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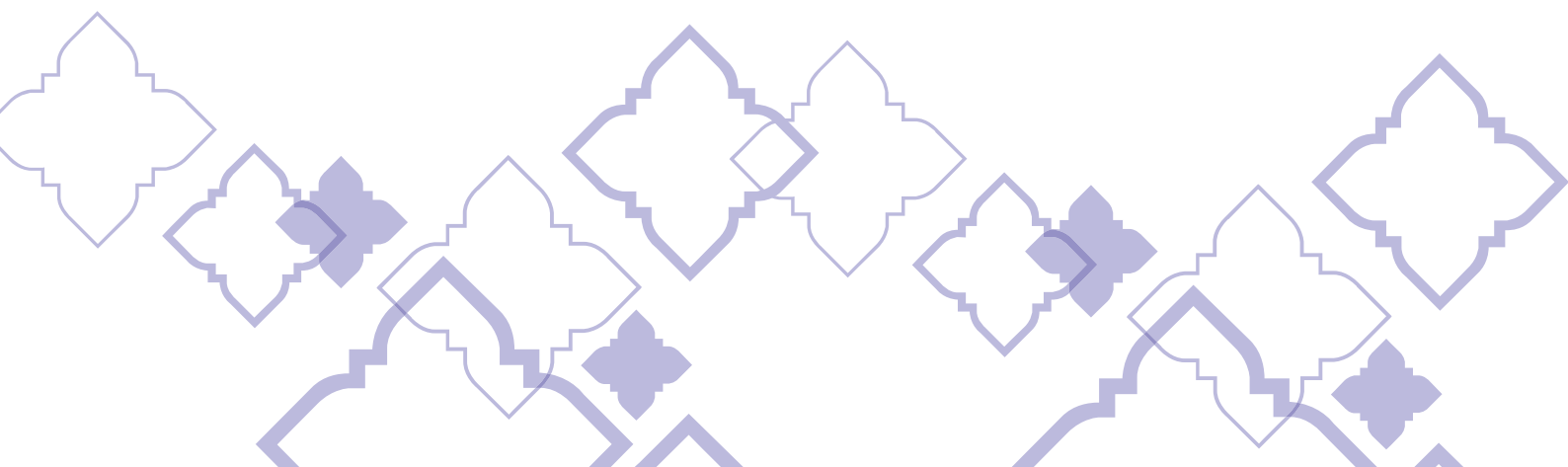
The 2nd Materials Research Society
of Thailand International Conference

The Zign Hotel, Pattaya, Thailand

July 10 - 12, 2019



The 2nd Materials Research Society
of Thailand International Conference



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Conference Overview

Time	Room	Activities
10 Jul 2019		
08:00 - 16:30		Registrations
09:00 - 10:30	Primary	Parallel session Symposium 7 (Sym07_KN02, 015, 010, 02, 017, 06)
	Vermillion	Parallel session Symposium 17 (Sym17_04, 02, 01, INV01)
	Magenia	Parallel session Symposium 11 (Sym11_02, 022, 014, 04, 01, KN01)
	Flavio	Parallel session Symposium 9 (Sym09_KN01, INV01, 010, 011, 012)
	Tempara	Parallel session Symposium 13 (Sym13_KN01, INV01, 01, 02, 03)
	Fineen	Parallel session Symposium 3 (Sym03_KN01, 014, 09, 06)
10:30 - 10:45		Morning Break
10:45 - 12:15	Fidella	Plenary Talk: Prof.Dr.Mas Subramanian (PL_01) and Prof. Hiroshi Watanabe (PL_02)
12:15 - 13:00		Lunch
13:00 - 15:45	Primary	Parallel session Symposium 7 (Sym07_KN01, INV01, 014, 013, 012, 011, 07, 08, 09)
	Vermillion	Parallel session Symposium 17 (Sym17_INV02, INV03, INV04, INV05, INV06, 03)
	Magenia	Parallel session Symposium 16 (Sym16_KN01, 012, 09, 08, 01, KN02, 013, 010, 029)
	Flavio	Parallel session Symposium 9 (Sym09_INV02, 013, 014, 015, 016, 017, 019, 02)
	Tempara	Parallel session Symposium 1 (Sym01_KN01, INV01, INV02, 01, 010, 011, 012, 013)
	Fineen	Parallel session Symposium 3 (Sym03_INV01, INV02, INV03, 02, 03, INV04, 016, 08)
15:45 - 16:30	Fauna	Session break & Poster session
16:30 - 18:00	Fineen	Future of Materials Science for Thailand 4.0: Education, Research and Innovation
	Magenia	Parallel session Symposium 16 (Sym16_ KN03, 028, 024, 019, 05)
	Flavio	Parallel session Symposium 9 (Sym09_INV03, INV04, 020, 022, 023)
	Tempara	Parallel session Symposium 1 (Sym01_INV03, 014, 015, 016, 017, 018)

11 Jul 2019

08:00 - 16:30		Registrations
08:30 - 10:00	Fidella	Opening Ceremony
10:00 - 10:15		Session break
10:15 - 11:45	Fidella	Plenary Talk: Prof.Dr.Robert Nemanich (PL_03) and Prof.Dr.Roy Chantrell (PL_04)
11:45 - 12:15	Fidella	Scientific instrument Talk
12:30 - 13:00		Lunch
13:00 - 15:30	Primary	Parallel session Symposium 5 (Sym05_KN01, INV01, INV02, 01, 030, 027, 023)
	Vermillion	Parallel session Symposium 12 (Sym12_KN01, INV01, INV02, 01, 011, 014, 02)
	Magenia	Parallel session Symposium 4 (Sym04_KN01, INV01, INV02, 01, 02, 03, 04, 05)
	Flavio	Parallel session Symposium 6 (Sym06_KN01, INV01, INV02, 01, 010, 02, 05)
	Tempara	Parallel session Symposium 13 (Sym13_KN02, INV02, INV03, INV04, 04, 05, 06, 07)
	Fineen	Parallel session Symposium 8 (Sym08_KN01, 01, 02, INV01, INV02, 04, 05)
15:30 - 16:15	Fauna	Session break & Poster session
16:15 - 18:30	Primary	Parallel session Symposium 5 (Sym05_02, 05, 011, 024, 016, 07, 012, 026)
	Vermillion	Parallel session Symposium 17 (Sym17_INV07, INV08, INV09, INV10, 08)
	Magenia	Parallel session Symposium 16 (Sym16_KN04, 06, 023, 04, 07, 016, 015, 011)
	Flavio	Parallel session Symposium 6 (Sym06_INV03, INV04, 06, 08, 09)
	Tempara	Parallel session Symposium 9 (Sym09_INV05, 024, 03, 04, 05, 06, 08, 09)
	Fineen	Parallel session Symposium 8 (Sym08_INV03, INV04, 06, 07, 08, 03, 010)
18:30 - 21:00	Fidella	Banquest

12 Jul 2019

08:00 - 10:15	Primary	Parallel session Symposium 1 (Sym01_019, 020, 022, 025, 026, 028, INV04, INV05)
	Vermillion	Parallel session Symposium 12 (Sym12_INV03, INV04, 03, 04, 06, 07, 08)
	Magenia	Parallel session Symposium 14 (Sym14_INV01, INV02, INV03, 01, 02, 04, 05, Sym15_01)
	Flavio	Parallel session Symposium 11 (Sym11_03, INV01, KN02, INV02, INV03)
	Tempara	Parallel session Symposium 10 (Sym10_01, 011, 012, 02, 08, KN01, INV01)
	Fineen	Parallel session Symposium 3 (Sym03_INV05, INV06, 04, 011, 013, 018, 019)
10:15 - 10:30		Session break

10:30 - 12:00	Fidella	Plenary Talk: Prof.Xiao Matthew Hu (PL05) and Dr.Adisorn Tuantranont (PL06)
12:00 - 13:00		Lunch
13:00 - 15:30	Primary	Parallel session Symposium 1 (Sym01_INV06, 03, 04, 05, 06, 07, 08, 09)
	Vermillion	Parallel session Symposium 5 (Sym05_INV03, 03, 010, 015, 017, 018, 019, 021, 025)
	Magenia	Parallel session Symposium 2 (Sym02_INV01, 01, 02, 03, 04, 05)
	Flavio	Parallel session Symposium 11 (Sym11_INV04, 07, 024, 08, 06, 05, 09, 015, 012)
	Tempara	Parallel session Symposium 10 (Sym10_INV02, INV03, INV03, 03, 04, 05, 07)
	Fineen	Parallel session Symposium 3 (Sym03_INV07, INV08, 07, 05)
15:30 - 17:00	Fidella	Awards & Closing Ceremony

Plenary Speakers

Presenter	Title	Abstract code	Time
Date:10 July 2019	Room: Fidella		
Prof.Dr.Mas Subramanian	Discovery of Novel Inorganic Pigments with Transition Metal Chromophores at Trigonal Bipyramidal Coordination: YInMn Blues and Beyond	PL_01	10:45
Prof. Hiroshi Watanabe	Science of Deformation and Flow	PL_02	11:30
Date:11 July 2019	Room: Fidella		
Prof.Dr.Robert Nemanich	Diamond: A Brilliant Wide Bandgap Semiconductor	PL_03	10:15
Prof.Dr.Roy Chantrell	Magnetic Materials Models and their Design Potential: Status, Gaps and Challenges	PL_04	11:00
Date:12 July 2019	Room: Fidella		
Prof.Xiao Matthew Hu	TBA	PL_05	10:30
Dr.Adisorn Tuantranont	2D and 3D Graphene Technology for Sensors and Energy Storage Applications		11:15

Keynote Speakers

Presenter	Title	Abstract code	Time
Symposium 01: Emerging Solar PV, Energy Storage Materials and Energy Harvesting Materials			
Date:10 July 2019	Room: Tempara		
Prof. Jim Williams	Intermediate-band near-infrared absorption in Au hyperdoped Si	Sym01_KN01	13:00
Symposium 03: Dielectrics, Piezoelectrics, Ferroelectrics, Thermoelectrics and Superconductors			
Date:10 July 2019	Room: Fineen		
Prof. Dr. Li-Chyong Chen	Customizing thermoelectric materials to boost their performance	Sym03_KN01	9:00
Symposium 04: Magnetic Materials and Their Applications			
Date:11 July 2019	Room: Magenia		
Dr. Robert R Lamberton	Magnetics and Data Storage related (TBD)	Sym04_KN01	13:00
Symposium 05: Materials in Design Manufacturing and Applications			
Date:11 July 2019	Room: Primary		
Assoc.Prof.Dr. Dan WANG	Study on the Solidification Cracking Susceptibility of Austenitic Stainless Steel during Laser Welding	Sym05_KN01	13:00
Symposium 06: Ceramic and Glass Technology			
Date:11 July 2019	Room: Flavio		
Prof.Dr. Hong Joo Kim	Discovery of TI-based new scintillation materials	Sym06_KN01	13:00

Symposium 07: Polymers, Rubber, Bioplastics, colloid and emulsion			
Date:10 July 2019	Room: Primary		
Assoc. Prof. Dr. Makoto Takafuji	Surface functionalized hybrid polymer microspheres with unique morphological features	Sym07_KN01	13:00
Prof. Dr. Pranut Potiyaraj	Graphene as an Additive for Polymeric Hybrid Materials	Sym07_KN02	9:00
Symposium 08: Biomaterials and Applications			
Date:10 July 2019	Room: Fineen		
Assoc. Prof. Joachim Loo	Delivering the pharmaceutical and nutraceutical cargo using multi-phase delivery systems	Sym08_KN01	13:00
Symposium 09: Sensors, Organic Electronics and Printed Electronics			
Date:10 July 2019	Room: Flavio		
Prof. Dr. Orawan Chailapakul	Nanomaterial-based electrodes for electroanalytical applications	Sym09_KN01	9:00
Symposium 10: Composites and Construction Materials			
Date:12 July 2019	Room: Tempara		
Prof. Dr. Prinya Chindaprasirt	TBA	Sym10_KN01	9:15
Symposium 11: Computational Material Sciences			
Date:10 July 2019	Room: Magenias		
Prof. Yoshiyuki Kawazoe	Materials Informatics based on Reliable Materials Database	Sym11_KN01	10:15
Date:12 July 2019	Room: Flavio		
Asst. Prof. Anderson Janotti	The impact of hydrogen impurities on the electrical and optical properties of oxide semiconductors	Sym11_KN02	9:15
Symposium 12: Surface Sciences, Tribology and Thin Film Technology			
Date:11 July 2019	Room: Vermillion		
Prof. Tomoaki Masuzawa	Field emission from doped diamonds investigated by combined photoelectron spectroscopy and field-emitted electron spectroscopy	Sym12_KN01	13:00
Symposium 13: Catalyst and Materials Chemistry for Green Environment			
Date:10 July 2019	Room: Tempara		
Professor Dr. Soo Wahn Lee	Modified α -NiMoO ₄ photocatalyst for efficient dyes/drugs degradation and bacterial inactivation in waste water	Sym13_KN01	9:00
Date:11 July 2019	Room: Tempara		
Dr. Kajornsak Faungnawakij	Recent development of catalytic nanomaterials for biorefinery application	Sym13_KN02	13:00
Symposium 16: Rheology			
Date:10 July 2019	Room: Magenias		
Prof. Kyung Hyun Ahn	Rheology in Korea: voyage for 30 years	Sym16_KN01	13:00
Prof. Anuvat Sirivat	Biopolymers as Electroactive Materials: Fundamental Aspects	Sym16_KN02	14:30
Prof. Tadashi Inoue	Rheology in Japan	Sym16_KN03	16:30

Date: 11 July 2019	Room: Magenia		
Prof. Wei Yu	Rheological modification of biodegradable polymers	Sym16_KN04	16:15

Invited Speakers

Presenter	Title	Abstract code	Time
Symposium 01: Emerging Solar PV, Energy Storage Materials and Energy Harvesting Materials			
Date: 10 July 2019	Room: Tempara		
Asst. Prof. Dr. Supab Choopun	TBA	Sym01_INV01	13:30
Prof. Yongsheng Liu	TBA	Sym01_INV02	14:00
Prof. Shih-kang Lin	Nano-volcanic eruption of silver: a computational thermodynamics study	Sym01_INV03	16:30
Date: 12 July 2019	Room: Primary		
Dr. Pongsakorn Kanjanaboos	TBA	Sym01_INV04	9:30
Prof. Li Zheng	Self-powered electrostatic actuation systems based on triboelectric nanogenerators	Sym01_INV05	10:00
Dr. Wirat Jarernboon	Hole transport materials free perovskite solar cell development at the Khon Kaen University, Thailand	Sym01_INV06	13:00
Symposium 02: Graphene and Carbon Materials			
Date: 12 July 2019	Room: Magenia		
Asst. Prof. Dr. Theerapol Thurakitseree	Diameter modulation of undoped/doped single-walled carbon nanotubes and their potential applications : nitrogen does a trick	Sym02_INV01	13:00
Symposium 03: Dielectrics, Piezoelectrics, Ferroelectrics, Thermoelectrics and Superconductors			
Date: 10 July 2019	Room: Fineen		
Assoc. Prof. Dr. Ken Kurosaki	Enhancement of thermoelectric properties by simultaneous control of phonon/carrier transport	Sym03_INV01	13:00
Dr. Ryoji Funahashi	Durability of thermoelectric module composed of oxides	Sym03_INV02	13:30
Assoc. Prof. Dr. Tosawat Seetawan	Development of thermoelectric devices to application on low, medium and high temperatures	Sym03_INV03	14:00
Prof. Nagarajan Valanoor	Nanoscale bubble domains in ultrathin ferroelectric films	Sym03_INV04	15:00
Date: 12 July 2019	Room: Fineen		
Assoc. Prof. Dr. Khian-Hooi Chew	A thermodynamic model of phase transitions in antiferroelectric-ferroelectric superlattices	Sym03_INV05	8:00
Dr. Nitish Kumar	Electrical Fatigue Failure in Relaxor Ferroelectrics	Sym03_INV06	8:30
Asst. Prof. Dr. Prasit Thongbai	Excellent giant-dielectric performance in TiO ₂ ceramics co-doped with (Mg ²⁺ , Ta ⁵⁺) ions	Sym03_INV07	13:00
Assoc. Prof. Dr. Soodkhet Pojprapai	Surasole-Smart insole: from a research idea to a startup	Sym03_INV08	13:30

Symposium 04: Magnetic Materials and Their Applications				
Date:11 July 2019	Room: Magenia			
Asst. Prof. Dr. Pongsakorn Jantaratana	Magnetocaloric related (TBD)	Sym04_INV01	13:30	
Asst. Prof. Dr. Phanwadee Chureemart	Micro Magnetic Model related (TBD)	Sym04_INV02	14:00	
Symposium 05: Materials in Design Manufacturing and Applications				
Date:11 July 2019	Room: Primary			
Dr. Namurata Sathirachinda Palsson	Corrosion Monitoring – From Laboratory to Industries	Sym05_INV01	13:30	
Dr.-Ing. Alexander Brezing	Material Classification, Identification and Selection in Design Methodology: An Approach for Design Education and Practice	Sym05_INV02	14:00	
Date:12 July 2019	Room: Vermillion			
Dr. Eakkachai Warinsiriruk	Multi-Heat Input Technique for Aluminum WAAM Using DP-GMAW Process	Sym05_INV03	13:00	
Symposium 06: Ceramic and Glass Technology				
Date:11 July 2019	Room: Flavio			
Asst.Prof.Dr. Sirithan Jiemsirilers	TBA	Sym06_INV01	13:30	
Assoc.Prof.Dr. Apirat Laobuthee	Metal Complex Decomposition Process: From Common Precursors to Advanced Ceramics	Sym06_INV02	14:00	
Prof.Dr.C.K. Jayasankar	Spectral characteristics of Pr ³⁺ -doped lead phosphate glasses for optical display device and gain media applications	Sym06_INV03	16:15	
Prof. Lili Tong	Research for thermal/mechanical/wave transmitting properties of fiber reinforced resin matrix composite materials	Sym06_INV04	16:45	
Symposium 07: Polymers, Rubber, Bioplastics, colloid and emulsion				
Date:10 July 2019	Room: Primary			
Assoc. Prof. Dr. Taweechai Amornsakchai	Pineapple Leaf Fiber: Versatile Fiber for Advanced Applications and Sustainability	Sym07_INV01	13:30	
Symposium 08: Biomaterials and Applications				
Date:11 July 2019	Room: Fineen			
Dr. Weerakanya Maneepprakorn	Colloidal nanoparticle for signal enhancement in diagnostic assays	Sym08_INV01	14:00	
Assoc. Prof. Vuthichai Ervithayasuporn	Fluorescent silica nanocages	Sym08_INV02	14:30	
Prof. Liang Cheng	Tumor Microenvironment-mediated Nanoplatfrom for Cancer Theranostics	Sym08_INV03	16:15	
Dr. Suwussa Bamrungsap	SERS-based biosensors for medical applications	Sym08_INV04	16:45	
Symposium 09: Sensors, Organic Electronics and Printed Electronics				
Date:10 July 2019	Room: Flavio			
Dr. Anurat Wisitsoraat	Multi-dimensional Metal-oxide Nanocomposites for Advanced Gas-Sensing Applications	Sym09_INV01	9:30	

Assoc. Prof. Thawatchai Charinpanichkul	Gas-Phase Mass Transfer Coefficient of CO ₂ in Dimethylaminoethanol in Packed-bed Absorption Column	Sym09_INV02	13:00
Prof. Hirofumi Tanaka	TBA	Sym09_INV03	16:30
Prof. Chih-Chung Huang	Title: Pulse Wave Imaging for Carotid Artery Based on Ultrafast Ultrasound Vector Velocity Estimation	Sym09_INV04	17:00
Date: 11 July 2019	Room: Tempara		
Assoc. Prof. Teerakiat Kerdchareon	Human Body Odor as a Resource for Healthcare Monitoring – Development of Methods and Wearable Technology	Sym09_INV05	16:15
Symposium 10: Composites and Construction Materials			
Date: 12 July 2019	Room: Tempara		
Prof. Dr. Suksun Horpibulsuk	TBA	Sym10_INV01	9:45
Prof. Suched Likitlersuang	Applications of Microbially Induced Calcium Carbonate Precipitation in Construction and Building Materials	Sym10_INV02	13:00
Assoc. Prof. Dr. Arnon Chaipanich	Utilization of Sustainable Materials in Cement Mixes: Effects on Cement and Concrete Properties- The Past, the Present and the Future	Sym10_INV03	13:30
Prof. Jiang-Zhong Zhang	TBA	Sym10_INV04	14:00
Symposium 11: Computational Material Sciences			
Date: 12 July 2019	Room: Flavio		
Dr. Suwit Suthirakun	A computational perspective on transport properties of electron small polaron in transition metal oxide-based energy materials	Sym11_INV01	8:45
Assoc. Prof. Dr. Siriporn Jungsuttiwong	Local Structure Elucidation and Reaction Mechanism of n-Pentane Aromatization over Ga Embedded H-ZSM-5 Zeolite: Combined Experiment and Theoretical Study	Sym11_INV02	9:45
Dr. Supawadee Namuangruk	Role of metal doped on CeO ₂ Catalysts for Selective Catalytic Reduction of NO with NH ₃	Sym11_INV03	10:15
Assoc. Prof. Dr. Jiraroj T-Thienprasert	Investigation of material behavior through a combination of first-principles calculations and experiments	Sym11_INV04	13:00
Symposium 12: Surface Sciences, Tribology and Thin Film Technology			
Date: 11 July 2019	Room: Vermillion		
Asst. Prof. Navaphun Kayunkid	Pulsed laser deposition; from the control of polymorphic formation to the morphological tailoring of metal-oxide thin film	Sym12_INV01	13:30
Prof. Balaji Rao Ravuri	Mixed Polyanion NaFe _{1-x} (VO) _x PO ₄ Glass-ceramic Cathode Network: Electrochemical Performance and Storage Mechanism	Sym12_INV02	14:00
Date: 12 July 2019	Room: Vermillion		
Assoc. Prof. Dr. Kazuki Nagashima	Metal Oxide Nanowire Surface for Molecular Recognition	Sym12_INV03	8:00

Dr. Noppadon Nuntawong	A series of SERS substrates fabricated by magnetron sputtering toward rapid chemical trace analyses	Sym12_INV04	8:30
Symposium 13: Catalyst and Materials Chemistry for Green Environment			
Date: 10 July 2019	Room: Tempara		
Prof. Dr. Karuna Kar Nanda	Optimising the utilization of M–N–C centres for energy applications	Sym13_INV01	9:30
Date: 11 July 2019	Room: Tempara		
Assoc. Prof. Dr. Thongthai Witoon	Advances in selective olefin production via catalytic CO ₂ hydrogenation	Sym13_INV02	13:30
Dr. Chularat Wattanakit	Potential of sustainable hierarchical zeolites in catalytic upgrading of biomass-derived compounds	Sym13_INV03	14:00
Dr. Varol Intasanta	Nanomaterials for Solar Light Harvest towards Pollution Mitigations and Green Energy: Recent Advances and Challenges	Sym13_INV04	14:30
Symposium 14: Instrumentation and Advanced Material Characterization			
Date: 12 July 2019	Room: Magenia		
Dr. Narong Chanlek	Applications of photoemission electron spectroscopy at Siam Photon Laboratory	Sym14_INV01	8:00
Dr. Supagorn Rugmai	Development of Python-based calculation-simulation software for data analyses and science education	Sym14_INV02	8:30
Pattiya Suttipitakwong	Utilization of Electron Microscopy Technology in Petrochemical Industries	Sym14_INV03	9:00
Symposium 17: Quantum Materials and Technologies			
Date: 10 July 2019	Room: Vermillion		
Dr. Sorawis Sangtawesin	Surface Engineering for Shallow Nitrogen-Vacancy Centers in Diamond with Long Coherence Times	Sym17_INV01	9:45
Prof. Jing Xia	Studying 2D magnetism and superconductivity with a Sagnac MOKE microscope	Sym17_INV02	13:00
Prof. Takao Sasagawa	TBA	Sym17_INV03	13:30
Dr. Rui Peng	Evidence of cooperative effect on the enhanced superconducting transition temperature at the FeSe/SrTiO ₃ interface	Sym17_INV04	14:00
Dr. Tanachat Eknapakul	Interplay of negative electronic compressibility and capacitance enhancement in lightly-doped metal oxide Bi _{0.95} La _{0.05} FeO ₃ by quantum capacitance mode	Sym17_INV05	14:30
Prof. Jianzhong Zhang	TBA	Sym17_INV06	15:00
Date: 11 July 2019	Room: Vermillion		
Dr. Hiroshi Eisaki	Unique defect structure and advantageous vortex pinning properties in CaKFe ₄ As ₄	Sym17_INV07	16:15
Dr. Haichao Xu	Unveiling the superconducting mechanism of Ba _{0.51} K _{0.49} BiO ₃	Sym17_INV08	16:45
Dr. Ganatee Gitgeatpong	Nonreciprocal magnons in the noncentrosymmetric antiferromagnet a-Cu ₂ V ₂ O ₇	Sym17_INV09	17:15

Dr. Wonshik Kyung	Electric field driven octahedral rotation in Sr_2RuO_4 : its underlying mechanism and implication	Sym17_INV10	17:45
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Oral Presentation

Presenter	Title	Abstract code	Time
Symposium 01: Emerging Solar PV, Energy Storage Materials and Energy Harvesting Materials			
Date: 10 July 2019	Room: Tempara		
Dr. chatwarin Poochai	Nitrogen and sulfur dual-doped graphene with ionic liquid-based solid electrolyte for high energy density supercapacitors	SYM1_01	14:30
Ms. Gladis Aros Safitri	A guideline to fabricate activated carbon pouch cell supercapacitor	SYM1_010	14:45
Miss Chanakarn Phansa	Singlet exciton fission: Towards efficient light harvesting	SYM1_011	15:00
Mr. Thanphisit Artchuea	Ni-Co-S loading reduced graphene oxide/acid treat carbon nanotubes as the cathode for high performance lithium-sulfur battery	SYM1_012	15:15
Mr. Supanut Laohawiroj	Thin film comprised of nanocrystalline ZnO:Bi and Si deposited by spin-coating as a generated carrier addition layer of third generation photovoltaics	SYM1_013	15:30
Miss Atittaya Naikaew	Enhancing High Humidity Stability of Quasi-2D Perovskite Thin Films through Mixed Cation Doping and Solvent Engineering	SYM1_014	17:00
Miss Kamonchanok Mekmork	Borosilicate glass using as a rear passivation layer localized by a simplified flash foam stamping technique for high efficiency photovoltaic structure	SYM1_015	17:15
Dr. Assadawoot Srikhaow	A stable lithium-sulfur battery enabled by nitrogen-doped reduced graphene oxide coated separator	SYM1_016	17:30
Mr. Khathawut Lohawet	High performance, stability and low-cost carbon electrodes for perovskite solar cell	SYM1_017	17:45
Mr. Peerawoot Rattanawichai	Improvement of Opto-electrical Characteristics of Spherical Nano-crystalline ZnO:Bi Film on Indium Tin Oxide Substrate for Advanced Solar Cells Application	SYM1_018	18:00
Date: 12 July 2019	Room: Tempara		
Dr Johannes Mensing	High performance symmetric lithium-ion supercapacitors based on palladium nanoparticles anchored to reduced graphene oxide	SYM1_019	8:00
Ms. Thitima Maturos Daniels	Electrochemical performance of LiAl-Layered double hydroxide for energy storage application	SYM1_020	8:15
Mr. warakorn limsiri	Gradient-Index Antireflection Coating Effects on Optical Properties and Electrical Factors of Black Solar Cell Manufacturing	SYM1_022	8:30

Mr. Seksan Lowpa	Ferroelectric BiFeO ₃ doped Cu thin film materials as photovoltaics in Solar- Supercapacitor storage application	SYM1_025	8:45
Asst. Prof. Dr. Ashok Kumar	Electrochemical behavior of oxygen-deficient double perovskite, Sr ₂ FeCoO _{6-δ} , synthesized by facile wet chemical process	SYM1_026	9:00
Mr. Adisorn Piyapaneeekoon	A CFD Study on the Energy Saving in Reheating Furnace with Oxygen-Enriched Air Conditions	SYM1_028	9:15
Ms pimpisit Worakajit	Improving Charge Transport in CuSCN Hole Transport Layer by Anti-solvent Treatment and Application in High-efficiency Organic Solar Cells	SYM1_03	13:30
Ms. Jidapa Chaopaknam	New wide band gap inorganic semiconductor tin(II) thiocyanate [Sn(NCS) ₂]	SYM1_04	13:45
Miss Supansa Musikajaroen	Electronic Structure of CuO-Cu(OH) ₂ /Cu ₂ O Mediator electrodes During Water Electrolysis under Sunlight Irradiation	SYM1_05	14:00
Mr. Ponart Aroonratsameruang	Evaluation of charge transport in Co ₃ O ₄ photocathodes prepared by electrodeposition and spin coating by transient absorption spectroscopy	SYM1_06	14:15
Mr. Chutchawan Jaisuk	Co-based Reversible Auxiliary Electrode for Electrolytic Water Splitting	SYM1_07	14:30
Anusit Kaewprajak	Improving photovoltaic performance and device stability of planar perovskite solar cells using TiO ₂ /TiO ₂ :AgInS ₂ quantum dots as electron transport bilayer	SYM1_08	14:45
Mr. Ukrit Jitropas	Capacitance optimization of planar carbon-based supercapacitor	SYM1_09	15:00

Symposium 02: Graphene and Carbon Materials

Date:12 July 2019

Room: Tempara

Miss Ubonwan Khopongpaiboon	Fabrication and characterization of calcium aluminate (12Ca _{0.7} Al ₂ O ₃) with carbon black	SYM2_01	13:30
Mr. Kanit Hantanasirisakul	MXenes - 2D Materials Beyond Graphene	SYM2_02	13:45
Miss Kittiya Kosaentor	Reduction of Graphene Oxide via Plasma Irradiation	SYM2_03	14:00
Asst. Prof. Dr. Kamonwan Aup-Ngoen	Solvothermal Synthesis of Carbon Nanodots and Its Application in Perovskite Solar Cell	SYM2_04	14:15
Mr. Saran Kingsakklang	The highly activated porous carbon material derived from pineapple leaf fibers as a sustainable carbon electrode for lithium batteries	SYM2_05	14:30

Symposium 03: Dielectrics, Piezoelectrics, Ferroelectrics, Thermoelectrics and Superconductors

Date:10 July 2019

Room: Fineen

Dr. Athorn Vora-ud	Enhanced thermoelectric properties of p-type (Ag-Sb-Te) and n-type (Bi-Te) thin films for micro-power generation	SYM3_014	9:45
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Dr. Kitiphat Sinthiptharakoon	Electrical determination of nanoscale charge transport and energy band dynamics of individual hybrid nanowires for thermoelectricity	SYM3_09	10:00
Mr. Watcharaphong Kloisuwan	Site-specific charge transport and electronic band structure of individual semiconductor nanowires for future application design	SYM3_06	10:15
Mr. Sora-at Tanusilp	Si-based nanostructured materials for thermoelectric application	SYM3_02	14:30
Miss Wanthana Silpawilawan	Thermoelectric properties of nanostructured Ti-doped FeNbSb half-Heusler compound synthesized by a melt-spinning/spark plasma sintering technique	SYM3_03	14:45
Assistant Professor Dr. Aek Jantayod	Resistive switching on the diamondoid adamantane thiol film	SYM3_016	15:30
Dr. Tosapol Maluangnont	Tuning the electrical properties of lepidocrocite-type titanate via inter- and intralayer cations	SYM3_08	15:45
Date:12 July 2019		Room: Fineen	
Dr. Methee Promsawat	Properties of PMNT Ceramics Prepared by Gel-Casting Method for Piezoelectric Energy Harvesters	SYM3_04	9:00
Dr. Sasiporn Prasertpalichat	Comparison of Structural, Ferroelectric and Piezoelectric Properties between A- and B-site Acceptor Doped BNT-BT Ceramics	SYM3_011	9:15
Asst. Prof. Dr. Narin Atiwongsangthong	Role of $\text{Ti}_{0.8}\text{O}_2$ Nanosheets and Ag Nanoparticles Co-filled in BaTiO_3 /PDMS Composite for the Improvement of Triboelectric Nanogenerator Performance	SYM3_013	9:30
Dr. Ploypailin Yongsiri	Optical and Electrical Properties of Lanthanide Doped KNN- SiO_2 Glass-ceramics	SYM3_018	9:45
Mr. Suppanat Musigawon	Preparation and properties of $(\text{Na,K,Li})(\text{Nb,Ta,Sb})\text{O}_3$ -Polyvinylidene Fluoride (PVDF) composite materials.	SYM3_019	10:00
Dr Thitirat Charoonsuk	Facile synthesis of Scheelite-type and Powellite-type fine-powder: Growth mechanism and microwave dielectric properties	SYM3_07	14:00
Dr. Rangson Muanghlua	The ultrahigh Q-factor of BaZrO_3 -based perovskite	SYM3_05	14:15

Symposium 04: Magnetic Materials and Their Applications

Date:11 July 2019

Room: Magenian

Mr. Taweesak Kaewmanee	Mn-Zn Ferrite@ SiO_2 / $\text{BiOBr}_{0.5}\text{Cl}_{0.5}$ composites for photocatalytic application	SYM4_01	14:30
Miss Pimchanok Ieamviteevanich	Magnetic Carbon Fiber Composite Derived from Bacterial Cellulose for oil sorbent.	SYM4_02	14:45
Mr. Yattiphong Kaeokhamchan	Synthesis of magnetic carbon sands	SYM4_03	15:00
Miss Apichaya Worawong	Synthesis of distributed magnetite (Fe_3O_4) nanoparticles by sol-gel method	SYM4_04	15:15

Mr. Siwat Polin	Light Control of Ferromagnetism in heterostructured ferromagnet-topological insulator $\text{Ni:Bi}_2\text{Te}_3$ at Room Temperature	SYM4_05	15:30
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Symposium 05: Materials in Design Manufacturing and Applications

Date: 11 July 2019	Room: Primary		
Mr. Suporn Kittivinitchnun	Utilization of Biomass-Based Reducing Agent for Sustainable Iron and Steelmaking Process	SYM5_01	14:30
Miss Bovonrat Emtip	Effect of silicon addition on oxidation resistance of pack aluminized commercial pure iron	SYM5_030	14:45
Mr. Sarun Seubkrasair	The Study of Time Factors Under the Concept of Preventing the Formation of Fouling in The Heat Exchanger by Using Electric Charge Properties	SYM5_027	15:00
Ms. Chanitra Dumrongkith	Evaluation of Mechanical Properties of Railway's Weld Joint by Using Magnetic Barkhausen Noise Method	SYM5_023	15:15
Pimwalun Sutakhote	Braille Block from Polystyrene Foam Recycling using D-limonene and Reinforcing with Coconut Coir Pitch	SYM5_02	16:15
Gede Putu Agus Suryawan	A study on correlation between hardness and thermal conductivity of polymer composites reinforced stinging nettle fiber	SYM5_05	16:30
Ms. Sirikarn Sattawitchayapit	The influence of synthesis parameters on the structure and properties of electrodeposited nickel-cobalt films	SYM5_011	16:45
Mr. Poramet Dejthammarong	Modelling of nickel aluminide layer growth on IN738 and Haynes 214 in pack aluminizing	SYM5_024	17:00
Miss Wananurat Srijampan	Eutectoid transformation in sintered medium to high carbon- Fe-Mo-C alloys	SYM5_016	17:15
Mr. Ekkarat Chusong	Dry-sliding wear of 316L/h-BN composites produced under crack ammonia atmosphere	SYM5_07	17:30
Mr. Sirawit Duangtawee	Study of vibration damping properties in materials for using as fixture in high-precision grinding process	SYM5_012	17:45
Mr Smach KIM	Welding Machine Selection Based On Materials by Using Welch Algorithm	SYM5_026	18:00
Date: 12 July 2019	Room: Vermillion		
Mr. Taratip Chaimongkon	Investigation of Anisotropic Fracture Forming Limit Curves of Aluminum Alloys Sheet AA5052-H32	SYM5_03	13:30
Mr. Channarong Yamchoang	Determination of Wrinkling Limit Curves of Aluminum Sheet using a Modified Yoshida Bucking Test	SYM5_010	13:45
Mr. Aeksuwat Nakwattanaset	Strain and Stress based forming limit curves of high strength steel sheet and its application to cross die forming test	SYM5_015	14:00
Miss Benjaphorn Khuangnorn	Analysis and Correction of Defects for Deep Drawing Process of Stainless Sink by Use of Finite Element Simulation	SYM5_017	14:15

Mr. siwaphan luksanayaem	Formability study on ultra-high strength steel sheet for automotive parts using forming limit diagram	SYM5_018	14:30
Mr. Aekkapon Sunanta	Finite Element Simulation of Sheet Metal Forming of Advanced High Strength Steels for Automotive Parts	SYM5_019	14:45
Mr. Naiyanut jantepa	Finite Element Simulation of Ball Joint under Hot Forging Process	SYM5_021	15:00
Mr. Patiparn Ninpetch	A Review of Computer Simulations of Metal 3D Printing	SYM5_025	15:15

Symposium 06: Ceramic and Glass Technology

Date: 11 July 2019

Room: Flavio

Assoc.Prof.Dr. Jakrapong Kaewkhao	Structural and luminescence studies of MnO ₂ doped in glass from rice husk ash for green and orange emission material applications	SYM6_01	14:30
Mr. Worasari Saengsui	Electronic and phononic contributions to near-infrared reflectivity of oxide pigments	SYM6_010	14:45
Mr. Chirakit Chobtham	Utilization of Aluminium Dross as Alumina Resource for Carbothermic Reduction at 1550°C: Influences of Dross Content	SYM6_02	15:00
Dr. Eakapon Kaewnuam	The luminescence, optical and structural properties of SrMoO ₄ :Ce ³⁺ phosphor for photonics material applications	SYM6_05	15:15
Miss Oranich Thongsri	The effected crystallization of aluminosilicate glass powder synthesized by sol-gel method on the setting reaction of glass ionomer cements	SYM6_06	17:15
Mr. Phatchara Wipataphan	Photocathodic Protection of Amorphous and Nanorod Zinc Oxide Thin Film Coatings on Stainless Steel AISI 304 Fabricated by Spray Pyrolysis Technique	SYM6_08	17:30
Mr. Worapak Tanwongwan	Structure development of Thailand's kaolin by mechanochemical technique	SYM6_09	17:45

Symposium 07: Polymers, Rubber, Bioplastics, colloid and emulsion

Date: 10 July 2019

Room: Primary

Mr. Thilina Rajeend Katugampalage	Synthesis of Magnetic Sensitive MXene/MNP Composite Material Loaded Porous PLGA Microspheres as a Common Vehicle for Control Release	SYM7_015	9:30
Miss Lalipat Janamphansang	Silane functionalization of thermochromic monoclinic vanadium dioxide	SYM7_010	9:45
Dr. Adisak Takhulee	Preparation and characterization of silk fibroin and poly(vinyl alcohol) semi-interpenetrating network hydrogel	SYM7_02	10:00
Mr. Klanarong Samana	Effect of tris(nonylphenyl) phosphite (TNPP) on thermal and hydrolytic degradation of PLA	SYM7_017	10:15

Miss Putita Katesripongsa	Termo-responsive gating performance of poly(N-isopropylacrylamide) grafted nylon smart membranes : effect of grafting yield and chain structure	SYM7_06	10:30
Mr Aung Chan Thar	Synthesis of Oxidation-Resistant Colloidal Copper-Silver Core-Shell Nanoparticles in Different Reaction Media	SYM7_014	14:00
Miss Kamonchanok Thananukul	Surface modification of low-density polyethylene films by embedding with nisin-loaded nanoparticles for antimicrobial food packaging	SYM7_013	14:15
Nuchsara Wattana	Preparation of emulsions of ketene dimer-containing (KDC) compounds by self-polymerization for hydrophobicity enhancement of paper sheets	SYM7_012	14:30
Miss Narisara Jaikaew	Toughened polylactide bio-composites with tuneable gas permeability by employing modified silica and polyethylene glycol	SYM7_011	14:45
Mr. Numporn Thungphotrakul	Effect of Nanoclay on properties of Medium density polyethylene (MDPE)/Rice husk flour (RHF) composites	SYM7_07	15:00
Miss Suthinee Pinrat	Synthesis of Chitosan and Nanochitosan Blend in Natural Rubber Latex Foam	SYM7_08	15:15
Ms. Anothai Suwanniroj	Enhancement of Flame Retardancy and Mechanical Properties of poly(butylene succinate) Composites by Adding Hybrid Fillers	SYM7_09	15:30

Symposium 08: Biomaterials and Applications

Date: 11 July 2019

Room: Fineen

DDS Vanasanan Buranapanich	Effect of Temperature and Treatment Time of Hydrothermal Treatment on Crystallization of Titanium Nitride-Hydroxyapatite Films Coated on Polyetheretherketone	SYM8_01	13:30
Miss Weerawan Hankamolsiri	Synergistic Antibacterial Activity of Green Tea/Tannic Acid Mixtures and their Use	SYM8_02	13:45
Dr. Kantapat Chansaenpak	Organic Nanoparticles for Medical Theranostic Applications	SYM8_04	15:00
Mr. Tanawut Rittidach	Investigation of mechanical and in vitro biological properties of hybrid BCPZAS bioceramics/biopolymers composite scaffold	SYM8_05	15:15
Miss Autcharaporn Srion	Fabrication of Brushite by Powder-Based Three Dimensional Printing	SYM8_06	17:00
Miss Faungchat Thammararakcharoen	BMP-2 Incorporation on 3D Printed Hydroxyapatite by Biomimetic Co-Deposition Technique	SYM8_07	17:15
Miss Nuchanat Thongchuea	Corrosion Behavior on Cerclage Wire Joining Using Laser Weld	SYM8_08	17:30
Miss. Chalothon Kaewsanthia	Encapsulation Efficiency and Release Properties of Lemongrass Oil (Cymbopogon Citratus (DC) Stapf) with Soy Protein Isolate	SYM8_03	17:45

Mr. Yongsan Thon Khotbot	Effect of variable compression ratio on the performance and exhaust emission of an agricultural engine using palm biofuel	SYM8_010	18:00
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Symposium 09: Sensors, Organic Electronics and Printed Electronics

Date: 10 July 2019

Room: Flavio

Ms Pranlekha Traiwatcharanont	Electrochemical sensor based on agglomeration of nanomaterials for salinity testing	SYM9_010	10:00
Miss Wannee Sukbangnop	Novel helicene derivative for biosensor	SYM9_011	10:15
Mrs. Thitima Matusos Daniels	Fabrication of graphene/Ag/Polyimide SERS substrate as a flexible sensor for insecticide residues detection	SYM9_012	10:30
Dr. Kamonwad Ngamchuea	Probing Single Silver Nanoparticles by Electrochemical Nano-impacts	SYM9_013	13:30
Dr. Chanpen Karuwan	Detection of Vibrio parahaemolyticus using loop-mediated isothermal amplification and disposable screen-printed graphene-based electrochemical sensor	SYM9_014	13:45
Mr. Arthit Jityen	Using various metal oxides for non-specific electrodes in electronic tongue system to classify orange juices	SYM9_015	14:00
Mr. Socheat Veng	Using Electromyograph to Access the Performance of the Welder in GTAW Process	SYM9_016	14:15
Dr. Kata J aruwongrungruengsee	The development of Hydrogen sulfide portable gas sensing device based on Copper-doped Tin oxide on glass micro hotplate	SYM9_017	14:30
Mr. Ekkapong Kantarak	Fabrication, Design and Application of Stretchable Strain Sensors for Human Motion Detection	SYM9_019	14:45
Dr. Saithip Pakapongpan	Flexible Sensor for Parkinson's disease	SYM9_020	15:00
Asst.Prof.Dr. Nampueng Pangpaiboon	Controllable Size of ZnO Nanorod by Varied the Solutions in Hydrothermal Process for Reusable SERS Applications	SYM9_022	17:30
Mr. Teerapat Lapsirivatkul	Tuning temperature sensitivity of conductive carbon black (CB)/polymer composites	SYM9_023	17:45
Asst.Prof. Koson Trachu	Combination of molecularly imprinted polymer electrode and principal component analysis for casein detection	SYM9_024	18:00
Date: 11 July 2019		Room: Tempara	
Mr. Sujint Wangsuya	The fertilizer detection analysis with artificial intelligence based on mimic enzymeless electrochemical sensor	SYM9_03	16:45
Khakkhanang Khamfoo	Selective Methyl Mercaptan Sensor Based on Pd-doped Spinel Zn ₂ SnO ₄ Nanoparticulate Sensing Films	SYM9_04	17:00
Kanmanee Kaewklin	Development of 3D-printed graphene-based materials for tissue engineering applications		17:15

Ms. sukanya sirimak	Fabrication of paper-based microfluidic devices (μ PADs) using screen-printing technique for analysis of maltodextrin in dietary supplement products	SYM9_05	17:30
Miss waraporn panchan	A New Green Dye from [5]Helicene Derivative for Organic Light-Emitting Diode	SYM9_06	17:45
Miss Wichayaporn Kamsong	Study of electrode pattern design for a disposable screen-printed graphene-based electrochemical sensor	SYM9_08	18:00
Mrs. Laongdao Kangkaew	3,12-Dicarbazole-7,8-dicyano-5,6,9,10-tetrahydro[5]helicene: A New Material for OLED and OFET Applications	SYM9_09	18:15

Symposium 10: Composites and Construction Materials

Date:12 July 2019		Room: Tempara	
Lecturer Pimwalun Sutakhote	Development of Fiber Board from Polystyrene Foam Recycling - Pineapple Leaf Fiber Composites	SYM10_01	8:00
Miss Thidaphat Chintonguyad	Improvement of Soil stabilization using Natural rubber latex	SYM10_011	8:15
Dr. Sitchai Hunpratub	Effect of CNTs addition on dielectric and piezoelectric properties of 0-3BCTZO/White Portland cement composites	SYM10_012	8:30
Lecturer Pimwalun Sutakhote	Properties of Recycled Polystyrene and Coir/Pineapple Leaf Fiber Reinforcing	SYM10_02	8:45
Miss Parichat Muensita	The effect of Na ₂ O/SiO ₂ and SiO ₂ /Al ₂ O ₃ ratios on engineering properties of alumino-silicious materials solidified plating sludge	SYM10_08	9:00
miss sirilak intom	Comparisons properties between Natural Rubber/Bismuth Oxides (Bi ₂ O ₃) composites and Natural Rubber/Lead Oxides (PbO) composites	SYM10_03	14:30
Miss Anutida Suwan	A novel polyurethane adhesive based on used palm oil for particleboard composites from bamboo waste	SYM10_04	14:45
Mr Woottipong Prakongwittaya	Effects of Calcium Carbide Residue on the Engineering Properties of Compacted Clay and Water Treatment Residue from Bang Len Plant	SYM10_05	15:00
Mr. Karn Kantatham	Effect of natural rubber latex on the compressive strength and durability of cement stabilized soil	SYM10_07	15:15

Symposium 11: Computational Material Sciences

Date:10 July 2019		Room: Magenia	
Mr. Siwakorn Sukharom	First-principles study of native point defects in potassium hexatitanate (K ₂ Ti ₆ O ₁₃)	SYM11_02	9:00
Asst. Prof. Dr. Adisak Boonchun	First-principles calculations on delithiation of Li ₂ Ti ₆ O ₁₃ for lithium-ion batteries	SYM11_022	9:15
Asst. Prof. Jariyanee Prasongkit	Ultrahigh-sensitive gas sensors based on doped phosphorene: A first-principles investigation	SYM11_014	9:30

Mr Klichchupong Dabsamut	The response of electronic properties of monolayer to elastic strain and the stacking stability of bilayer C_2N	SYM11_04	9:45
Mr. Patompob Pakeetood	Effect of growth conditions on electronic properties of $BiVO_4$	SYM11_01	10:00
Date: 12 July 2019		Room: Flavio	
Miss Intuon Chatratin	The nitrogen impurity in wide-band-gap oxide semiconductors	SYM11_03	8:30
Miss Supparat Charoenphon	Energetics and optical properties of carbon impurities in rutile TiO_2	SYM11_07	13:30
Prof. Dr. Murari Mohan Sinha	Structural, electronic and lattice dynamical properties of Weyl semimetals ZrX ($X = S, Se$ and Te): A first-principles study	SYM11_024	13:45
Dr. Nirand Pisutha-Arnon	Implementation of Shear-Type Deformation in the Phase-Field Crystal Method	SYM11_08	14:00
Dr. Sorayot Chinkanjanarot	Predicting Mechanical Properties of Porous Clay Ceramics by Finite Element Modeling	SYM11_06	14:15
Mr. Narasak Pandech	Effects of the Van de Waals Interactions on Structural and Electronic Properties of $CH_3NH_3(Pb,Sn)(Cl,Br,I)_3$ Halide Perovskites	SYM11_05	14:30
Mr Tatchai Wijitwiengrat	Atomistic simulations of phosphorus and vacancy mobility in Fe-P systems	SYM11_09	14:45
Mr. Panat Nanthanasit	Theoretical Investigation of Natural Rubber Vulcanization Using Electron Beam Irradiation and Cross-linking Agents	SYM11_015	15:00
Miss Kornrawee Munpakdee	Prediction of Porosity Defects in Platinum 950 Centrifugal Investment Casting	SYM11_012	15:15

Symposium 12: Surface Sciences, Tribology and Thin Film Technology

Date: 11 July 2019		Room: Vermillion	
Miss Phimolphan Rutthongjan	Growth mechanism of Zinc Oxide thin film by mist-chemical-vapor-deposition via the modulation of $[H_2O]/[Zn]$ ratios	SYM12_01	14:30
Mr. Nontakoch Siriphongsapak	Effect of Zinc-hydroxo Species on the Growth of One-dimensional ZnO Nanostructures	SYM12_011	14:45
Miss Nidchamon Jumrus	Heating and etching enhanced surface modification of low-temperature glass for superhydrophobic application	SYM12_014	15:00
Dr. Franco Mayanglambam	Ceramic reinforced electroless nickel-based composite coatings: Preparation, tribology, micromechanical and corrosion perspectives	SYM12_02	15:15
Date: 12 July 2019		Room: Vermillion	
Mr. Winai Thongpan	Porous Cu/WO_3 Composite Films with Enhanced Electrochromic Properties Prepared by Sparking Method	SYM12_03	9:00
Mr. Panupong san	Hot air treatment: facile and low-cost annealing technique without substrate deformation	SYM12_04	9:15

Miss Phattarasuda Manantapong	Efficiency of organic corrosion inhibitors derived from Thai-bael fruit extract for preventing corrosion in carbon steel	SYM12_06	9:30
Mr. Kittikhun Seawsakul	Influence of vacuum annealing temperature on structural, optical and electrical of nanocolumnar AZO films for TCO application	SYM12_07	9:45
Miss Varunya Atimayulerd	Surface enhanced fluorescence of Ag nanostructure films prepared DC magnetron sputtering	SYM12_08	10:00

Symposium 13: Catalyst and Materials Chemistry for Green Environment

Date: 10 July 2019	Room: Tempara		
Miss Panudda Patiphatpanya	Photocatalysis of BiOI ₃ nanoparticles synthesized by microwave-assisted method	SYM13_01	10:00
Mr. Chanwit Thititanagul	Reduction of Heavy Metals from Electric Arc Furnace Dust Recycling Process	SYM13_02	10:15
Miss Meekaruna Boonyaratchinda	Fundamental Investigation of Ferrosilicon Production using Rice Husk and Rubber Tree Bark at 1550°C: Implication for utilization of agricultural waste in steelmaking industry	SYM13_03	10:30
Date: 11 July 2019	Room: Tempara		
Mr Piyapol Heawphet	Enhancement of Photoelectrochemical Cathodic Protection of Copper in Marine Condition by Cu doped TiO ₂	SYM13_04	15:00
Prof. Ashavani Kumar	Structural, Optical, Dielectric and Photocatalytic Studies of Rapidly Synthesized m-WO ₃ Nanoparticles	SYM13_05	15:15
Assoc. Prof. Dr. Khamphree Phomphrai	Catalytic telomerization of carbon dioxide and 1,3-butadiene to delta-lactone and their applications as self-healing polyurethane	SYM13_06	15:30
Mr. Anurak Waehayee	Enhancement photocatalytic activity of KNbTeO ₆ defect pyrochlores through band engineering	SYM13_07	15:45

Symposium 14: Instrumentation and Advanced Material Characterization

Date: 12 July 2019	Room: Magenia		
Dr. Phongbandhu Sritonwong	Effects of N Addition on Optical Properties of Lattice-Matched InGaPN on GaAs (001)	SYM14_01	9:30
Mrs. Thanyaporn Yotkaew	Characterization of martensite and retained austenite	SYM14_02	9:45
Mr. Sakdinan Naeosuphap	Study of high resistivity silicon wafers under gamma and electron irradiation for ALICE pixel detectors	SYM14_04	10:00
Mr. Thiha Soe Thiha	X-ray Photoelectron Spectroscopy Study of Chromium and Magnesium Doped Copper Ferrite (CuFe ₂ O ₄) Thin Film	SYM14_05	10:15

Symposium 15: Material Enterprises and Industries			
Date:12 July 2019	Room: Magenia		
Ms. Atchara Chinnakorn	Novel Three-Dimensional Fibrous Structure by Three-Dimensional Electrospinning	SYM15_01	10:30
Symposium 16: Rheology			
Date:10 July 2019	Room: Magenia		
Prof. Hiroshi Suzuki	Three-Dimensional Flow Structure in a Cavity Swept by a Visco-Elastic fluid	SYM16_012	13:30
Dr. Masataka Sugimoto	Slip at the ETFE/PS coextruded interface	SYM16_09	13:45
Prof Youngdon Kwon	Modeling of elastic flow instabilities	SYM16_08	14:00
Associate Professor Takashi TANIGUCHI	Multiscale simulation of polymer melt flows in between two coaxial cylinders under non-isothermal conditions	SYM16_01	14:15
Assoc. Prof. Dr. Osamu Urakawa	Rheological behavior of carboxyl terminated metallopolymer	SYM16_013	15:00
Prof. Quan Chen	Temperature Dependent Linear Viscoelasticity of Vitrimers based on Dioxaborolane Metathesis	SYM16_010	15:15
Assoc. Prof. Shigeru Okamoto	Extremely high degree of order in semi-dilute solutions of block copolymer and application to non-linear optical devices	SYM16_029	15:30
Prof Dr Yihu Song	Rheological Behavior of Rubber Composites	SYM16_028	17:00
Assoc.Prof.Dr.Cattaleeya Pattamaprom	Rheology and Processability Modification of PLA/NR Blown Film	SYM16_024	17:15
Prof. Ruri Hidema	Effects of rheological properties of acrylic solution on macro void formation in acrylic resin fibers.	SYM16_019	17:30
Dr. Chaweewan Sapcharoenkun	Effect of Rheological Behavior of Sunscreens Containing Metal Oxide Nanoparticles on Thin Film Preparation	SYM16_05	17:45
Date:11 July 2019	Room: Magenia		
Prof. Dr. Shinichi Sakurai	Synchrotron Small-Angle X-Ray Scattering Studies on Effects of Drying Temperature in Solution Coating Process on Microphase-Separated Structures and Mechanical Properties of Pressure-Sensitive Adhesive Composed of Di- and Triblock Copolymer Blends	SYM16_06	16:45
Dr Chaiwut Gamonpilas	Rheo-tribology and texture perception of liquid and semi-solid foods	SYM16_023	17:00
Assoc. Prof. Dr. Visit Vao-soongnern	Molecular simulations of structures and dynamics for cyclic and linear poly(ethylene oxide) homopolymer melts and blends	SYM16_04	17:15
Asst. Prof Dr. Khongvit Prasitnok	Coarse-grained modelling of self-assembling poly(ethylene glycol) /poly(lactic acid) diblock copolymers	SYM16_07	17:30
Mr. Hyunkyu Jang	Analysis of the PLA/PBAT blends by relaxation time	SYM16_016	17:45
Mr. Geun Woo Hong	Analysis of the Rheological Data of Composites of Biodegradable Polymers with Zeolite Particles	SYM16_015	18:00

Assoc. Prof. Dr. Yoshiaki Takahashi	Preparation and characterization of silk fibroin and poly(vinyl alcohol) semi-interpenetrating network hydrogel	SYM16_011	18:15
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Symposium 17: Quantum Materials and Technologies

Date:10 July 2019	Room: Vermillion		
Ms. Unchittha Prasatsap	DC and AC Circuit Parameters of Hybrid InAs/GaAs and GaSb/GaAs Quantum-Dot Solar Cells	SYM17_04	9:00
Mr. Warakorn Jindata	Spectroscopic signature of negative electronic compressibility from the Ti core-level of titanium carbonitride (Ti ₃ CN) MXene	SYM17_02	9:15
Miss Pakwan Chanprakhon	Optical excitation and electron donation at the surface of MoS ₂	SYM17_01	9:30
Mr. Sujinda Chaichachad	Nano-scale dependent evolution of bandgap in highly oriented pyrolytic graphite (HOPG)	SYM17_03	15:30
Date:11 July 2019	Room: Vermillion		
Mr. Titipong Phoophathong	The stability diagram of single-electron transistors	SYM17_08	18:15

Poster Presentation

Author	Abstract Title	Abstract Code
Date:10 Jul 2019	15:45 - 16:30	
Symposium 01: Emerging Solar PV, Energy Storage Materials and Energy Harvesting Materials		
Miss Tanaporn Kongthong	Polyol Synthesis of Hausmannite Mn ₃ O ₄ Nanospheres as Electrochemical Supercapacitors	SYM1_P1
Miss Parichat Cummon	Structural and physical properties of SnS _{1-x} Se _x solid solution thin films prepared by close spaced sublimation method	SYM1_P10
Miss Suphawi Chaisit	Activated Carbon Derived from Cassava Starch for Energy Storage Application	SYM1_P11
Asst.Prof.Dr Viyada Harnchana	Calcium silicate hydrate composite for mechanical energy harvesting applications	SYM1_P12
Dr. Jessada Khajonrit	Synthesis, characterization, magnetic and electrochemical properties of Cu-doped BiVO ₄ nanoparticles	SYM1_P13
Asst.Prof.Dr. Pawinee Klangtakai	Facile synthesis of MnO ₂ /Graphene electrodes for supercapacitors	SYM1_P14
Dr. Sukanya Nilmoung	Electrochemical properties of ACNF/Al _x Cu _{(1-x)/2} Mn _{(1-x)/2} Fe ₂ O ₄ composite nanostructures for electrochemical capacitors	SYM1_P15
Miss Pornjira Phuenhinlad	Lithium Storage in Biomass-derived Materials Obtained from Power Plant of Sugarcane Industries	SYM1_P16
Mr. Panya Thanwisai	Synthesis, Characterizations and Electrochemical Properties of MnO ₂ /Activated Carbon Derived from Rice Husk Composite Materials for Supercapacitor Electrodes	SYM1_P17
Miss Sujeera pleuksachat	Enhanced electronic conductivity of LiFe _{1-x} Mn _x PO ₄ Cathode Materials by carbon coating for Lithium Ion Batteries	SYM1_P18

Mr. Chaiwat Phrompet	Supercapacitor Properties of $3\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{H}_2\text{O}$ Cement/ Reduced Graphene Oxide nanocomposite for Energy Storage Applications	SYM1_P19
Assoc.Prof. Supree Pinitsoontorn	Bacterial Cellulose Nanocomposite for Triboelectric Nanogenerator	SYM1_P2
Mr. Phongsit Krabao	Controlling carbon form in nanocapsule-like $\text{LiMn}_{0.5}\text{Fe}_{0.5}\text{PO}_4/\text{C}$ cathode materials by changing firing temperature	SYM1_P20
Ms. Chanlika Yoksiri	Preparation of Nanoporous Carbon Derived from Polybenzoxazine for Electrode Materials in Supercapacitors	SYM1_P21
Dr. Chanisa Nawani	Effect of surface treatment on electrical properties of polydimethylsiloxane based triboelectric nanogenerator	SYM1_P22
Patin Tagsin	Non-linear fitting the charge-discharge curves of the known circuits and the experimental MnO_2 -Carbon supercapacitor electrode	SYM1_P23
Mrs. YaHan Lin	Enhanced the electrochemical properties of spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathode materials using ALD of Al_2O_3 ultra thin layer	SYM1_P25
Mr. Hu Chang	Fabrication of all-solid-state interdigitated in-planar flexible micro supercapacitors by using laser printer patterned sacrificed layer	SYM1_P26
Pantiwa Kumlangwan	Calculating and Fabricating $\text{CH}_3\text{NH}_3\text{Pb}(\text{SCN})_{x-1}\text{I}_{3-x}$ perovskite film as the light-absorber in the hole-transporting-layer free perovskite solar cells	SYM1_P3
Dr. Wipakorn Jevasuwan	The Al-Catalyzed Silicon Nanowire Formation and Its Core-Shell Nanowire Photovoltaic Device	SYM1_P4
Mr. Vallop Homrahad	Optimization of the CsBr concentration on the CsPbBr_3 perovskite morphology for the hole transport materials free perovskite solar cell	SYM1_P5
Asst. Prof. Dr. Muangjai Unruan	Effects of pattern and frequency of excitation force on output power of PZT circular diaphragm	SYM1_P6
Miss Pitphichaya Suksangrat	Calculation and Fabrication of $\text{CsPb}(\text{SCN})_x\text{Br}_{3-x}$ film for light absorbing in hole-transporting layer free $\text{CsPb}(\text{SCN})_x\text{Br}_{3-x}$ perovskite solar cell	SYM1_P7
Mr. Tanachai Ponken	Activated Carbon Synthesized from Bamboo Shoots for Supercapacitor Application	SYM1_P8
Mr. Sumeth Siriroj	Binder-free supercapacitor electrode by carbonization of glucose via hydrothermal method.	SYM1_P9
Symposium 03: Dielectrics, Piezoelectrics, Ferroelectrics, Thermoelectrics and Superconductors		
Asst. Pro. Dr. Orawan Khamman	Electrical Properties of PNN-PZT Ceramic Nanocomposites	SYM3_P4
Miss Thita Sonklin	A study of electrical fatigue behavior of lead zirconate titanate for micro-actuator hard disk drives	SYM3_P6
Mr. Anocha Kongtrakannon	Fabrication of Lead Zinc Tungstate-Lead Zirconate Titanate Ceramics by a Two-Stage Sintering Technique	SYM3_P12
Assistance Professor Dr. Anurak Prasatkhetragarn	Morphology, Electrical and Magnetic Properties of $\text{PbTiO}_3\text{-Fe}_2\text{O}_3$ Heterostructure Ceramics	SYM3_P33

Asst. Prof. Dr. panupong jaiban	Effects of Mg and La co-doping on dielectric, and piezoelectric properties of barium calcium zirconate titanate ceramics	SYM3_P3
Assoc.Prof.Dr. Anucha Watcharapasorn	Investigation of $\text{Bi}_{0.5}(\text{Na}_{0.80}\text{K}_{0.20})_{0.5}\text{TiO}_3\text{-LiNbO}_3\text{-Ba}(\text{Ti}_{0.90}\text{Sn}_{0.10})\text{O}_3$ Lead-Free Piezoelectric Ceramics	SYM3_P5
Assoc. Prof. Dr. Theerachai Bongkarn	The effect of CuO substitution on phase formation, morphology and electrical properties of BNKLT ceramics prepared by the solid state combustion technique	SYM3_P16
Miss PARICHAT POMYAI	Studying the fatigue behavior under electrical field of BCZT ceramics	SYM3_P10
Dr Piewpan Parjansri	Improvement the Electrical Properties of $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ (BNT) Ceramics using the Seed-Induced Method	SYM3_P11
Dr. Wilaiwan Leenakul	Dielectric and ferroelectric of Niobium and Lithium Co-Doped Bismuth Sodium Potassium Titanate Ceramics	SYM3_P18
Dr Pasinee Siriprapa	Effect of Grain Size and Grain Orientation on Dielectric, Electrical and Ferroelectric Properties of W doped $\text{Bi}_{3.25}\text{La}_{0.25}\text{Ti}_3\text{O}_{12}$ Ceramics	SYM3_P24
Dr Nuttapon Pisitpipathsin	Microstructure and electrical properties of 0.96BNLT-0.04BT ceramic with various sintering temperatures	SYM3_P27
Miss Naruepon Kongthong	Enhancement in Electrical Properties of $\text{Bi}_{0.5}(\text{Na}_{1-x}\text{K}_x)_{0.5}\text{TiO}_3$ lead-free Relaxor Ferroelectric Ceramics	SYM3_P29
Ms. Surirat Yotthuan	Effect of NiO Doping on Phase Structure, Microstructure, Electric and Magnetic Properties of $0.99(\text{K}_{0.45}\text{Na}_{0.52}\text{Li}_{0.03})(\text{Nb}_{0.94}\text{Sb}_{0.06})\text{O}_3\text{-}0.01\text{BiScO}_3$ Ceramics	SYM3_P15
Mr. Narongdetch Boothrawong	Electrical and Mechanical Properties of Modified Barium Titanate by Doping an M-type Hexagonal Ferrites	SYM3_P2
Ms. Pichittra Thawong	Effect of BFCO content on phase structure, microstructure, electric and magnetic properties of BNKLT ceramics prepared by combustion method	SYM3_P14
Asst Prof Dr. Tawat Suriwong	Effect of Sr substitution on structural, ferroelectric and magnetic properties of $\text{La}_{1-x}\text{Sr}_x\text{FeO}_3$ perovskite oxides	SYM3_P32
Dr. Narit Triamnak	Dielectric and photoluminescent properties of Eu-doped $0.85\text{BaTiO}_3\text{-}0.15\text{Bi}(\text{Zn}_{0.5}\text{Ti}_{0.5})\text{O}_3$ synthesized via solid state reaction with NaCl as a reactive agent	SYM3_P34
Asst.Prof.Dr. Rattiyakorn Rianyo	Ferroelectric and induced strain behavior of PVDF modified 0–3 connectivity cement-based/lead-free $0.94\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3\text{-}0.06\text{BaTiO}_3$ piezoelectric ceramic composites	SYM3_P8
Dr. Chang Won Ahn	Stress driven high electrostrain at low field in incipient piezoelectrics	SYM3_P19
Dr. Jaru Jutimoosik	Influence of calcination temperature on phase formation and local structure of $\text{Co}_{0.6}\text{Zn}_{0.4}\text{Fe}_{1.6}\text{Cr}_{0.4}\text{O}_4$ nanoparticles	SYM3_P20
Assoc.Prof.Dr. Sukanda Jiansirisomboon	Fabrication and characterization of $\text{Hf}_{1-x}\text{La}_x\text{O}_2$ thin films by sol-gel method	SYM3_P22
Mr. Chonnarong Kaewsai	Photo-Capacitance Effect in BiFeO_3 Thin Film	SYM3_P30
Mr Suppanut Sangphet	Effect of UV-light on the enhanced superconductivity in monolayer FeSe/SrTiO_3 superconductor	SYM3_P36
Ms. Wiphichaya Thongsamrit	A simple solution process of NiO_x film fabrication as a hole transport layer for perovskite solar cells	SYM3_P35

Associate Professor Chung Wung Bark	Enhanced Efficiency of Perovskite Solar Cells with Ferroelectricity	SYM3_P26
Assoc.Prof. Dr. Naratip Vittayakorn	A Graphite fluoride/polydimethylsiloxane (GF/PDMS) compressible composite sponge; dielectric and electrical outputs for the triboelectric nanogenerator	SYM3_P17
Asst. Prof.Dr. Worawut Makcharoen	Electrical conductivity of Piezoelectric-based flexible polymer composite materials for energy harvesting application	SYM3_P23
Assoc.Prof.Dr Wanwilai Vittayakorn	Effect of Piezoelectric Phase on Electrical Properties of PDMS-based Nanocomposites	SYM3_P25
Dr. Usa Sukkha	Flower-like Hydroxyapatite Microstructure and Its Piezoelectric Response based on Flexible Piezocomposite Energy Harvesters	SYM3_P28
Mr. Keerati Maneesai	Measurement and simulation of thermoelectric efficiency for single leg Bi ₂ Te ₃ TEC	SYM3_P13
Miss Wannisa Thongsamrit	Enhancing thermoelectric properties of Bi ₂ Te _{2.7} Se _{0.3} by adding reduce Graphene oxide (rGO)	SYM3_P21
Mr. Audompong Yanasorn	Study thermoelectric properties of segmented YBa ₂ Cu ₃ O _{7-x} -Na _y CoO ₂ fabricated by hot pressing method	SYM3_P1
Mr. Paitoon Boonsong	Effect of Calcination Condition on Phase Formation Characteristics of NdBa ₂ Cu ₃ O _y Powder Prepared by Solid-state Reaction	SYM3_P9

Symposium 07: Polymers, Rubber, Bioplastics, colloid and emulsion

Assis.Researcher Wattana Klinsukhon	Study on Segmented-pie PLA/TPE Bicomponent Fibers: an Alternative for Enhancing Toughness	SYM7_P1
Miss wasana nonkrathok	Effects of PEG and MMT Contents on Mechanical, Thermal and Shape Memory Properties of MMT/PEG/PLA Nanocomposites	SYM7_P10
Asst. Prof. Dr. Kachain Dangudom	The study of phase transition temperature of liquid mixtures by light scattering technique	SYM7_P11
Dr. Pisutti Dararutana	Characterization of polyurea elastomer used for blast mitigation	SYM7_P12
Miss Watanya Yaidam	Development of thermoplastic resin for fused deposition modeling printer and its applications	SYM7_P13
Asst.Prof.Dr. Sujitra Unruan	Effect of ZrO ₂ addition on the mechanical and thermal properties of Poly(butylene succinate) and Poly(lactic acid) blends composites	SYM7_P14
Dr. Linda Thiraphattaraphun	A Natural pH Indicator from Tapioca Starch/Curcumin Film	SYM7_P15
Miss Namthip Bureewong	Modification of Natural Rubber Latex with Silica from Agricultural Waste for Use as Admixture in Concrete Material	SYM7_P16
Ms Kalyakorn Charoenkul	Antimicrobial and antioxidant efficiency of turmeric and phlai extract loaded nanoemulsion	SYM7_P17
Miss Sudapa Karawong	Mechanical properties and adhesion of UV-thermal cured epoxy for hard disk drive hand assembly	SYM7_P18
Mr Prachya Watasit	CO ₂ /CH ₄ permeability and selectivity of EVA/SiO ₂ mixed matrix membranes at ambient pressure	SYM7_P19
Assis.Researcher Sirada Padee	Study on Parameters Influencing Structures and Properties of PP and PP/TPE Melt-blown nonwovens	SYM7_P2

Dr. Rakdiaw Muangma	Ratification of constitutive model for non-linearity examination of DRFC using AMSE-5-fold-CV supervised learning analysis	SYM7_P20
Miss Arpaporn Teamsinsungvon	Preparation and characterization of nano-titania-silica binary mixed oxide and PLA composite on mechanical, thermal and morphological properties	SYM7_P3
Mr. Nattapong Pinpru	Effect of difference ionic crosslinking on physical, mechanical and thermal properties of Alginate/Carboxymethyl cellulose mulching film	SYM7_P5
Miss Nissapa Wattanawong	Antibacterial activity of silver zeolite ZSM-5/poly(butylene succinate) composite films for food packaging	SYM7_P6
Mr. Kraiwit Pakutsah	Exploring Synergistic Effect of Cellulose Fiber and APP on Mechanical and Flame Retardant Properties of ABS Hybrid Composites	SYM7_P7
Mr. Jiradet Sringam	Effects of borax and montmorillonite contents on physical properties of cassava starch based composite hydrogels	SYM7_P8
Assist.Prof.Dr. Paweena Prapainainar	Synthesis Conditions for Natural Rubber and Natural Rubber reinforced Graphene Fibre Production by Electrospinning	SYM7_P9

Symposium 09: Sensors, Organic Electronics and Printed Electronics

Mr panuwat Dangngam	Pd modified CdFe ₂ O ₄ nanoparticles as a H ₂ S gas sensor	SYM9_P1
Mr. Peerawat Laohana	Photoresistance properties of BiFeO ₃ thin films on SrTiO ₃ substrates prepared by RF magnetron sputtering	SYM9_P10
Assoc.Prof. Dr. Ekarat Detsri	Development of a method for mercury (II) determination based on Au-Ag bimetallic nanoparticles as sensitive and selective colorimetric sensor	SYM9_P15
Mr. Yotsarayuth Seekaew	Amplification of gas sensor sensitivity for toxic gas detecting drone	SYM9_P16
Miss sophia phanthuwan	Synthesis and properties of fluorescence hydrogels based on bacterial cellulose and CdS nanoparticle	SYM9_P2
Miss Sahacharat Suktommaong	Investigation of H ₂ gas sensor based on Pd-doped ZnFe ₂ O ₄ nanoparticles	SYM9_P3
Mr. Gun Chaloeipote	Flexible Soil Moisture Sensor for Digital Farm Application	SYM9_P7
Mr. Sarawut Kondee	Invention of low-cost CO ₂ detection system for indoor plant growth	SYM9_P8
B.Sc.Student Kattaliya Chaipisan	Flame-made Cr-doped CuO Nanoparticles for Low-concentration Ethanol Sensing	SYM9_P9

Symposium 11: Computational Material Sciences

Assoc. Prof. Pornjuk Srepusharawoot	Enhancements of Hydrogen Adsorption Energy in M-MOF-525 (M=Zr, Ti and V): A DFT study	SYM11_P2
Assoc. Prof. Dr. Pairot Moontragoon	The DFT Study of Electronic and Optical Properties of the Surface Functional SiGe, GeSn and GeSn Nanostructures	SYM11_P3
Dr. Kittiphong Amnuyswat	Accurate electrical properties prediction of the alloying halide perovskites using GW compare to DFT-1/2 method	SYM11_P4
Dr Anurak udomvech	Quantum Calculations of Graphene Nanopored Using as Seawater's Desalination Membranes	SYM11_P5

Assist. Prof. Dr. Sripajak Krongsuk	Effect of cholesterol on the physical and dynamical properties of melatonin in the niosome bilayers based on using coarse-grained molecular dynamics simulations	SYM11_P6
Dr. Thanayut Kaewmataya	The study of air stability of CaP ₃ : A Potential Material for Photovoltaics	SYM11_P7

Symposium 13: Catalyst and Materials Chemistry for Green Environment

Mr. Noppon Somsesta	Preparation of Cellulose/ Activated Carbon Composite Film from Sisal fiber for Selective Removal of Dyes	SYM13_P1
Asst.Prof.Dr. Thanawat Sutjaritvorakul	Biological Synthesis and Characterization of Lead Oxide Nanoparticles Using Averrhoa bilimbi Linn. Aqueous Extract	SYM13_P10
Mr. Tanatorn Liamprawat	Porous Structure Materials from Water Hyacinth via Hydrothermal Carbonization for N-doped Electrode	SYM13_P11
Mr. Sirayu Chanpee	Highly Porous Carbon Materials for Adsorbent from Water Hyacinth via Hydrothermal Carbonization	SYM13_P12
Assistant Professor Dr. Nipaphat Charoenthai	Preparation of Highly Efficient Sm-doped ZnO photocatalyst for the Degradation of Methylene blue	SYM13_P13
Miss Soriya Phiankoh	Improved photoelectrochemical performance of WO ₃ /BiVO ₄ heterojunction thin film photoanodes via thermal treatment	SYM13_P2
Dr. Sucheewan Krobthong	Influence of Fe-Cu-ZnO composites synthesized by chemical precipitation on antibacterial performance	SYM13_P3
Mr. Thanaphon Kansaard	Effect of ultrasonic irradiation time on physical properties and photocatalytic performance of BiVO ₄ nanoparticles prepared via sonochemical process	SYM13_P4
Dr. Ram Phincharoenphan	Preparation and characterization of Cu-Ni core-shell bimetallic nanoparticles with high photocatalytic activity	SYM13_P5
Miss Daranee Piyachatpanom	Synthesis of graphitic carbon nitride (g-C ₃ N ₄) photocatalyst from melamine by pyrolysis process	SYM13_P6
Mr. Abhirak Sinchangreed	Synthesis of N-Doped TiO ₂ Photocatalyst by Sol-Gel Method	SYM13_P7
Asst. Prof. Dr. Katnanipa Wanchai	Synthesis of Fe ₃ O ₄ @Chitosan Beads for Degradation of Sulfanilamide Using Photo-Fenton Process	SYM13_P8
Miss Sasiporn Audtarat	Localized surface plasmon resonance improved optical absorption activity in core-shell Ag@TiO ₂ spherical nanoparticles	SYM13_P9

Symposium 14: Instrumentation and Advanced Material Characterization

Dr. Chalad Yuenyao	Quality of nano-silica xero-gel synthesized from rice straw ash	SYM14_P1
Dr. Maliwan Subsadsana	Mesoporous material MCM-41 as solid phase extraction sorbent combined with spectrofluorometry for the analysis of oxolinic acid residue in Macrobrachium rosenbergii	SYM14_P2
Miss Aissara Rasritat	Development of UV-visible absorption spectroscopy for probing magnetic properties	SYM14_P3

Symposium 15: Material Enterprises and Industries

Mr. Thanapon Muenwacha	Fabrication of three-dimensional nanofibers for tissue engineering	SYM15_P2
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Ms. Anatvida Sukchanta	A NOVEL 3D-PRINTED SKIN PHANTOM FOR OPTICAL COHERENCE TOMOGRAPHY (OCT)	SYM15_P3
Mr YANAWARUT SOI-NGOEN	PREDICTION OF ELECTROSPINNING PARAMETERS FOR NANOFIBERS PRODUCTION USING ARTIFICIAL NEURAL NETWORKS	SYM15_P4
Mr. Yossawas Nopchinda	Dry sliding wear behavior of sintered SS316L-Sn containing MoS ₂ solid lubricant	SYM15_P5

Symposium 16: Rheology

Ms. Natlita Thummarungsan	Electromechanical properties of plasticized poly(lactic acid) filled with graphene nanoplates	SYM16_P1
Miss Kamonthira Wichai	Monte Carlo simulation of structures and dynamics of polystyrene (PS) melts and blends with different chain tacticities	SYM16_P2
Miss Natchamon Sukhonthamethirat	Molecular simulation to study structural and dynamic properties of polypropylene with different stereochemical configuration	SYM16_P3
Mr. Tae Hoon Kim	Application of the Robust Numerical Differentiation with B-Spline Regression to the Validity of Time-Temperature Superposition of Dynamic Modulus Data	SYM16_P4
Ms Thidarat Makmoon	SAOS and LAOS of Calcium Ion Mediated Low Acyl Gellan Gum/ Xanthan Gum Mixed Gel	SYM16_P5
Mr. Supanont Jamornsuriya	Effect of monomer sequence on the dynamics of ethylene-propylene copolymer melts	SYM16_P8

Symposium 17: Quantum Materials and Technologies

Mr. Masayoshi Chiba	Crystal Growth and Magnetotransport Properties of NbTe ₄	SYM17_P1
Assoc. Prof. Dr. Suwit Kiravittaya	Numerical Simulations of Single Whispering-Gallery Mode Enhancement in Hollow Cylindrical Optical Microcavity	SYM17_P2
Miss Areeya Mooltang	Electrochemical property of MnO ₂ thin film prepared by sputtering technique	SYM17_P3

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Symposium 02: Graphene and Carbon Materials

Dr. Nicharat Manmuanpom	Insightful Study of CO ₂ and CH ₄ Adsorption of Ultra-Microporous Carbon with Nitrogen Functional Groups Derived from Polybenzoxazine	SYM2_P1
Asst.Prof.Dr. Kessarat Ugsornrat	Designing of Graphene/Carbon Ratios of Graphene-Carbon Paste for Electrochemical Sensor	SYM2_P10
Miss Nutchaporn Ngamthanacom	Influence of Chemical Activation on Synthesis of Carbon Nanoparticles via Carbonization from Lignin	SYM2_P11
Miss Jaranya Papraisawang	Properties of Rice Straw-derived Hydrochar from Various Hydrothermal Carbonization Temperature	SYM2_P12
Dr. Jiyapa Sripirom	Boron doped graphene oxide and iron oxide composite as material for hybrid carbon fiber electrode	SYM2_P13
Asst.Prof.Dr. Sutee Chutipaijit	Physiological and metabolic modifications in response to nanocarbon in callus of indica rice cultivar	SYM2_P2

Mr. Sutichai Samart	Differential responses to nanoparticles induced by nanocarbon application in pigmented rice seedlings	SYM2_P3
Dr Kittimon Jirakittidul	Effect of annealing temperature and time on PU/MWCNT nanocomposites	SYM2_P4
Dr. Akkawat Ruammaitree	The Growth of Graphene on Metal by Chemical Vapor Deposition Using Waste Soybean Oil as a Carbon Source	SYM2_P5
Pristanuch Kasian	Water hyacinth-derived activated carbon for electrochemical energy storage devices	SYM2_P6
Mr. Tewasin Kumpika	Stretchable strain and pressure sensor based on carbon nanotubes composite for gait monitoring	SYM2_P7
Miss Sinutta Visanvanit	Effect of Exfoliation Techniques on Properties of Transparent Electrode Films Prepared From Graphene/PEDOT:PSS nanocomposites	SYM2_P8
Dr. Sutthipoj Wongrerkdee	Effect of graphite oxide on zinc oxide photocatalytic material for organic dye degradation	SYM2_P9

Symposium 04: Magnetic Materials and Their Applications

Assoc. Prof. Dr. Chitnarong Sirisathitkul	Classification of Iron-Platinum Based Nanoparticles from Size-Selective Precipitation	SYM4_P1
Miss Piyawan Leepheng	The modification selective electrode based on magnetic molecularly imprinted polymer for cypermethrin determination	SYM4_P10
Mr. Santi Phumying	Synthesis and magnetic properties of magnetite (Fe_3O_4) nanoparticles using egg white solution via hydrothermal method	SYM4_P11
Ms. Kornkanok Rotjanasuworapong	On the study of structural, morphological, and magnetic properties of $\text{Fe}_{(1-x)}\text{Mn}_x\text{Fe}_2\text{O}_4$ nanoferrite by surfactant assisted co-precipitation	SYM4_P2
Asst. Prof. Dr. Songkot Utara	Ferromagnetism of CeO_2 nanoparticles prepared by ozonolysis assisted at room temperature	SYM4_P3
Assoc. Prof. Dr. Teerasak Kamwanna	Effects of Fe substitution on the structural and physical properties of CuBO_2 delafossite oxide	SYM4_P4
Miss Warichat Chijee	Influence of CoFe_2O_4 on Magnetic and Electrical Properties of BNT-based Ceramics	SYM4_P5
Dr. Rattakarn Yensano	Fabrication and Magnetic properties of Fe-doped CuCrO_2 Electrospun nanofibers	SYM4_P6
Dr. Wichaid Ponhan	Room temperature ferromagnetism observed in $\text{LaFe}_x\text{Ti}_{1-x}\text{O}_3$ nanofibers fabricated by electrospinning	SYM4_P7
Mrs. Yaowarat Sirisathitkul	Modified Process for Synthesizing Iron-Platinum Nanoparticles	SYM4_P8
Mr. Rukpat Siriariyachai	Magnetic properties of iron oxide nanoparticulate films prepared by sparking process under external magnetic fields	SYM4_P9

Symposium 05: Materials in Design Manufacturing and Applications

Dr. Pattanaphong Janphuang	Fabrication of Polymer Based Transdermal Drug Delivery Microneedles Using Microinjection Moulding	SYM5_P1
Dr. Wantana Koetnityom	Physical properties of automotive textiles for modified pick-up child seat vehicle	SYM5_P2

Assistant Prof Dr. Pat Sooksaen	Fabrication of open-cell aluminum foams by pressure infiltration and salt leaching method from commercial grade alloys	SYM5_P3
Mr. Littchai Seewongkae	Synthesis of monodisperse mesoporous TiO ₂ using different templates	SYM5_P4
Assoc.Prof.Dr. Chesta Ruttanapun	Prototype of Graphene Oxide and reduced Graphene Oxide Fabrications Machine for Small Industrials	SYM5_P5
Dr. Supamas Wirunchit	Synthesis of Zinc Oxide Nanoparticles for The Car-Seat Textile in Public Transport Application	SYM5_P6
Dr. Adirek Rangkasikorn	Influence of printing cycle on electrical and optical properties of nanocomposite between poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) and indium tin oxide nanoparticles as flexible electrode prepared by printing technique.	SYM5_P7

Symposium 06: Ceramic and Glass Technology

Asst. Prof. Sunantasak Ravangvong	Simulation of radiation shielding and elastic moduli properties of Gd ³⁺ on Ce ³⁺ /Tb ³⁺ co-doped some scintillating glasses	SYM6_P10
Dr. Yotsakit Ruangtaweep	Photoluminescence characteristics of Sm ³⁺ -doped Gadolinium tungsten calcium silicoborate glass as a new orange emission material application	SYM6_P11
Assistant Professor Dr. Rungtiwa Chidthong	Photoluminescence properties of Bi ₂ MoO ₆ : Dy ³⁺ phosphors fabricated by solid state reactions	SYM6_P12
Miss Suchanun Martvijit	Investigation of the phase formation and mechanical properties of Li-SiO ₂ glass system	SYM6_P13
Dr Thanapong Sareein	Study on properties of Gd ₂ O ₃ -WO ₃ -CaO-SiO ₂ -B ₂ O ₃ glasses doped with Tb ³⁺	SYM6_P14
Asst. Prof. Narun Luewarasirikul	Light-emitting CaMoO ₄ :Dy ³⁺ phosphors for photonic materials: Synthesis and luminescence properties	SYM6_P15
Assoc.Prof.Dr. Nisakron Sangwaranatee	Spectroscopy Properties in Dy ³⁺ ion doped Zinc Barium Tellurite Oxyfluoride Glasses for White LED Applications	SYM6_P16
Assoc. Prof.Dr. Narong Sangwarantee	Sm ³⁺ Ion doped Zinc Barium Tellurite Oxyfluoride Glasses	SYM6_P17
Miss Suphada Srilai	Synthesis of zeolite A from bentonite via hydrothermal method	SYM6_P18
Dr. Kanit Soongprasit	Polymer/ceramics materials for powder-based additive manufacturing process	SYM6_P19
Mr. Kritkaew Somton	Shrinkage and Properties of Die Pressed Alumina Produced from Different Granule Sources	SYM6_P2
Ms Latda Chandeng	Effects of water content on compressive strength of eco-friendly light-weight concrete using cement-like materials prepared from agricultural wastes	SYM6_P20
miss Kornkamon Meesombad	Nanoparticulate Zn-doped TiO ₂ as Glutamate and Nitrite Sensors	SYM6_P21
Miss Nicha Sato	Fe ₂ O ₃ /MWCNTs modified microdialysis electrode for dopamine detection	SYM6_P22
Asst.Prof.Dr. Suchart Kiatwattanacharoen	A study of X-ray Radiation Shielding Properties of Bricks Contained Barium Sulfate	SYM6_P23

Assoc.Prof.Dr. Suchart Kothan	Study on Radiation shielding properties of glass samples doped with Holmium	SYM6_P24
Miss Ramnaree Kaemkit	Influence of novel drying with acetone volatile liquid in forming tubular alumina membrane through agar gel-casting	SYM6_P25
Miss Khanthima Hemra	Surface Treatment of Wollastonite for Geopolymer Reinforcement	SYM6_P26
Dr. Supawan Vichaphund	Cationic dye-modified SiO ₂ nanoparticles for developing latent fingerprints	SYM6_P27
Assist. Dr. Apishok tangtrakarn	Structures and Ionic Conductivities of Samarium and Copper co-Doped Ceria	SYM6_P28
Miss Kannigar Dateraksa	Influence of Precursor Preparation on the Synthesis of Boron Carbide from Glutinous Rice Flour	SYM6_P3
Ms. Boonyachon Pondee	The Formulation of Ceramic Bodies and Glazes for Single Firing	SYM6_P30
Mr. Khemmakorn Gomonsirisuk	Porous Kaolin-based Geopolymer from Sodium Perborate	SYM6_P4
Dr. Kullachate Muangnapoh	Synthesis of Fe ₂ O ₃ /TiO ₂ core-shell NIR-reflective pigment by sol-gel method	SYM6_P5
Mr. Poom Prayoonphokkharat	Fabrication and Properties of Defect Layered Perovskite Pr-substituted YBCO Ceramics	SYM6_P6
Miss Mantana Suwan	Synthesis of High NIR-Reflective Calcium-Manganese-Titanium Oxide Black Pigments	SYM6_P7
Miss ุNuchjarin Sangwong	Synthesis and Optical Band Gap Study of MgO&CaO- and Al ₂ O ₃ -Doped CoFe ₂ O ₄ NIR-Reflective Black Pigments	SYM6_P8
Asst. Prof. Dr. Pruittipol Limkitjaroenporn	The comparative study of photon interactions for LaBr ₃ :Ce and LuYAP:Ce scintillation crystals by Compton scattering technique	SYM6_P9
Symposium 08: Biomaterials and Applications		
Miss Piyarat Sungkhaphan	Clindamycin Hydrochloride-loaded Composite Hydrogel of Poly(ethylene glycol dimethacrylate-glycidyl methacrylate) and Mesoporous Silica Nanoparticles	SYM8_P1
Asst. Prof. Dr. Panchika Prangkio	Development of Silk Sericin-based Hydrogels for Wound Dressing	SYM8_P10
Miss Apakorn Poonpoklang	Hydroxyapatite nanoparticles influence shoot and root development on rice callus	SYM8_P11
Miss Siripanyo Promnil	Effect of PLA molecular weight on PLA /Silk fibroin composites: mechanical properties for bone tissue engineering scaffold	SYM8_P12
Dr. Nutthita Chuankrerkkul	Fabrication of Spinel Ceramic Brackets by Powder Injection Moulding	SYM8_P13
Miss Krongkarn Sirinukunwattana	Ceramic Coatings on Titanium Alloys for Medical Application	SYM8_P14
Ms. Winadda Wongwiriyan	Nitrogen self-doped activated carbon derived from silkworm pupae waste for performance enhancement of supercapacitor	SYM8_P16
Dr. Rung-Yi Lai	Light-induced Nanopolygons Assembly of Green Fluorescent Protein	SYM8_P19

Mr Likit Temprom	A novel preparation of niosomes based on using ball mill method for drug delivery application	SYM8_P2
Miss Sirada Sungsinchai	Effect of high pressure processing on functional property of nanofibrillated cellulose	SYM8_P4
thapanee.sr@ku.th Thapanee Srichumpong	Influence of additive on properties of a mica-based glass-ceramic for dental restorations	SYM8_P5
Mr. Chatpravit Kongpiboon	Synthesis of Carbon Materials from Water Hyacinth via Hydrothermal Carbonization	SYM8_P6
Mrs. Apinya Raksa	Fabrication and characterization of silk fibroin/poly vinyl alcohol (SF/PVA) nanofibres via electrospinning	SYM8_P7
Miss Jiraporn Sinna	Thermal properties of Polyvinyl alcohol (PVA) composite based on silk fibroin and silk sericin prepared from Bombyx Mori silk.	SYM8_P8
Miss Sirinapa Pongpeera	Enhancing Effect of Released Calcium and Phosphorus from Hydroxyapatite Nanoparticles on Rice Germination and Growth	SYM8_P9

Symposium 10: Composites and Construction Materials

Miss Suwanan Thammarong	The Physical and Mechanical Properties of Diatomite-based Geopolymer for Construction Materials	SYM10_P1
Asst. Prof. Dr. Thanongsak Nochaiya	Compressive strength and thermal properties of recycle-expanded polystyrene concrete blended with condensed silica fume	SYM10_P11
Asst. Prof. Dr. Pincha Torkittikul	The Investigation of Polyester Resin Polymer Concrete with Various Amounts of Aggregate	SYM10_P12
Dr. Peerapan Dittanet	Fracture Behavior of Lignin/Epoxy Composites	SYM10_P13
Dr. Watcharapong Wongkeo	Physical and thermal properties of building insulation made from waste paper and rice straw	SYM10_P14
Asst. Prof. Dr. Thanongsak Nochaiya	Effect of Sugarcane Bagasse Ash on Properties of Mortars Curing in Acid, Base and Sulfate Solutions	SYM10_P15
Dr. SUNISA KHAMSAK	Fabrication and characterization of Al ₅₀ Si ₃ 2wt%SiO ₂ composite and its aging behavior	SYM10_P16
Asst.prof. Pongsathorn Kongkaew	Mechanical and Physical Properties of Water Hyacinth and Cogon Grass Fiber Reinforced Epoxy Resin Composites	SYM10_P17
Miss Kannikar Kaewapai	Effect of Olive Oil on Physical and Mechanical Properties of Ceramic Waste-Based Geopolymer Foam	SYM10_P2
Miss Panadda Charee	Preparation and characterization of bacterial cellulose-silica nanocomposite from agricultural waste products	SYM10_P3
Miss Oradee Srikimkaew	Synthesis and Electrical Properties of Ag/Ag ₂ S Nanoparticles	SYM10_P4
MRS. Pimpun Henprasertae	Porous geopolymer: Effect of Al powder addition and curing conditions on physical and thermal properties	SYM10_P5
Miss Siripassorn Sukkhawuttigit	In-situ Synthesized Polypyrrole-cellulose Conductive Paper	SYM10_P6
Miss Preeyaporn Injorhor	Preparation of silica chitosan hybrid fillers from agricultural waste by sol-gel technique	SYM10_P7
Miss Panida Wimuktiwan	Effect of pore foaming agent on mechanical and thermal properties of porous ceramic materials for building application	SYM10_P8

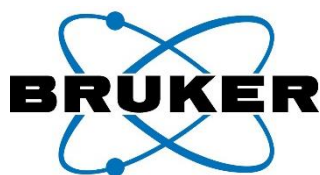
Symposium 12: Surface Sciences, Tribology and Thin Film Technology		
Mr. Rachakid Patthananihi	A study of the failure mechanism of diamond-like carbon film deposited on stainless steel under tensile loading	SYM12_P10
Miss Arisara Panthawan	Hot air treatment : facile and low-cost annealing technique without substrate deformation	SYM12_P11
Ms. Sasiwan Muedlha	Effects of PVP and PEG on the Physicochemical properties of PSF/NH ₂ -SiO ₂ composite membranes	SYM12_P12
Dr. Wuttichai Phae-ngam	Effect of post annealed treatment on HfN thin films prepared by DC reactive magnetron sputtering	SYM12_P13
Mr. Chamnan Promjantuk	Influence of deposited Ag nanoparticles on ZnO nanorod array by high power impulse magnetron sputtering for SERS substrate	SYM12_P14
Dr. Theerayuth Plirdpring	Preparation of PTFE-coated SiO ₂ nanorod films for self-cleaning application	SYM12_P15
Dr. Jedsada Prathumsit	The effect of thickness on the properties of ZrHfN thin films prepared by reactive co-magnetron sputtering	SYM12_P16
Asst.Prof.Dr.Chalermwat Wongwanitwattana	Analysis of the properties of molybdenum and sodium-doped molybdenum thin films for back contact of CIGS solar cells	SYM12_P17
Dr. Krisana Chongsri	Structural and optical properties of Sb-doped ZnO nanoparticles prepared by co-precipitation process	SYM12_P19
Dr. Chutima Paksunchai	CrAlN Film hardness uniformity affected by nitrogen content	SYM12_P2
Miss Wantanee Hincheeranun	Improved Electrochemical Cycling Durability of W _x Ta _y O _z nanocomposite Films in H ₂ SO ₄ Electrolyte	SYM12_P20
Asst. Prof. Dr. Wanichaya Mekprasart	Surface characterization and antibacterial activity of yellow zinc oxide prepared by high-energy ball milling technique	SYM12_P21
Mr. Parinya Panprom	Effect of sputtering power on optical properties of nickel oxide electrochromic thin films	SYM12_P22
Miss Siriporn Tigunta	Dehydration behavior of hydrated MgO thin film barrier-MTJs	SYM12_P23
Dr. Russameeruk Noonuruk	PVA/nanocellulose composite films derived from sugarcane bagasse via sonochemical process under different irradiation time	SYM12_P24
Chantana Aiempnanakit	Structural and optical properties of titanium dioxide nanotubes prepared on glass by anodization	SYM12_P25
Prof. Dr. Jiti Nukeaw	Improvement of Electrochemical Glucose Detection based on Iron Oxide Nanorods Functionalized with Gold Nanoparticles by means of Solar Activation	SYM12_P26
Miss Pacharamon Somboonsaksri	Influence of surface treatments on zinc sheets towards ZnO nanorod as high-performance SERS templates	SYM12_P27
Asst. Prof. Dr. Kamon Aiempnanakit	Electrochromic and structural properties of nickel oxide thin films prepared by chemical bath deposition	SYM12_P28
Asst. Prof. Dr. Arrak Klinbumrung	Optical characteristics and antimicrobial performance of Mg doped TiO ₂ nanostructures synthesized by microwave assisted method	SYM12_P29
Miss Atchara Sriboonruang	Different alkyltrichlorosilanes enhanced superhydrophobicity on superhydrophilic SiO ₂ prepared by one-step reaction	SYM12_P3
Dr. Peerapong Nuchuyay	Oxygen plasma treatment of ITO nanorod films prepared by glancing angle deposition	SYM12_P31
Mr. Wattikon Sroila	Enhancement of Photocatalytic Efficiency Under Visible Light Region of TiO ₂ -Fe ₂ O ₃ Nanoparticles Coated on Multiwall Carbon Nanotubes Films by One-Step Sparking Process	SYM12_P5

Miss Porntipa Pooseekheaw	Visible-light photocatalytic performance of V_2O_5/TiO_2 composite films prepared by sparking process	SYM12_P6
Mr. Tachgiss Jampreecha	Fabrication and study of the magnetic properties of $BiFe_{1-x}Cu_xO_3$ Thin Films	SYM12_P7
Miss Araya Sangpung	A study on the influence of reheats temperature on tribological properties of DLC Films	SYM12_P8
Mr. Norravit Kanjanamai	A study of the failure mechanism of diamond-like carbon film deposited on titanium alloy under tensile loading	SYM12_P9

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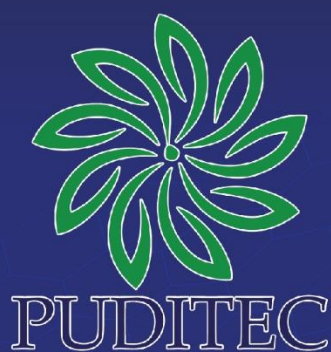


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