## Sunday 27 November 2016

#### Plenary talk:

1) Prof. Michael Coey, Trinity College, Dublin, Ireland (14:15-15:00)

**Chairpersons:** Assoc. Prof. Vittaya Amornkitbamrung and Prof. Santi Maensiri

Time	[ID] Title [page]	Presenter
14:15	Magnetism at the nanoscale; Some puzzles and surprises	COEY, Michael

# Heron 1: Theory and simulation related to nanosystem and Nano-characterization & instruments (15:15-16:45)

**Chairpersons:** Assoc. Prof. Jiraroj T-Thienprasert and Dr. Suwit Suthirakun

Time	[ID] Title [page]	Presenter
15:15	[IN-TH-01]Sustainable Innovation of Magnetic Field Application in Catalytic CO2 Conversion [page a-16]	CHAREONPANICH, Metta
15:35	[IN-TH-02]Identification of Defects in Materials: A Combination of First-principles Calculations and Experiments [page a-17]	t-thienprasert, Jiraroj
15:55	[IN-CH-03]Nondestructive 3D Characterization of Materials Using Optical Coherence Tomography [page a-40]	MEEMON, Panomsak
16:15	[OR-TH-01]Theoretical Investigation on the Electroreduction of CO <sub>2</sub> to Methanol on Stepped Cu-based Alloy (211) Surfaces [page a-90]	HIRUNSIT, Pussana
16:30	[OR-TH-02]Molecular Structure and Formation of Melatonin in the Bulk Water and at the Water–Air Interface: A Molecular Dynamics Simulation Study [page a-91]	RITWISET, Aksornnarong

### Hornbill 1: Nano-fabrication & manufacturing and Nanoelectronics/systems (15:15-16:45)

Chairpersons: Dr. Saroj Rujirawat and

Dr. Adisorn Tuantranont

Time	[ID] Title [page]	Presenter
15:15	[IN-FA-01]Nano-materials Engineering and Manufacturing in Hard Disk Drives for Cloud Storage [page a-41]	SUBRAMANIAN, Krishnan
15:35	[IN-FA-02]The industrial-academic network for nanoscience research in cementitious materials [page a-42]	SINTHUPINYO, Sakprayut
15:55	[IN-EC-01]Printed Graphene Electronics [page a-54]	TUANTRANONT, Adisorn
16:15	[OR-FA-01]A simple electrospining system for fabrication of core-shell nanofibers [page a-125]	NETTONG, Chaturon
16:30	[OR-FA-02]Effect of cylindrical length and regression model of Euler number of hydrocyclone [page a-126]	SUPACHART, Pakpoom

# Heron 2: Nano-agriculture and Nano-medicine & biotechnology (15:15-16:40)

Chairpersons: Asst. Prof. Toemsak Srikhirin and

Asst. Prof. Teerakiat Kerdcharoen

Time	[ID] Title [page]	Presenter
15:15	[IN-AG-01]Synthesis and fabrication of nanomaterials for applications in food and agriculture [page a-35]	SUKWATTANASINITT, Mongkol
15:35	[IN-AG-02]Enhanced Production and Selected Use of Nanocellulose from Fruit and Vegetable Residues: A Brief Review [page a-36]	DEVAHASTIN, Sakamon
15:55	[IN-MB-11]Discovery of biological self-assembling systems that have potential for incorporation into nanodevices and sensors	ROBINSON, Robert
16:15	[OR-AG-01]Production of Nanocellulose from Lime Residues Using Chemical-free Technology [page a-119]	JONGAROONTAPRANG EE, Saranya
16:30	[OR-OT-02]Antimicrobial and Antioxidant Activity of Caffeic Acid Phenethyl Ester Nanoparticles [page a-130]	SAELO, Suparak

#### Falcon 1: - Nanomaterials & nanostructures (15:15-16:50)

Chairpersons: Asst. Prof Kasama Jarukumjorn and

Assoc. Prof. Supon Ananta

Time	[ID] Title [page]	Presenter
15:15	[IN-MA-01]Limitation of Rheology and Curing Processes for Tiny Adhesive Dot with Various	OSOTCHAN, Tanakorn
	Dispensing Systems in Hard Disk Assembly Process [page a-6]	i anakom
15:35	[OR-MA-01]Highly dispersed Ni and Cu nanoparticles supported SBA-15 for hydrogenation of methyl levulinate to – valerolactone [page a-66]	FANG, Cheng
15:50	[OR-MA-02]Electrospun nanofibers of polylactide (PLLA)/ polyglutamic acid (-PGA) blends and their use as ammonia detecting kits in intelligent meat packaging [page a-67]	SDOK, Soksreymeng
16:05	[OR-MA-03]Effect of F incorporation on physical, electrical and optical properties of hydrothermally grown ZnO nanorods [page a-68]	SINORNATE, Wuttichai
16:20	[OR-MA-04]Application of amine- functionalized magnesium ferrite nanoparticles in wastewater treatment [page a-69]	NONKUMWON G, Jeeranan
16:35	[OR-MA-05]Anatase/Rutile composite thin films prepared via dip coating technique and their hydrophilicity, stability and photocatalytic activity [page a-70]	IBRAHIM, AMMAR

## Poster session (17:15-18:15)

## Monday 28 November 2016

#### Plenary talk:

1) Prof. Erik Reimhult, U. of Natural Resources and Life Sciences, Austria (08:30-09:10)

2) Prof. Harald Krug, EMPA, Switzerland (09:20-10:00)

Chairpersons: Prof. Dr. Montarop Yamabhai

Dr. Sirasak Teparkum

Time	[ID] Title [page]	Presenter
	Functional and responsive core-shell nanoparticle assembly at oil and lipid interfaces [page a-2]	REIMHULT, Erik
09:20	What Can We Learn from the Nanotoxicology Publications? [page a-3]	KRUG, Harald

Heron 2: - Nano-medicine & biotechnology (10:15-11:50)

Chairpersons: Prof. Albert Schulte and Dr. Uracha Ruktanonchai

Time	[ID] Title [page]	Presenter
10:15	[IN-MB-01]Development of Theranostic Nanoparticles for Cancers [page a-25]	SATHORN SUMETEE, Sith
10:35	[IN-MB-02]Nanotechnology based delivery systems for peptides and vaccines [page a-26]	TOTH, Istvan
10:55	[IN-MB-03]Nanotechnology and Health [page a-27]	SRICHANA, Teerapol
11:15	[IN-MB-04]Highly Sensitive Nucleic Acid and Antibody Based Electrochemical Detection by Using of Nanomaterials as Signal Amplification Elements [page a-28]	SURAREU NGCHAI, Werasak
11:35	[OR-MB-01]Evaluation of immunochromatographic-gold nanoparticle based assay efficacy in the detection of protease inhibitor in HIV-1 infected patient's plasma [page a-112]	THONGKUM, Weeraya

# Heron 1: Nano-characterization & instruments and Nanomaterials & nanostructures (10:15-12:05)

**Chairpersons:** Assoc. Prof. Wisanu Pecharapa and Dr. Pinit Kidkhunthod

Time	[ID] Title [page]	Presenter
10:15	[IN-CH-01]The mystery of high temperature superconductivity at the FeSe/STO interface [page a-38]	FENG, Donglai
10:35	[IN-CH-02]Possible electric field induced indirect to direct band gap transition in MoSe <sub>2</sub> [page a-39]	CHANGYOUNG, Kim
10:55	[IN-TH-03]First-principles study on two dimensional dichalcogenides for hydrogen production [page a-18]	HAN, Seungwu
11:15	[OR-MA-06]The observation of strain- induced valence band splitting on HfSe <sub>2</sub> by Alkali metal intercalation [page a-71]	EKNAPAKUL, Tanachat
11:30	[OR-MA-07]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> [page a-72]	CHAIYACHAD, Sujinda

### Falcon 1: Nanomaterials & nanostructures (10:15-11:55)

**Chairpersons:** Assoc. Prof. Pisith Singjai and Assoc. Prof. Rattikorn Yimnirun

Time	[ID] Title [page]	Presenter
10:15	[IN-MA-02]Metal-oxide Semiconducting	CHOOPUN,
	Nanostructures by Microwave-assisted	Supab
	Thermal Oxidation Technique for Sensor and	
	Solar Cell Applications [page a-7]	
10:35	[IN-MA-03] Biodegradable nanocomposite	PUNYODOM,
	blown films based on PLA and PBAT	Winita
	containing silver-loaded kaolinite: Formulation	
	and property testing for use as smart packaging	
	for dried longanm [page a-8]	
10:55	[OR-MA-08]Fabrication and	NILMOUNG,
	Electrochemical properties of	Sukanya
	$CNF/MFe_2O_4$ : (M = Mn, CuMn)	
	Composite Nanofiber for Electrochemical	
	capacitors [page a-73]	
11:10	[OR-MA-09]Effect of dc bias effect	YOTBURUT,
	on the dielectric properties and	Benjaporn
	nonlinear electrical behaviors of	
	Bi <sub>1-x</sub> Ba <sub>x</sub> FeO <sub>3</sub> ceramics [page a-74]	
11:25	[OR-MA-10]Fabrication, structure	SONSUPAP,
	and magnetic properties of Ce <sub>1-x</sub> Fe <sub>x</sub> O <sub>2</sub>	Somchai
	nanostructures [page a-75]	
11:40	[OR-MA-11]New 8-Aminoquinoline	HOJITSIRIYANONT
	Derivatives as "Turn-On" Fluorescent	, Jutawat
	Sensor for Cd(II) ion Detection [page a-76]	

## Hornbill 1: Nano-safety (10:15-12:00)

Chairperson: Prof. Harald Krug

Time	[ID] Title [page]	Presenter
10:15	Welcome Remarks	CHINSIRIKUL, Wannee
10:25	[IN-ST-01]Alternatives to animal testing in Nanotoxicology [page a-44]	MANIRATANACHOTE, Rawiwan
10:45	[IN-ST-02]High throughput screening method for nanoparticles toxicity using 3D Cells [page a-45]	YOON, Seokjoo
11:05	[IN-ST-03]Comparison of nano perception between Asia and Europe and its influence on nano regulation [page a-46]	KARLAGANIS, Georg

## Hornbill 2: Hands-on workshop (10:00-12:00)

Time	[ID] Title [page]	Presenter
10:00	Latest Technology Atomic Force Microscope and Advanced Applications	Puditec company limited

# Heron 1: Nano-electronics/systems and Nano-characterization & instruments (13:00-14:50)

Chairperson: Asst. Prof. Tanakorn Osotchan and

Asst. Prof. Worawat Meevasana

Time	[ID] Title [page]	Presenter
13:00	[IN-EC-02] Polymer/Metal	WONGWIRIYAPAN,
	Nanoparticle/Nanocarbon Hybrid Materials	Winadda
	for Highly Sensitive and Selective Volatile	
	Organic compound Detection [page a-55]	
13:20	[IN-EC-03]Designing Molecular Structures	PROMARAK,
	of D- <b>T</b> -A Type Organic Dyes for High	Vinich
	Efficiency Dye-Sensitized Solar Cells	
	[page a-56]	
13:40	[IN-EC-04] X-ray Absorption Investigation	PECHARAPA,
	on Cation Distribution and Magnetic	Wisanu
	Behavior of Zinc Ferrite Nanoparticles [page	
	a-57]	
14:00	[IN-EC-05]Fabrication of Highly Aligned	MIMURA,
	CNT and P(VDF/TrFE) Nanofiber Sheets	Hidenori
	[page a-58]	
14:20	[OR-EC-01]Simulation of single quantum	KUNRUGSA,
	well solar cells [page a-128]	Maetee

#### Falcon 1: Nanomaterials & nanostructures (13:00-14:55)

**Chairperson:** Assoc. Prof. Vittaya Amornkitbamrung and Asst. Prof. Theeranun Siritanon

Time	[ID] Title [page]	Presenter
13:00	[IN-MA-04] Chemical syntheses of functional nanostructures and their SERS applications [page a-9]	EKGASIT, Sanong
13:20	[IN-MA-05]Effect of boron addition on the structure and magnetic properties of CoPt nanoparticles [page a-10]	PINITSOONTORN , Supree
13:40	[OR-MA-12]Titanate nanotubes-AgO nanocomposites: Synthesis, characterization, and dielectric properties [page a-77]	SIWAWONGKASEM, Kwunta
13:55	[OR-MA-13]Magnetic properties of Co-doped BiFeO <sub>3</sub> nanoparticles [page a-78]	KHAJONRIT, Jessada
14:10	[OR-MA-14]Structure and magnetic properties of Mn-doped CeO <sub>2</sub> nanostructures prepared by egg-white solution route [page a-79]	SANGKHAOARTYON , Panwit
14:25	[OR-MA-15] Zinc stannate nanoparticles synthesized at room temperature: Effect of annealing on size, morphology and photocatalytic activity [page a-80]	KHAN, Muhammad Najam
14:40	[OR-MA-16]Heterogeneous Suzuki cross-coupling reaction in water catalyzed by palladium nanoparticles supported on individual calcium carbonate plates derived from mussel shell particle. [page a-81]	CHOTNITIKORNKUN , Sukumaporn

### Hornbill 1: Nano-safety (13:00-14:45)

Chairpersons: Ramjitti Indaraprasirt

Time	[ID] Title [page]	Presenter
13:00	[IN-ST-04]Risk mapping and Risk management by control of release — strategies to design better materials and products [page a-47]	RIEDIKER, Michael
13:20	[IN-ST-05]Perception and Attitudes about Nanotechnology and Nano-Safety in Thailand's University Community [page a-48]	HORNYAK, G. Louis
13:40	[IN-ST-06]The progress of Taiwan nano- EHS regulations and researches [page a- 49]	JIN TSAI, Chuen
14:00	[IN-ST-07]Characterization of nanoparticles in photocatalytic and regular cement using an aerosolizing nanoparticle generator system [page a-50]	BATSUNGNOEN, Kiattisak

#### Heron 2: Environmental nanotechnology (13:00-14:55)

Chairperson: Asst. Prof. Rapee Utke and

Asst. Prof. Montree Sawangphurk

Time	[ID] Title [page]	Presenter
13:00	[IN-EV-02]Nanocatalysts for Biorefinery and Advanced Biofuel Applications [page a-24]	FAUNGNAWAKIJ, Kajornsak
13:20	[OR-EN-10]The electrochemical properties of NiO/NFs electrode induced by UV light irradiation [page a-102]	MUSIKAJAROEN, Supansa
13:35	[OR-EV-01]Deoxygenation of oleic acid to produce bio-hydrogenated diesel over molybdenum oxide catalysts on supported alumina under inert atmosphere [page a-104]	KROBKRONG, Navapat
13:50	[OR-EV-02]An innovative application of magnetic field for CO <sub>2</sub> hydrogenation reaction on Fe and Cu supported MCM-41 catalyst [page a-105]	KIATPHUENGPORN , Sirapassorn
14:05	[OR-EV-03]The Increased Durability of Natural Dye on the SiO <sub>2</sub> -Modified Paper [page a-106]	BUNTEM, Radchada
14:20	[OR-EV-04]Efficient visible light-induced photocatalytic degradation of Rhodamine B over chlorophyll and Mg co-modified P25 nanoparticles [page a-107]	PHONGAMWONG, Thanaree

# Hornbill 2: Synchrotron: Advanced Technology for Industry (13:00-15:00)

Chairpersons: Dr. Somchai Tancharakorn and

Dr. Waraporn Tannanuch

Time	[ID] Title [page]	Presenter
13:00	[IN-SLR-01]Photoemission Electron Spectroscopy (PES) at the Siam Photon Laboratory, SLRI [page a-61]	CHANLEK, Narong
13:30	[IN-SLR-02]Classification and Application of Diamond-Like Carbon Films Using SR-Based Spectromicroscopy [page a-62]	TUNMEE, Sarayut
14:00	[IN-SLR-03]An Application of Synchrotron-based X-ray Absorption Spectroscopy Study on Advanced Functional Materials [page a-63]	KIDKHUNTHOD , Pinit
14:30	[IN-SLR-04]Synchrotron SAXS/WAXS for nano structural investigation [page a-64]	soontaranon , Siriwat

# Heron 2: Nano-agriculture and Environmental nanotechnology (15:00-16:50)

**Chairpersons:** Asst. Prof. Supab Choopun and Assoc. Prof. Sukon Phanichphant

Time	[ID] Title [page]	Presenter
15:00	[IN-AG-03]Smart Farm System : Case Studies in Thailand [page a-37]	KERDCHAROEN, Teerakiat
15:20	[OR-EV-05]The effect of green synthesized gold nanoparticles on rice germination and roots [page a-108]	TSI, Nji
15:35	[OR-EV-06]Turn-On Fluorescent Sensor from Indolium Salt for Cyanide Detection [page a-109]	PROMCHAT, Apiwat
15:50	[OR-EV-07]Styryl-Functionalized BODIPY as Fluorescent Probe For Metal Ions Detection in Aqueous Media [page a-110]	JANTRA, Suthikorn
16:05	[OR-EV-08]Water disinfection using silver nanoparticles impregnated coffee grounds: Escherichia coli and Staphylococcus aureus killing in batch-mode [page a-111]	POKHUM, CHONLADA
16:20	[OR-EN-01]Cassava root materials composited with PEDOT:PSS used as low cost counter electrodes in dye-sensitized solar cell [page a-93]	LOWPA, Seksan
16:35	[OR-OT-03]Metal Phthalocyanine and Metal Oxide Modifying Multiwall Carbonnano Tube Paste Sensors for Classification of Sweet Taste [page a-131]	JUAGWON, Theerasak

#### Heron 1: Nano-energy & storage (15:00-16:55)

**Chairpersons:** Assoc. Prof. Supree Pinitsoontorn and Dr. Pinit Kidkhunthod

Time	[ID] Title [page]	Presenter
15:00	[IN-EN-01]Natural Materials for Dye Sensitized Solar Cells: Experimental and Theoretical Study [page a-20]	AMORNKITBAMRUNG, Vittaya
15:20	[IN-EN-02]A recent development of mixed metal oxides/polymer nanocomposites as energy storage catalysts [page a-21]	NGAOTRAKANWIWAT, Pailin
15:40	[OR-EN-02]Electrical Properties of Co- Doped LiFePO <sub>4</sub> Nanomaterial by Impedance Spectroscopy Technique [page a-94]	KRABAO, Phongsit
15:55	[OR-EN-03]The porous carbon derived from the KOH activation of agro-waste char for supercapacitor electrode [page a-95]	SODTIPINTA, Jedsada
16:10	[OR-EN-04]Synthesis and identification of silica and activated carbon nanocomposite from rice husks for energy storage [page a-96]	KANAPHAN, Yutthanakon
16:25	[OR-EN-05]Investigation the role of Co <sup>2+</sup> in LiFePO₄ cathode material during batteries operation by In–situ XANES technique [page a-97]	CHANTRASUWAN, Patcharapohn
16:40	[OR-EN-06]Fabrication of Perovskite Solar Cell via Rapid Convective Deposition [page a-98]	SARANROM, Natpapon

### Hornbill 1: Nano safety (15:00-16:45)

Chairpersons: Ramjitti Indaraprasirt

Time	[ID] Title [page]	Presenter
15:00	[IN-ST-08]Malaysia National Nanosafety Initiative. [page a-51]	MOHD HELAN, Mohd Helme
15:20	[IN-ST-09]Teaching and Learning on Nano Safety in School [page a-52]	INTARASAWANG, Mana
15:40	[IN-ST-10]Human studies and experimental studies for nanosafety [page a-53]	ICHIHARA, Gaku

### Hornbill 2: Hands-on workshop (15:00-18:00)

Time	[ID] Title [page]	Presenter
15:00	Hands-on workshop	Crest Nanosolution (Thailand) company

#### Falcon 1: Nanomaterials & nanostructures (15:00-17:00)

**Chairpersons:** Dr. Adisorn Tuantranont and Asst. Prof. Prasit Thongbai

Time	[ID] Title [page]	Presenter
15:00	[IN-MA-06]Effects of Electric and Magnetic Fields on Nanoparticle Thin Films Prepared by Sparking-off Metal Tips [page a-11]	SINGJAI, Pisith
15:20	[IN-MA-07]Photocatalytic Activity of the Binary Composite CeO <sub>2</sub> /SiO <sub>2</sub> for Degradation of Dye [page a-12]	PHANICHPHANT, Sukon
15:40	[IN-MA-08]Optical and Luminescence from Ln <sup>3+</sup> dope glasses and their applications [page 13]	KAEWKHAO, Jakrapong
16:00	[OR-MA-17]Preparation of nanocellulose from Jute fiber waste [page a-82]	ABBASI, Rehan
16:15	[OR-MA-18]Micrometers to nanometers conversion process in perovskite BaTiO <sub>3</sub> particles [page a-83]	CHAROONSUK, Thitirat
16:30	[OR-MA-19]Hydrothermal synthesis in egg white solution and magnetic properties of magnetite (Fe <sub>3</sub> O <sub>4</sub> ) nanoparticles [page a-84]	PHUMYING, Santi
16:45	[OR-MA-20]Preparation of controlled release nanocapsule for mosquito repellent application [page a-85]	JOOTHAMONGKHON, Jaruwan

## Poster session (17:15-18:15)

## Tuesday 29 November 2016

#### Plenary talk:

- 1) Prof. Y. Kawazoe, Tohoku University, Japan (08:30-09:10)
- 2) Prof. Albert Schulte, Suranaree Univ. of Tech., Thailand (09:20-10:00)

**Chairpersons:** Prof. Dr. Sukit Limpijumnong and Assoc. Prof. Vannajan Sanghiran Lee

Time	[ID] Title [page]	Presenter
08:30	[PL-MA-02]How to Predict New Nano-	KAWAZOE,
	structured Materials with Confidence?	Yoshiyuki
	-Theoretical Study on Task Specific Ionic Liquid	
	for Metal Extraction from Garbage Caused by	
	Tsunami- [page a-4]	
09:20	[PL-MB-02]Nano-needles, nano-conduits,	SCHULTE,
	nano-biocatalysts and nano-biopores On	Albert
	powerful tiny tools for atomic/molecular	
	resolution surface inspections and effective	
	nanoscopic facilitators of electroanalysis,	
	bacterial cell survival and antibiotic design	
	[page a-5]	

# Heron 1: Theory and simulation related to nanosystem and Nano-energy & storage (10:15-12:15)

Chairpersons: Assoc. Prof. Vittaya Amornkitbamrung

Time	[ID] Title [page]	Presenter
10:15	[IN-EV-01] Chitosan-metal nanohybrids for microbial detection and extraction [page a-23]	CHIRACHANCH AI, Suwabun
10:35	[IN-EN-03]Charge storage mechanisms of manganese oxide nanosheets and N-doped reduced graphene oxide aerogel for high-performance asymmetric supercapacitors [page a-22]	SAWANGPHRUK , Montree
10:55	[IN-TH-04] Molecular Dynamics Simulations and Gaussian Network Model in Improving Protein— Protein Binding Affinity: HIV and Dengue Cases [page a-19]	LEE, Vannajan Sanghiran
11:15	[OR-EN-07]Fabrication, Characterization, and Electrochemical Properties of Electrospun MnCo <sub>2</sub> O <sub>4</sub> Nanofibers [page a-99]	KALAWA, Ornuma
11:30	[OR-EN-08]Synthesis, characterization and electrochemical properties of KFeO <sub>2</sub> nanoparticles prepared by sol-gel method [page a-100]	SICHUMSAENG, Thongsuk
11:45	[OR-EN-09]Improved Electrochemical Properties of Activated Biomass/FeO <sub>x</sub> /MnO <sub>x</sub> Composite Prepared by Hydrothermal method for Supercapacitor Electrode Materials [page a-101]	WONGPRATAT, Unchista
12:00	[OR-EN-11] Diamondoid Counter Electrodes for Dye-Sensitized Solar Cells [page a-103]	SIRIROJ, Sumeth

## Hornbill 2: Hands-on workshop (10:00-12:00)

Time	[ID] Title [page]	Presenter
10:00	X-ray Photoelectron Spectroscopy(XPS)	Bara Scientific
	Techniques	company

# Falcon 1: Nanomaterials & nanostructures and Theory and simulation related to nanosystem (10:15-12:10)

**Chairpersons:** Assoc. Prof. Jakrapong Kaewkhao and Assoc. Prof. Supree Pinitsoontorn

Time	[ID] Title [page]	Presenter
10:15	[IN-MA-09]Classic Perovskite Ferroelectric BaTiO <sub>3</sub> Ceramics Modified with Nanogold [page a-14]	ANANTA, Supon
10:35	[IN-MA-10] Electrical properties and dielectric responses in rutile-TiO <sub>2</sub> -based ceramics [page a-15]	THONGBAI, Prasit
10:55	[OR-MA-21]Investigation on the effect of nanoparticles to ammonium salt based gel electrolytes [page a-86]	CHOTSUWAN, Chuleekorn
11:10	[OR-MA-22]One-Dimensional Carbon Nanomaterials and Their Application for Oxygen Reduction Reaction [page a-87]	NIAMLAEM, Malinee
11:25	[OR-MA-23]Effect of Al Concentration on Aldoped ZnO Thin Films deposited by Magnetron Co-Sputtering Technique [page a-88]	TANTISANTISOM , Kittipong
11:40	[OR-MA-24] 2Mechanism of ferromagnetism occurring in CVD-adamantane films [page a-89]	SANGPHET, Suppanut
11:55	[OR-TH-03]Atomic structures of graphene like nanomaterials including SiC and BP [page a-92]	RERKHAJORNNAMKUL, Taweesin

## Hornbill 1: Nano-electronics/systems and Nano-characterization & instruments (10:15-12:00)

Chairpersons: Prof. Vinich Promarak and

Asst. Prof. Montree Sawangphurk

Time	[ID] Title [page]	Presenter
10:15	[IN-FA-03] Tailoring Nanocapsules for Self-Healing Materials [page a-43]	CRESPY, Daniel
10:35	[IN-EC-06]Material, Device and Interfacial Engineering for High efficiency Solution Processable Organic Light Emitting Diode [page a-59]	WOON, Kai Lin
10:55	[IN-EC-07]Asst. Prof. Toemsak Srikhirin [page a-60]	SRIKHIRIN, Toemsak
11:15	[OR-CH-02]Optical diffraction of binary-nanoparticle film prepared by convective deposition with vibration assistance [page a-121]	SITPATHOM, Nonthanan
11:30	[OR-CH-03]Magneto and electro-optical study of Bismuth ferrite (BiFeO <sub>3</sub> ) thin films [page a-122]	POLIN, Siwat
11:45	[OR-CH-04]Penetration of Fluorescent Nanoparticles into the Cornea [page a-123]	SRINIVAS, Sangly P

#### Heron 2: Nano-medicine & biotechnology (10:15-12:20)

**Chairpersons:** Prof. Dr. Montarop Yamabhai and Dr. Mattaka Khongkow

Time	[ID] Title [page]	Presenter
10:15	[IN-MB-05]Domain-Exchanged Antibody	RUKER,
	with Potentiated Effector Functions [page a- 29]	Florian
10:35	[IN-MB-06] Use of nanobodies in developing	BERKMEN,
	a bacterial antibody production platform [page a-30]	Mehmet
10:55	[IN-MB-07] Bionanomaterials for	RUKTANONCHAI,
	Diagnostics, Imagine and Drug delivery [page a-31]	Uracha
11:15	[IN-MB-08]Prof. Orawon Chailapakul [page	CHAILAPAKUL,
	a-32]	Orawon
11:35	[OR-MB-02]Selective Permeability of	AUNKHAM,
	Antimicrobial Agents through the Protein	Anuwat
	Nanopore of the Highly-Drug Resistant	
	Melioidosis Bacterium Burkholderia	
	pseudomallei [page a-113]	
11:50	[OR-MB-03]Oriented antibody	TREERATTRAKOON
	conjugation on dye-doped silica	, Kiatnida
	nanoparticles for targeted in vivo	
	fluorescent imaging [page a-114]	
12:05	[OR-MB-04]Development of cellular platform	UDOMRAT,
	for enhancing neuron differentiation [page a-115]	Suthiwan

Heron 2: Nano-medicine & biotechnology (13:30-14:55)

Chairpersons: Dr. Bura Sinthupakorn

Time	[ID] Title [page]	Presenter
13:30	[IN-MB-09]Cosmeceutical based nanotechnology: the beauty from nature [page a-33]	KHONGKOW, Mattaka
13:50	[IN-MB-10]Nanomedicine-based drug delivery systems for anti-cancer targeting and treatment. [page a-34]	YATA, Teerapong
14:10	[OR-MB-05]Electrochemical aptasensor for glycated albumin in Diabetes mellitus diagnosis and monitoring [page a-116]	BUNYARATAPHAN, Sasinee
14:25	[OR-MB-06]Development of novel silica-coated superparamagnetic iron oxide nanoparticles for highly efficient magnetofection and molecular imaging.  [page a-117]	LEELAWATTANACHAI, Jeerapond
14:40	[OR-MB-07]Synthesis and Fabrication of Silicon Nitride Nanopore Device for Biomolecule Detection [page a-118]	BOONKOOM, Thitikorn

#### Heron 1: Other related topics (13:30-14:30)

**Chairpersons:** Asst. Prof. Supab Choopun and Asst. Prof. Toemsak Srikhirin

Time	[ID] Title [page]	Presenter
13:30	[OR-OT-04]Gas Response of Tin Oxide Film Sensor to Varying Methane Gas Concentration [page a-132]	FLORIDO, Emmanuel
13:45	[OR-OT-05] Electrowetting on Dielectric (Ewod) of Sessile Microdroplets Containing Polydisperse Gold Nanoparticles [page a-133]	PATACSIL, Crismar
14:00	[OR-OT-06]Salicylideneaniline- Functionalized Poly(m- phenyleneethynylene)s as Fluorescent Turn-On Chemosensors for Cations [page a-134]	THAVORNSIN, Nopparat
14:15	[OR-OT-07]Observing Chitooligosaccharide Traveling through a Biological Nanopore of Escheriachia coli [page a-135]	SOYSA, H. Sasimali M.

# Falcon 1: Nano-characterization & instruments, Other related topics (13:30-14:50)

Chairpersons: Asst. Prof. Boonsong Sutapun and

Asst. Prof. Panomsak Meemon

Time	[ID] Title [page]	Presenter
13:30	[OR-FA-03]Investigation of using carbon nanotube mixed with several metal phthalcyanin compounds for electronic tongue applications [page a-127]	JITYEN, Arthit
13:45	[OR-OT-08] Characteristics of a Nanocrystalline-based, UVA-activated, 'Consume within' Indicator for Intelligent Packaging [page a-136]	KHANKAEW, Surachai
14:00	[OR-OT-09] Development of Physicochemical Properties of Pomegranate Extract using "Liponiosome" Encapsulation Technique [page a-137]	PHUANGSAWAI, Oraphan
14:15	[OR-OT-10] Enhanced piezoelectric properties and fatigue-free behavior of lead-free piezoelectric xBaZrO <sub>3</sub> -(0.85-x)BaTiO <sub>3</sub> -0.15CaTiO <sub>3</sub> ceramics [page a-138]	MUANGHLUA, Rangson

### Hornbill 1: Organizing committee meeting (13:30-15:15)