

## Wednesday, 18 July 2018

Time	Activity
14.00-18.30	Registration

## Thursday, 19 July 2018

Time	Activity at Ballroom 1 and 2
08:00-09:00	Registration
09:00-09:30	Welcome and Conference Opening/ Group photo
09:30-9:50	Coffee Break
09:50-10:30	<b>Keynote Presentation I</b> by Prof. Dr. Takeshi YANAGIDA (Kyushu University, Japan) “Metal Oxide Nanowire Meets Internet of Things (IoT)”
10:30-11:10	<b>Keynote Presentation II</b> by Prof. Dr. Supon Ananta (Chiang Mai University, Thailand) “The Role of Gold Nanometallics on Dielectric, Microstructure and Domain Switching Characteristics of Barium Titanate Ceramics”
11:10-12:10	Technical Talks
12:10-13:00	Lunch

Thursday, 19 July 2018 (P.1)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
13:00-13:15	<b><u>Optics &amp; Electronics I</u></b>	<b><u>Nanomaterials I</u></b>	<b><u>Materials for Health Science</u></b>	<b><u>Energy &amp; Environment I</u></b>	<b><u>Metals&amp;Alloys&amp;Comp</u></b>
13:15-13:30	Invited I : <b>Prof. Dr. C.K. Jayasankar</b> "Optical and Photoluminescence Dynamics of $\text{Ln}^{3+}:\text{B}_2\text{O}_3+\text{Li}_2\text{O}/\text{LiF}$ Glasses"	Invited I: <b>Prof. Dr. Sanong Ekgasit</b> "Hydrogen Peroxide: A Key Ingredient for the Fabrication of Unique Gold and Silver Micro/Nanostructure"	Invited I : <b>Assoc. Prof. Dr. Siwarutt Boonyarattanakalin</b> "Polymers as Vaccine Adjuvants and Vaccine Agents against Tuberculosis"	Invited I: <b>Prof. Dr. Tawatchai Charinpanitkul</b> "Conversion of Graphite powder to Graphene via Ozonation Treatment in Deionized Water"	Invited I : <b>Prof. Dr. Rattikorn Yimnirun</b> "Local Structure Investigation in Some Magnetic Materials Studied by Synchrotron X-Ray Absorption Spectroscopy"
13:30-13:45	Invited II : <b>Dr. Eakgapon Kaewnuam</b> "Study of $\text{LaBMoO}_6:\text{Ln}^{3+}$ Phosphors ( $\text{Ln} = \text{Dy}, \text{Sm}, \text{Tb}$ ) for Photonic Material Applications"	Invited II: <b>Dr. Sakon Rahong</b> "Nanowires Electrophoresis Chips for Biomolecule Analysis"	Invited II : <b>Assoc. Prof. Dr. Takao Yasui</b> "Oxide Nanowires for Urinary Extracellular Vesicle Analysis"	Invited II: <b>Assoc. Prof. Dr. Kazuki Nagashima</b> "Functional Inorganic and Organic Nanofiber Materials from Earth-Abundant Resources and Their Application"	Invited II: <b>Assoc. Prof. Dr. Theerachai Bongkarn</b> "Structural Phase, Phase Transitions and Electrical Behaviors of KNLNTS-based Ceramics Prepared via the Solid State Combustion Technique"
13:45-14:00					
14:00-14:15	<b>OR-OEM01 (Ab-ID012):</b> "Sm <sup>3+</sup> doped Molybdenum Gadolinium Borate Glasses for Orange Emission Laser Active Medium"	<b>OR-NAM01 (Ab-ID111):</b> "PM2.5 Collection and Detection Device for Analysis in Liquid Phase"	<b>OR-MHS01 (Ab-ID034):</b> "Self-assembling Iron-tannic Nanocomplex Developing as a New Emerging Agent for Healthcare"	<b>OR-EEM01 (Ab-ID018):</b> "Development and Testing on Polyurethane Resin/Carbon Black/Lead Zirconate Titanate composites for Energy Harvesting Application"	<b>OR-MAC01 (Ab-ID013):</b> "Photocatalytic Repeatability of CPC Photoreactor in Presence of Anatase/Rutile TiO <sub>2</sub> under Solar Irradiation"
14:15-14:30	<b>OR-OEM02 (Ab-ID081):</b> "White Light Emission of Gadolinium Calcium Phosphate Oxide and Oxyfluoride Glasses Doped with Dy <sup>3+</sup> "	<b>OR-NAM02 (Ab-ID233):</b> "Cost-effective Fabrication Process for SERS-Active Substrates from Metallic Nano-Templates by Laser Engraving Machine"	<b>OR-MHS02 (Ab-ID174):</b> "Fabrication of Multifunctional Lipid-based Nanocarrier of Herbal Medicine for Dermal Delivery System"	<b>OR-EEM02 (Ab-ID235):</b> "Fully Printable Hole Transport-free Perovskite Solar Cells with Guanidinium-based Additive"	<b>OR-MAC02 (Ab-ID074):</b> "The Effect of Cu <sup>2+</sup> Substituting on Phase Formation, Microstructure and Electrical Properties of BNKLT Lead-free Ceramics Fabricated by the Solid-state Combustion Technique"

## Thursday, 19 July 2018 (P.2)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
14:30-14:45	<b>OR-OEM03 (Ab-ID153):</b> <i>"Physical and Optical Properties of Zinc Barium Borotellurite Glasses Doped with CeF<sub>3</sub>"</i>	<b>OR-NAM03 (Ab-ID110):</b> <i>"Detection of Cell-Free Circulating Methylated DNA for Early Diagnosis of Cancer by Microheater-Nanowires"</i>	<b>OR-MHS03 (Ab-ID192):</b> <i>"Investigation and Characterization of Nano-transethosomes as Vesicular Carriers for Enhanced Topical Administration"</i>	<b>OR-EEM03 (Ab-ID163):</b> <i>"Trends and Emerging Materials in Fuel cell and Water Electrolysis Researches Analyzed by Computational Method"</i>	<b>OR-MAC03 (Ab-ID102):</b> <i>"Electrical Fatigue Behavior of the Lead-Free BaTiO<sub>3</sub> Powders and Fibers Added into Polydimethylsiloxane Matrix for the Flexible Nanogenerator"</i>
14:45-15:00	<b>OR-OEM05 (Ab-ID166):</b> <i>"Comparative Study of Er<sup>3+</sup> ions Doped Phosphate Based Oxide and Oxy-Fluoride Glasses For Lasers Applications"</i>	<b>OR-NAM04 (Ab-ID155):</b> <i>"Shape-controlled Synthesis of Tungsten Oxide Nanostructures and Characterization"</i>	<b>OR-MHS04 (Ab-ID195):</b> <i>"Effect of Plasma Jet on Shear Bond Strength of Self-adhesive Resin Cement to Dentin"</i>	<b>OR-EEM04 (Ab-ID068):</b> <i>"Study of Property Basic and Moisture Content of the Roselle Seeds per Oil Extraction Volume and Moisture Relations Analyzer for Used as Raw Material Production of Biodiesel Renewable Fuel"</i>	
15:00-15:15	<b>OR-OEM06 (Ab-ID194):</b> <i>"Development of Bi<sub>2</sub>O<sub>3</sub>-Na<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> Glasses for Radiation Shielding Material"</i>	<b>OR-NAM05 (Ab-ID214):</b> <i>"Control of Morphological and Optical Properties of Well-aligned ZnO Nanowires Synthesized through AZO Seeding Template"</i>	<b>OR-MHS05 (Ab-ID245):</b> <i>"Rapid Synthesis of Mycobacterial Glycan Components Conjugated with Alkyne Terminated Linker"</i>	<b>Invited III:</b> <b>Prof. Dr. Kandalam V. Ramanujachary</b>	
15:15-15:30				<i>"Novel Electro-catalytic Materials for Hydrogen Generation"</i>	
15:00-15:30	<b>Coffee break</b>				

Thursday, 19 July 2018 (P.3)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
15:30-15:45	<p><b><u>Optics &amp; Electronics II</u></b></p> <p><b>Invited III :</b>  <b>Prof. Dr. Mitra Djamal</b>  <i>“Development of Optical Material Based on Glass Doped Rare Earth for Photonic Devices”</i></p>	<p><b><u>Material process and manufacturing I</u></b></p> <p><b>Invited I:</b>  <b>Prof. Dr. Yuji Noguchi</b>  <i>“Gap-state Engineering of Visible-light-active Photoferroelectrics”</i></p>	<p><b><u>Biomaterials and carbon I</u></b></p> <p><b>Invited I:</b>  <b>Dr. Adisorn Tuantranont</b>  <i>“Graphene/NanoCarbon Materials and Its Applications”</i></p>		<p><b><u>Computational &amp; Characterization</u></b></p> <p><b>Invited I :</b>  <b>Prof. Dr. Chul-Hong Park</b>  <i>“Formation of Compensating Defects Through Many-body Interaction”</i></p>
15:45-16:00					
16:00-16:15	<p><b>Invited IV :</b>  <b>Asst. Prof. Dr. Ken Albrecht</b>  <i>“Solution-Processable Thermally-Activated Delayed-Fluorescence Dendrimer for OLED Application”</i></p>	<p><b>OR-MPM01 (Ab-ID050):</b>  <i>“Effect of Nitrogen Plasma Treatment on Crystal Structure, Chemical Bonding Structure, and Contact Angle of Titanium Dioxide (TiO<sub>2</sub>) Nanotubes Fabricated by Electrochemical Anodization”</i></p>	<p><b>Invited II:</b>  <b>Asst. Prof. Dr. Sommai Pivsa-art</b>  <i>“Biodegradable Polymers for Green Composites”</i></p>	<p><b>Haydale company workshop</b>  <b>“Graphene in Asia Market”</b></p> <p><b>16:00-17:45</b></p>	<p><b>Invited II:</b>  <b>Assoc. Prof. Dr. Siriporn Jungsuttiwong</b>  <i>“A Theoretical Study of Platinum Decorated Carbon Nanocones on Hydrogen Storage Reactions: Effect of Spillover Mechanism”</i></p>
16:15-16:30		<p><b>OR-MPM02 (Ab-ID053):</b>  <i>“Synthesis of BaTiO<sub>3</sub>-(Bi<sup>1/2</sup>A<sup>1/2</sup>)TiO<sub>3</sub>(A=K, Na) Solid Solution Semiconducting Ceramics by Alkali-earth Oxide Addition”</i></p>			
16:30-16:45	<p><b>OR-OEM07 (Ab-ID182):</b>  <i>“The Near-Infrared Fluorescence of Nd<sup>3+</sup>-doped Tungsten Gadolinium Borate Glasses”</i></p>	<p><b>OR-MPM03 (Ab-ID084):</b>  <i>“Cold Sintering Process: Low-Temperature Ceramic Processing Applied for Ceria”</i></p>	<p><b>Invited III:</b>  <b>Assoc. Prof. Dr. Somsak Dangtip</b>  <i>“Contemporary Plasma Science and Technology for Biomaterials in Thailand”</i></p>		<p><b>Invited III:</b>  <b>Assoc. Prof. Dr. Sirichok Jungthawan</b>  <i>“Modelling in Materials Science by First-Principles Calculations: From Two-Dimensional Materials to Bulks”</i></p>
16:45-17:00	<p><b>OR-OEM08 (Ab-ID197):</b>  <i>“Radio and Photo Luminescence Studies of MgO-BaO-P<sub>2</sub>O<sub>5</sub> Glasses Doped with Eu<sup>3+</sup> Ion for Reddish Orange Emission Material Application”</i></p>	<p><b>OR-MPM04 (Ab-ID143):</b>  <i>“Porcelain Body Preparation and Characterization for Dipping Former Usage in Latex Glove Manufacturing”</i></p>			

Thursday, 19 July 2018 (P.4)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
17:00-17:15	<b>OR-OEM09 (Ab-ID225):</b> "Studies of Luminescence Properties of Praseodymium Ions in Gadolinium Barium Borate Based Glasses for Reddish-Orange Lighting Applications"	<b>OR-MPM05 (Ab-ID230):</b> "Fabrication of $Ca_{12}Al_{14}O_{33}$ Mayenite Structure by Spark Plasma Sintering"	<b>OR-BIO01 (Ab-ID038):</b> "Characterization of starch granules derived from <i>Tacca leontopetaloides</i> by green synthesis"	<b>Haydale company workshop</b> "Graphene in Asia Market"	<b>OR-CCM01 (Ab-ID029):</b> "3D EMFIT Numerical Simulations of Electromagnetic Wave Absorbing Materials for RF Applications"
17:15-17:30	<b>OR-OEM10 (Ab-ID167):</b> "Fabrication of Potassium Aluminium Barium Phosphate Glasses Doped with $Sm^{3+}$ and Their Judd-Ofelt Analysis for Orange Lasing Material Application"	<b>OR-MPM06 (Ab-ID241):</b> "SnO <sub>2</sub> Coatings on Porous LiAl <sub>5</sub> O <sub>8</sub> by Simple Thermal Evaporation Process"	<b>OR-BIO02 (Ab-ID132):</b> "Characterization of Gelatin/CMC Scaffold Fabricated by Salt Leaching Method"		<b>OR-CCM02 (Ab-ID119):</b> "Modelling of Concrete Materials for 3D-EFIT Numerical Computations of Ultrasonic Nondestructive Evaluation"
17:30-17:45	<b>OR-OEM20 (Ab-ID246):</b> "The effect of doping with tungsten trioxide on thermochromic properties of vanadium dioxide synthesized by hydrothermal method"		<b>OR-BIO03 (Ab-ID037):</b> "Extraction and Characterization of Nanocellulose from Sugarcane Bagasse by Ball-milling-assisted Acid Hydrolysis"		
17:15-18:45	<b>Poster session I</b> <i>(Posters from Optical and electronic materials, Nanomaterial and applications and Sensors, sensing materials and related devices session)</i>				
19:00-21:00	<b>Banquet</b>				

Friday, 20 July 2018

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
09:20-10:00	<p><b>Keynote Presentation III</b> by <b>Prof. Dr. B.V.R. CHOWDARI</b> (Nanyang Technological University, Singapore) <b>“Energy Storage Aspects-Lithium Ion Batteries”</b> at Ballroom 2</p>				
10:15-10:30	<p><b>Optics &amp; Electronics III</b></p> <p><b>Invited V:</b> <b>Asst. Prof. Dr. Prasit Thongbai</b> <i>“Interfacial Polarizations in High-Permittivity TiO<sub>2</sub>-based Ceramics”</i></p>	<p><b>Nanomaterials II</b></p> <p><b>Invited III:</b> <b>Asst. Prof. Dr. Phimphaka Harding</b> <i>“Fe(III) Spin Crossover thin films and nanoparticles”</i></p>	<p><b>Sensor&amp;Sensing Materials I</b></p> <p><b>Invited I:</b> <b>Asst. Prof. Dr. Chatchawal Wongchoosuk</b> <i>“Smart Nanosensor Watch for Saving Life from Toxic Gases”</i></p>	<p><b>Energy &amp; Environment I</b></p> <p><b>Invited IV:</b> <b>Prof. Dr. Hajime Nagata</b> <i>“Mechanical Bending Strength of (Bi<sub>0.5</sub>Na<sub>0.5</sub>)TiO<sub>3</sub>-Based Lead-Free Piezoelectric Ceramics”</i></p>	<p><b>Material process and manufacturing II</b></p> <p><b>Invited II:</b> <b>Prof. Dr. Hidenori Mimura</b> <i>“Highly aligned P(VDF/TrFE) nanofiber webs fabricated by electrospinning”</i></p>
10:30-10:45					
10:45-11:00	<p><b>OR-OEM11 (Ab-ID011):</b> <i>“Modifying the Hydrophobicity and Transmittance of Spin-coated Poly(methyl methacrylate) Films by Adding Polyvinylpyrrolidone and Quenching”</i></p>	<p><b>OR-NAM06 (Ab-ID149):</b> <i>“Mechanical Property of Gelatin/CMC Nanofibrous Scaffold Fabricated by Electrospinning Method”</i></p>	<p><b>OR-SSM01 (Ab-ID085):</b> <i>“Development of CdTe-based Nuclear Radiation Sensors and Related Devices”</i></p>	<p><b>Invited V:</b> <b>Asst. Prof. Dr. Surawut Chuangchote</b> <i>“One-dimensional Catalysts for Photocatalytic Conversions of Bioresources to High Value Chemicals and Fuels”</i></p>	<p><b>OR-MPM07 (Ab-ID067):</b> <i>“Porosity Investigation of Bricks by Gamma-ray Transmission Measurement”</i></p>
11:00-11:15	<p><b>OR-OEM12 (Ab-ID175):</b> <i>“Synthesis and Radiation Properties of Li<sub>2</sub>O-BaO-Bi<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub> Glasses”</i></p>	<p><b>OR-NAM07 (Ab-ID039):</b> <i>“Transparent Cellulose Nanofibers Reinforced Composites for Electronic Devices”</i></p>	<p><b>OR-SSM02 (Ab-ID206):</b> <i>“Molecularly Imprinted Polymer Coated ZnO Nanowires Chemiresistor for Aromatic Compounds Vapor Detection”</i></p>		<p><b>OR-MPM08 (Ab-ID091):</b> <i>“Study on Physical and Optical Properties Sun Guard HP Clima Guard Neutral 70 and Clear Vision Glasses”</i></p>

## Friday, 20 July 2018 (P.1)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
11:15-11:30	<b>OR-OEM13 (Ab-ID176):</b> "Study Properties OF Zinc Barium Borate Glasses Doped with $Sm_2O_3$ "	<b>OR-NAM08 (Ab-ID036):</b> "PDMS-silver Nanocomposite for Flexible Conductive Stripes and its applications as Flexible Substrates for Organic Solar Cells"	<b>OR-SSM03 (Ab-ID209):</b> "Development of Reversible On-off Control Nanovalve"	<b>OR-EEM05 (Ab-ID015):</b> "Characterization and Photocatalytic Activity of Titanium Dioxide Deposited on Stainless Steel by Pulsed-Pressure Metalorganic Chemical Vapor Deposition"	<b>OR-MPM09 (Ab-ID139):</b> "Effect of Additional Laser-Sensitive Pigment on Marking Contrast and Physical Property of Polypropylene Plastic"
11:30-11:45	<b>OR-OEM14 (Ab-ID188):</b> "Exposure Buildup Factor Investigation of Tungsten Gadolinium Borate System"	<b>OR-NAM09 (Ab-ID008):</b> "CaCO <sub>3</sub> @TiO <sub>2</sub> Core-Shell and TiO <sub>2</sub> Hollow Nanospheres by a Sol-Gel Method"	<b>OR-SSM04 (Ab-ID232):</b> "External Electric Field Induced Metal Insulator Transition in VO <sub>2</sub> Thin Films for Thermal Switch Application"	<b>OR-EEM06 (Ab-ID236):</b> "Lithium Metal Composites Prepared by Lithium Melt Infusion as Highly Stable Anode for Lithium-sulfur Batteries"	<b>OR-MPM10 (Ab-ID142):</b> "The Effect of Thickness of Spring Wire on the Strength and Deformation Characteristics of a Spring Steel Conduit"
11:45-12:00	<b>OR-OEM15 (Ab-ID193):</b> "Fabrication of Mn <sup>2+</sup> Doped Al <sub>2</sub> O <sub>3</sub> Bulk Crystal by Flame Fusion Technique and Their Properties"	<b>OR-NAM10 (Ab-ID020):</b> "The Effect of Calcination Temperatures on Physical and Electrochemical Properties of Manganese Dioxide Nanoparticles Synthesized by Co-precipitation Method"		<b>OR-EEM07 (Ab-ID237):</b> "High-rate Symmetric Supercapacitor Using Water-soluble Sulfonated-poly(aniline-co-p-phenylenediamine) Nanofiber-Decorated Nitrogen-doped Reduced Graphene Oxide and Ferri/Ferrocyanide Redox-Active Electrolyte"	<b>OR-MPM11 (Ab-ID189):</b> "Improvement of Welding Repair Aluminium Alloy 6082T6 by MIG Welding Process with Pulse Current"
12:00-13:15	<b>Lunch</b>				

## Friday, 20 July 2018 (P.2)

Time	Ballroom 1	Ballroom 2	Meeting room 1
13:00-14:30	<b>Poster session II</b> <i>(Posters from Biomaterials and carbon-based materials, Energy and environment materials, Theoretical and computational science of materials, Materials for health science, Metal alloys and composite materials and Material process and manufacturing session)</i>		
13:15-13:30	<b><u>Optics &amp; Electronics IV</u></b>  <b>Invited VI:</b> <b>Dr. Taras Kolodiazhn</b>	<b><u>Nanomaterials III</u></b>  <b>Invited IV:</b> <b>Dr. Pongkarn Chakthranont</b>	<b><u>Sensor&amp;Sensing Materials II</u></b>  <b>Invited II:</b> <b>Assoc. Prof. Dr. Apinpus Rujiwatra</b>
13:30-13:45	<i>"Competing f-electron Localization Mechanisms in Rare Earth Cubic Fluorites"</i>	<i>"Highly Dispersed Ni-Cu Nanoparticles on SBA-15 for Catalytic Production of <math>\gamma</math>-Valerolactone"</i>	<i>"Lanthanide Coordination Polymers in Luminescence-based Thermometry"</i>
13:45-14:00	<b>OR-OEM16 (Ab-ID082):</b> "Synchrotron Radiation X-ray Photoelectron Spectroscopic Study of CdTe-In Structures Formed by Laser-Induced Doping Technique"	<b>OR-NAM11 (Ab-ID004):</b> <i>"The Sol-hydrothermal Synthesis of <math>K_{0.5}Bi_{0.5}TiO_3</math> (KBT) Nano-particles"</i>	<b>OR-SSM06 (Ab-ID144):</b> <i>"Recent Advances in Micro-nanoscale Thermal Management for Metal Oxide Nanowires Assembly and Gas Molecules Detections"</i>
14:00-14:15	<b>OR-OEM17 (Ab-ID033):</b> "Fabrication of High Magnification Microscope Lens for Smartphone and SPR Sensor Chip using Confined Sessile Drop Technique"	<b>OR-NAM12 (Ab-ID160):</b> <i>"Temperature dependence of crystal growth of highly oriented columnar ZnO nano-rod by hydrothermal method"</i>	<b>OR-SSM07 (Ab-ID190):</b> <i>"A Portable USB-Powered Potentiostat System Design for Salty Detection"</i>
14:15-14:30	<b>OR-OEM18 (Ab-ID099):</b> "Improvement of Optical and Electrical Properties of Cu-Doped SnO <sub>2</sub> Thin Films by O <sub>2</sub> Plasma Treatment"		<b>OR-SSM08 (Ab-ID211):</b> <i>"The Selective Electrochemical Determination of Casein Based on Magnetic Molecularly Imprinted Nanoparticles"</i>
14:30-14:45	<b>OR-OEM19 (Ab-ID123):</b> "Transparent Conductive Nanocolumnar AZO Film Coating by GLAD"		<b>OR-SSM09 (Ab-ID062):</b> <i>"Invention of Flexible Graphene-carbon Nanotube Network Electroluminescent Gas Sensor"</i>
14.45-15.00	<b>Coffee break</b>		
15.00-15.30	<b>Closing Ceremony and Award</b>		