nanoassembly Smuggles Highly Condensed 10B-cluster Molecules (BSH) into Cells and Tissues Needing Boron Neutron Capture Therapy (BNCT)*

Goeun CHOI, Invited Professor, ITREN, Dankook University, South Korea

12:05 - 13:15 **Lunch**

Afternoon Session 1

13:15 - 13:55 *Colloidal Dispersion of the Layered Zeolite MCM-56 with High Content of Mono-layers Obtained by a Convenient Exfoliation procedure (Keynote lecture)*

Wieslaw ROTH, Research Scientist, Jagiellonian University in Krakow, Poland

13:55 - 14:25 *Novel Inorganic Layered Materials: From Interlayer Chemistry, Delamination, toward Energy Storage Applications (Invited Talk)*

Fengxia GENG, Professor, Soochow University, China

14:25 - 14:40 Coffee Break

Afternoon Session 2

14:40 - 15:10 *Functional Bridged Silsesquioxanes and applications (Invited Talk)*

Michel WONG CHI MAN, CNRS Research Director, Institut Charles Gerhardt Montpellier (UMR 5253), Laboratoire Architectures Moléculaires et Matériaux Nanostructuré

15:10 - 15:30 *Thiocyanate coordination polymers for electronic applications*

Pichaya PATTANASATTAYAVONG, PI, Lecturer, VISTEC, Thailand

15:30 - 15:50 *Covalent Organic and Coordination Frameworks for Emerging Energy Storage/Conversion Reactions*

Ken SAKAUSHI, Senior Researcher, GREEN, NIMS

15:50 - 16:20 *Versatile Roles of Exfoliated 2D Inorganic Nanosheet in Multifunctional Nanohybrids (Invited Talk)*

Seong-Ju HWANG, Professor, Ewha Fellow, Ewha Womans University, South Korea

16:20 Closing Remarks

16:30 - 17:30 Laboratory Tour

17:30 - 18:00 Movement

18:00 - 20:00 Invitation Dinner