

JT-AND 2020 Program and Contents

Tuesday, January 21st

Welcome Reception (19:00-21:00)

Wednesday, January 22nd

Registration (8:30-9:00) Registration Desk

Opening Address (9:00-9:10)

Prof. Keizo Kato, Niigata University

Welcome Message (9:10-9:20)

Dean, Faculty of Science, Prince of Songkla University

SESSION 1 (9:20-10:25)

Chairperson: Prof. Takaaki Manaka

IA-1 9:20-10:00 (INVITED TALK)

Development of a thin film device with polymer electret for high performance tactile sensor

Toshihide Kamata, Taiki Nobeshima, Sei Uemura, Manabu Yoshida

National Institute of Advanced Industrial Science and Technology (AIST)

OA-1 10:00-10:25 Enhanced supercapacitor performance of CoO-NiO microflowers using reduced graphene oxide sheets

Chaval Sriwong, Worawee Saei, Prathan Buranasiri

King Mongkut's Institute of Technology Ladkrabang (KMITL)

Break (10:25-10:40)

SESSION 2 (10:40-12:10)

Chairperson: Prof. Kanet Wongravee

IA-2 10:40-11:20 (INVITED TALK)

Growth Kinetics and Magnetic Property of Single-Crystal Fe Nanowires

Toshihiro Shimada, Takashi Yanase

Hokkaido University

OA-2 11:20-11:45 Green synthesis of nanoparticles and their applications

Parawee Rattanakit

Walailak University

OA-3 11:45-12:10 Enantiomeric discrimination by tip-enhanced Raman scattering

Prompong Pienpinijtham¹, Thanyada Sukmanee¹, Yasutaka Kitahama²,
Sanong Ekgasit¹, Tamitake Itoh, Yukihiro Ozaki²

¹*Chulalongkorn University*, ²*Kwansei Gakuin University*, ³*National Institute of Advanced Industrial Science and Technology (AIST)*

Lunch Break (12:10-13:30)

SESSION 3 (13:30-15:25)

Chairperson: Prof. Akira Baba

IA-3 13:30-14:10 (INVITED TALK)

Development of Redox Nanomaterials for Electrochemical Multiplex Detection of Cancer Biomarkers

Kontad Ounnunkad, Thitirat Putnin, Chammari Pothipor, Kulrisa Kuntamong, Patrawadee Yaiwong, Supakiet Chanarsa, Jaroon Jakmunee

Chiang Mai University

OA-4 14:10-14:35 Molecular Functional Electrodes for Biodevices -Electrochemical studies of carboxylated carbon nanotube (-COOH functionalized CNT) /chitosan (CH) nanocomposite films-

Mitsuyoshi Onoda

University of Hyogo / Himeji City Fire Bureau

OA-5 14:35-15:00 Development of Biosensors Based on Conducting Polymer Composites

Saengrawee Sriwichai, Chanida Ratlam, Patamaphorn Utrat

Chiang Mai University

OA-6 15:00-15:25 Surface Plasmon Transmission Light in Nanostructured Organic Thin Films on Metallic Gratings and Application to

High-Sensitivity Sensors

Keizo Kato, Chutiparn Lertvachirapaiboon, Akira Baba, Kazunari
Shinbo
Niigata University

Break (15:25-15:40)

SESSION 4 (15:40-17:20)

Chairperson: Prof. Ounnunkad Kontad

- OA-7 15:40-16:05** **A nanocomposite fluorescence probe of quantum dots incorporated into molecularly imprinted polymer for lomefloxacin detection**
Naphatsakorn Orachorn, Opas Bunkoed
Prince of Songkla University
- OA-8 16:05-16:30** **Controlling the luminescent intensity of gold quantum dots by the plasmonic effect of silver nanoprisms**
Chutiparn Lertvachirapaiboon, Itaru Kiyokawa, Akira Baba, Kazunari
Shinbo, Keizo Kato
Niigata University
- OA-9 16:30-16:55** **Increasing the sensitivity of enzyme-linked immunosorbent assay for latex allergens using gold nanoparticless**
Apichat Phengdaam¹, Thunkamol Traisakul¹, Benjaporn Phupet,
Phanthipha Runsaeng¹, Sanong Ekgasit²
^aTokyo University of Agriculture and Technology, ^bKanagawa University ¹Prince of Songkla University, ²Chulalongkorn University
- OA-10 16:55-17:20** **Analyses of two colorimetric indicators for detection of hydroxyl radicals in atmosphere by using methylene blue dye**
Saranya Yenchit, Satoru Iwamori
Tokai University

Banquet (18:30-)

Thursday, January 23rd

SESSION 5 (8:45-10:15)

Chairperson: Prof. Saengrawee Sriwichai

- IB-1 8:45-9:25 (INVITED TALK)**
MWCNT Reinforced Biobased Benzoxazine/Epoxy Shape Memory Polymers with NIR Actuation Capability
Sarawut Rimdusit¹, Wassika Prasomsin¹, Chanchira Jubsilp²
¹Chulalongkorn University, ²Srinakharinwirot University
- OB-1 9:25-9:50** **Pump-probe nonlinear optical spectroscopy for studying exciton and carrier dynamics in organic photovoltaics**
Takaaki Manaka, Dai Taguchi
 Tokyo Institute of Technology
- OB-2 9:50-10:15** **Investigation of Surface Plasmon Enhanced Organic Photovoltaic Devices**
Akira Baba, Chutiparn Lertvachirapaiboon, Kazunari Shinbo, Keizo Kato
 Niigata University

Break (10:15-10:30)

SESSION 6 (10:30-12:00)

Chairperson: Prof. Prompong Pienpinijtham

- IB-2 10:30-11:10 (INVITED TALK)**
Fabrication of Polydimethylsiloxane-based Organic-inorganic Hybrid /ceramic Composite on Metal via Electrophoretic Deposition
Yusuke Aoki
 Mie University
- OB-3 11:10-11:35** **Hilbert-space-expansion technique for polarization qubit gates**
Pruet Kalasuwan, Paphon Pewkhom
 Prince of Songkla University
- OB-4 11:35-12:00** **Interactions between Methylene Blue and Pullulan by Molecular Orbital Calculations**
Pasika Temeprasertkij, Saranya Yenchit, Michio Iwaoka, Satoru Iwamori
 Tokai University

Lunch Break (12:00-13:15)

SESSION 7 (13:15-14:30)

Chairperson: Prof. Satoru Iwamori

OB-5 13:15-13:40 Enhancing Sensitivity and Selectivity of Surface Raman Scattering Detection by Chemometric Method

Nontawat Sricharoen, Prompong Pienpinijtham, Sanong Ekgasit,
Kanet Wongravee

Chulalongkorn University

OB-6 13:40-14:05 The high potential Activated Carbon (Coconut shell) for Paper - based Supercapacitor

Montri Suklueng, Krittiya Chopngam, Matthana KangKhamano,
Kanadit Chetpattananondh

Prince of Songkla University

OB-7 14:05-14:30 Preparation and Characteristics of Phototransistor and Organic Solar Cell on Grating Structure

Kazunari Shinbo, Akira Baba, Keizo Kato

Niigata University

Concluding Remarks (14:30-14:40)

Prof. Sanong Ekgasit (Chulalongkorn University)

Technical Tour (15:00-)

Lab Tour (*Prince of Songkla University*)