

## **Session Program**

**27-29 Nov 2016**



# **NanoThailand 2016**

## ***Heron 1***

THE GREENERY RESORT KHAO YAI  
[www.greeneryresort.com](http://www.greeneryresort.com) Nakhon Ratchasima, Thailand

# Sunday 27 November

15:15

## Heron 1: Session 1: Theory and simulation related to nanosystem

Session | Location: Greenery, Room2, --

15:15-15:35

### Sustainable Innovation of Magnetic Field Application in Catalytic Co<sub>2</sub> Conversion

**Speaker**

Metta Chareonpanich

15:35-15:55

### Identification of Defects in Materials: A Combination of First-principles Calculations and Experiments

**Speaker**

Dr Jiraroj T-Thienprasert

15:55-16:15

### Nondestructive 3D Characterization of Materials Using Optical Coherence Tomography

**Speaker**

Panomsak Meemon

16:15-16:30

### Theoretical Investigation on the Electroreduction of CO<sub>2</sub> to Methanol on Stepped Cu-based Alloy (211) Surfaces

**Speaker**

Dr Pussana Hirunsit

16:30-16:45

### Molecular Structure and Formation of Melatonin in the Bulk Water and at the Water-Air Interface: A Molecular Dynamics Simulation Study

**Speaker**

Aksomnarong Ritwiset

16:45

# Monday 28 November

10:15

## Heron 1: Session 2: Nano-characterization & instruments & Nanomaterials & nanostructures

Session | Location: Greenery, Room2, --

10:15-10:35

### The mystery of high temperature superconductivity at the FeSe/STO interface

**Speaker**

Prof. Donglai Feng

10:35-10:55

### Possible electric field induced indirect to direct band gap transition in MoSe<sub>2</sub>

**Speaker**

Prof. Kim Changyoung

10:55-11:15

### First-principles study on two dimensional dichalcogenides for hydrogen production

**Speaker**

Prof. Seungwu Han

11:15-11:30

### The observation of strain-induced valence band splitting on HfSe<sub>2</sub> by Alkali metal intercalation

**Speaker**

Dr Tanachat Eknapakul

11:30-11:45

### Analysis of electronic spectral weight of two-dimensional electron gases at the surfaces of ferroelectric KNb<sub>x</sub>Ta<sub>(1-x)</sub>O<sub>3</sub> across T<sub>c</sub>

**Speaker**

Sujinda Chaiyachad

12:05

13:00

## Heron 1: Session 3: Nano-electronics/systems

Session | Location: Greenery, Room2, --

13:00-13:20

### Polymer/Metal Nanoparticle/Nanocarbon Hybrid Materials for Highly Sensitive and Selective Volatile Organic compound Detection

**Speaker**

Winadda Wongwiriyanan

13:20-13:40

### DESIGNING MOLECULAR STRUCTURES OF D- $\pi$ -A TYPE ORGANIC DYES FOR HIGH EFFICIENCY DYE-SENSITIZED SOLAR CELLS

**Speaker**

Prof. Vinich Promarak

13:40-14:00

**X-ray Absorption Investigation on Cation Distribution and Magnetic Behavior of Zinc Ferrite Nanoparticles****Speaker**

Wisanu Pecharapa

14:00-14:20

**Fabrication of Highly Aligned CNT and P(VDF/TrFE) Nanofiber Sheets****Speaker**

Hidenori Mimura

14:20-14:35

**Simulation of single quantum well solar cells****Speaker**

Dr Maetee Kunrugsa

14:55

15:00

**Heron 1: Session 4: Nano-energy & storage**

Session | Location: Greenery, Room2, --

15:00-15:20

**Natural Materials for Dye Sensitized Solar Cells: Experimental and Theoretical Study****Speaker**

Vittaya Amornkitbamrung

15:20-15:40

**A recent development of mixed metal oxides/polymer nanocomposites as energy storage catalysts****Speaker**

Dr Pailin NGAOTRAKANWIWAT

15:40-15:55

**Electrical Properties of Co-Doped LiFePO<sub>4</sub> Nanomaterial by Impedance Spectroscopy Technique****Speaker**

Mr Phongsit Krabao

15:55-16:10

**The porous carbon derived from the KOH activation of agro-waste char for supercapacitor electrode****Speaker**

Dr Jedsada Sodtipinta

16:10-16:25

**Synthesis and identification of silica and activated carbon nanocomposite from rice husks for energy storage****Speaker**

Mr Yutthanakon Kanaphan

16:25-16:40

**Investigation the role of Co<sup>2+</sup> in LiFePO<sub>4</sub> cathode material during batteries operation by In-situ XANES technique****Speaker**

Ms Patcharapohn Chantrasuwan

16:40-16:55

**Fabrication of Perovskite Solar Cell via Rapid Convective Deposition Technique**

**Speaker**

Mr Natpapon Saranrom

16:55

## Tuesday 29 November

10:15

### Heron 1: Session 5: Nano-energy & storage

Session | Location: Greenery, Room2, --

10:15-10:35 **Chitosan-metal nanohybrids for microbial detection and extraction**

**Speaker**

Prof. Suwabun Chirachanchai

10:35-10:55

**Charge storage mechanisms of manganese oxide nanosheets and N-doped reduced graphene oxide aerogel for high-performance asymmetric supercapacitors**

**Speaker**

Dr Montree Sawangphruk

10:55-11:15

**Molecular Dynamics Simulations and Gaussian Network Model in Improving Protein-Protein Binding Affinity: HIV and Dengue Cases**

**Speaker**

Vannajan Sanghiran Lee

11:15-11:30

**Fabrication, Characterization, and Electrochemical Properties of Electrospun MnCo<sub>2</sub>O<sub>4</sub> Nanofibers**

**Speaker**

Ms Ornuma Kalawa

11:30-11:45

**Synthesis, characterization and electrochemical properties of KFeO<sub>2</sub> nanoparticles prepared by sol-gel method**

**Speaker**

Ms Thongsuk Sichumsaeng

11:45-12:00

**Improved Electrochemical Properties of Activated Biomass/FeOx/MnOx Composite Prepared by Hydrothermal method for Supercapacitor Electrode Materials**

**Speaker**

Ms Unchista Wongpratrat

12:00-12:15

**DIAMONDROID COUNTER ELECTRODES FOR DYE-SENSITIZED SOLAR CELLS**

**Speaker**

Sumeth Siriroj

12:15

13:30

### Heron 1: Session 6: Other related topics

Session | Location: Greenery, Room2, --

13:30-13:45

**Gas Response of Tin Oxide Film Sensor to Varying Methane Gas Concentration**

**Speaker**

Prof. Emmanuel Florido

13:45-14:00

**ELECTROWETTING ON DIELECTRIC (EWOD) OF SESSILE MICRODROPLETS CONTAINING POLYDISPERSE GOLD NANOPARTICLES**

**Speaker**

Prof. Crismar Patacsil

14:00-14:15

**Salicylideneaniline-Functionalized Poly(m-phenyleneethynylene)s as Fluorescent Turn-On Chemosensors for Cations**

**Speaker**

Ms Nopparat Thavornsinn

14:15-14:30

**Observing Chitooligosaccharide Traveling through a Biological Nanopore of Escheriachia coli**

**Speaker**

H. Sasimali M. Soysa

14:30