



Materials Science and Nanotechnology (MS)

Session MS1

Room# BB 209

Date Feb 2, 2017

Time 14:25-15:55

Conductor: Assoc. Prof. Dr. Taweechai Amornsakchai

Co-conductor: Dr. Jessada Manyam

Time	Code	Presenter	Title
14:25-14:55	MS-I-001	Prof. Dr. Suwabun Chirachanchai, The Petroleum and Petrochemical College, Chulalongkorn University, Thailand	Chitosan in water-based system: A simple conjugating condition for versatile functional materials
14:55-15:10	MS-O-001	Wen Shyang Chow, Universiti Sains Malaysia, Malaysia	Kinetics of water absorption of poly(lactic acid)/halloysite nanotube nanocomposites: Effect of impact modifiers and immersion temperature
15:10-15:25	MS-O-002	Bunnakorn Suntamit, National Nanotechnology Center, Thailand	Antimicrobial, self-crimped and mechanically-robust yarns from side-by-side biocomponent polypropylene fibers with chemical and UV-resistant functions
15:25-15:40	MS-O-003	Nantaprapa Tuancharoensri, Naresuan University, Thailand	Electrospun nanofibers based on poly(lactic acid) (PLA) for tissue engineering scaffolds: Fabrication and characterization

Session MS2

Room# BB 210

Date Feb 2, 2017

Time 14:25-15:55

Conductor: Assoc. Prof. Dr. Panya Sunintaboon

Co-conductor: Dr. Manaschai Kunaseth

Time	Code	Presenter	Title
14:25-14:55	MS-I-002	Prof. Dr. Leonardo Simon, University of Waterloo, Canada	Renewable polymer nanocomposites: Starch, nanocellulose and other nanomaterials
14:55-15:10	MS-O-004	Panupong Srimalanon, KMUTT, Thailand	Mechanical, physical properties and antibacterial performance of PLA/PBS blends with additions of DCP and HPQM agents
15:10-15:25	MS-O-005	Pitchayapa Niramon, Chulalongkorn University, Thailand	Multi-enzyme from <i>Aspergillus</i> sp. For scouring of pineapple yarn
15:25-15:40	MS-O-006	Soksreymeng Sdok, Thammasat University, Thailand	Electrospun nanofibers of polylactide(PLLA)/polyglutamic acid (g-PGA) blends and their use as ammonia detecting kits in intelligent meat packaging



Session MS3 **Room# BB 209**

Date Feb 2, 2017

Time 16:15-17:30

Conductor: Prof. Dr. Santi Maensiri

Co-conductor: Dr. Jessada Manyam

Time	Code	Presenter	Title
16:15-16:45	MS-I-003	Prof. Dr. Fabrice Leroux, Blaise Pascal University, France	Relevance of layered double hydroxide-type platelets in polymer nanotechnologies for greener solutions
16:45-17:00	MS-O-007	Soontaree Intasa-ard, VISTEC, Thailand	Hydrothermal syntheses of well-defined layered double hydroxides from concentrated metal solutions
17:00-17:15	MS-O-008	Pimchanok Puksisawan, Thammasat University, Thailand	Utilization of aluminium dross as a main raw material for synthesize the geopolymers via mechanochemistry method
17:15-17:30	MS-O-009	Surawat Chariyakornkul, Maejo university, Thailand	Strontium-substituted hydroxyapatite reinforced with soda-lime glass waste: Mechanical properties and phase evolution

Session MS4

Room# BB 210

Date Feb 2, 2017

Time 16:10-17:40

Conductor: Dr. Kajornsak Faungnawakij

Co-conductor: Dr. Chompoonut Rungnim

Time	Code	Presenter	Title
16:10-16:40	MS-I-04	Dr. Pierre Rabu, Institut de Physique et Chimie des Matériaux de Strasbourg, France	Multifunctional hybrid organic-inorganic coordination networks by soft chemical routes
16:40-16:55	MS-O-010	Natee Angboonpong, Mahidol University, Thailand	Efficient synthesis of copper-based metal-organic framework using vortex fluidic device
16:55-17:10	MS-O-011	Pranwadee Kaewmuang, Chiang Mai University, Thailand	Effect of solvents on physicochemical and photocatalytic properties of NiO nanostructures synthesized by solvothermal method
17:10-17:25	MS-O-012	Parnuch Hongsawat, KMUTNB, Thailand	Removal of ciprofloxacin from aqueous solution by magnetic graphene oxide
17:25-17:40	MS-O-039	Ngin Pu Theary, Royal University of Phnom Penh,Cambodia	Characterization of soybean lypoxygenase adsorbed on nanoporous rice husk silica



Session MS5 Room# BB 403

Date Feb 3, 2017

Time 10:30-12:15

Conductor: Dr. Kittipong Chainok

Co-conductor: Asst. Prof. Dr. Anusara Srisrual

Time	Code	Presenter	Title
10:30-11:00	MS-I-005	Prof. Dr. Jun-Seo Park, Hankyong National University, Korea	Coaxial electrospinning and its applications
11:00-11:15	MS-O-013	Nakarin Subjalearndee, National Science and Technology Development Agency, Thailand	Multiphase-nanocrystalline metal oxide nanofibers via facile electrospinning of multicomponent metal precursors
11:15-11:30	MS-O-014	Prof. Insik In, Korea National University of Transportation, Korea	Simple preparation of soluble and functional low-dimensional carbon nanomaterials
11:30-11:45	MS-O-015	Boonyarit Panyayeun, Kasetsart University, Thailand	Effect of production parameters on electrical properties of wood ceramics made from oil palm frond
11:45-12:00	MS-O-016	Paveena Tangudom, KMUTT, Thailand	Effect of nano TiO ₂ on mechanical and anti- bacterial performances of poly(methyl methacrylate)/acrylic rubber
12:00-12:15	MS-O-038	Nay Thew Kyi, Myanmar	A comparative study on antibacterial screening of synthesized silver nanoparticles using Carica papaya Linn.

Session MS6

Room# BB 406

Date Feb 3, 2017

Time 10:30-12:15

Conductor: Dr. Benjamaporn Wonganu

Co-conductor: Dr. Ratthaphol Rangkupan

Time	Code	Presenter	Title
10:30-10:45	MS-I-008	Prof. Dr. Doo Sung Lee, Sungkyunkwan University, Korea	Acidic-local targeting polymeric nanocarriers: Theranostic applications
10:45-11:15	MS-O-027	Kiatikhun Manokruang, Chiang Mai University, Thailand	Injectable hydrogels derived from albumin- pH/thermo responsive poly(amino urethane) conjugates for lysozyme delivery
11:15-11:30	MS-O-028	Nopparuj Soomherun, KMUTNB, Thailand	Preparation of poly(D,L-lactic-co-glycolic acid) microparticles loaded hydrophilic drug delivery systems in biomedical applications
11:30-11:45	MS-O-029	Thanyaporn Pinthong, Naresuan University, Thailand	Porous hydrogel wound dressing incorporated with honey and sericin for aided wound healing



11:45-12:00	MS-O-030	Supissa Boon-in, Naresuan University, Thailand	Compression stress resistance hydrogel wound dressing designed for pressure sores
12:00-12:15	MS-O-031	Karna Wijaya, Universitas Gadjah Mada, Indonesia	Synthesis of Ag ₂ O/bentonite material as antibacterial of Escherichia coli

Session MS7
Room# BB 403
Date Feb 3, 2017
Time 13:15-15:00
Conductor: Dr. Ratthaphol Rangkupan

Co-conductor: Asst. Prof. Dr. Kiattikhun Manokruang

Time	Code	Presenter	Title
13:15-13:45	MS-I-007	Prof. Dr. Hiroshi Uyama, Osaka University, Japan	Fabrication of functional porous polymeric materials by phase separation
13:45-14:00	MS-O-022	Adunyarit Sutthongkhong, KMUTT, Thailand	Preparation of porous adsorbent from poly(ether block amide)
14:00-14:15	MS-O-023	Sunanta Chuayprakong, KMUTNB, Thailand	Influence of soft segment molecular weight on nanoscale segregation of polyurea ionomers
14:15-14:30	MS-O-024	Yanika Poonpipat, Kasetsart University, Thailand	Thermo-mechanical behavior and moisture absorption of silica nanoparticles reinforced CTBN/epoxy composite
14:30-14:45	MS-O-025	Komthep Silpcharu, KMUTNB, Thailand	Observation of scratch damage resistance and impact strength of PMMA-PU-Si composite sheets
14:45-15:00	MS-O-026	Thitinun Ungtrakul, KMUTNB, Thailand	Thermoplastic vulcanizates/recycled polypropylene blend for automotive OEM applications

Session MS8
Room# BB 406
Date Feb 3, 2017
Time 13:15-15:00
Conductor: Dr. Sompit Wanwong

Co-conductor: Dr. Thidarat Wangkam

Time	Code	Presenter	Title
13:15-13:45	MS-I-006	Prof. Dr. Pooi See Lee, Nanyang Technological University, Singapore	Nanocellulose: Renewable smart material for electronic and energy applications
13:45-14:00	MS-O-017	Thitarat Prathumsuwan, Thammasat University, Thailand	Water hyacinth-derived tunable fluorescent carbon dots and their luminescent properties for sensing applications
14:00-14:15	MS-O-018	Nutpichan Pienutsa, Mahidol University, Thailand	Tin oxide-graphene composite sensor for a room-temperature detection of ethanol vapors
14:15-14:30	MS-O-019	Onsuda Arayawut, Kasetsart University, Thailand	Electronic properties of the pillared graphene nanostructures by self-consistent charge density functional based tight binding



14:30-14:45	MS-O-020	Natthapat Rattanawichai, Chulalongkorn University, Thailand	Fabrication of PbS quantum dot doped TiO ₂ nanotubes for highly efficient perovskite solar cells
14:45-15:00	MS-O-021	Yotsarayuth Seekaew, Kasetsart University, Thailand	Room temperature sensing of ZnO decorated carbon nanotube-based gas sensors

Session MS9
Room# BB 403
Date Feb 3, 2017
Time 15:15-16:45
Conductor: Asst. Prof. Dr. Kiattikhun Manokruang

Co-conductor: Dr. Benjamaporn Wonganu

Time	Code	Presenter	Title
15:15-15:45	MS-I-009	Asst. Prof. Dr. Daniel R. King, Hokkaido University, Japan	Taking inspirations from nature to design “green” composites
15:45-16:00	MS-O-032	Phuri Kalnaowakul, Kasetsart University, Thailand	The evaluation of microstructure, photocatalytic activity and antibacterial properties of Ag NPs/TiO ₂ coated on a welded galvanized steel
16:00-16:15	MS-O-033	Oukrit Thonganantakul, Chulalongkorn University, Thailand	Effects of thermal treatment on microscopic properties of Iron oxide/graphene composite
16:15-16:30	MS-O-034	Florencio D. de los Reyes, University of Santo Tomas, Philippines	Optimization of marshall stability and self-healing property of asphalt mixture using response surface methodology

Session MS10
Room# BB 406
Date Feb 3, 2017
Time 15:15-16:45
Conductor: Asst. Prof. Dr. Anusara Srisrual

Co-conductor: Dr. Thidarat Wangkam

Time	Code	Presenter	Title
15:15-15:45	MS-I-010	Harnchana Gatemala, Merck-CST Distinguished Dissertation Award 2016	Synthesis and applications of morphologically controlled silver micro/nanostructures
15:45-16:00	MS-O-035	Nilobon Intararit, KMUTT, Thailand	Effect of Na ₂ SiO ₃ and Na ₂ CO ₃ on hydration properties of dicalcium silicate prepared from black rice husk ash
16:00-16:15	MS-O-036	Nichaphat Thongsai, Thammasat University, Thailand	Two birds with one stone: Synthesis of silica nanoparticles and carbon nanodots from rice husk
16:15-16:30	MS-O-037	Sunisa Supakanapitak, Rajamangala University of Technology Tawan-Ok, Thailand	Preparation and characterization of Pt/CeO ₂ -ZrO ₂ nanoparticles by different methods