

## Thursday, 4 August 2022

Time	Activity
14.00-18.30	Registration

## Friday, 5 August 2022

Time	Activity at Ballroom 1 and 2
08:30-09:10	Registration
09:10-09:40	Welcome and Conference Opening/ Group photo
09:40-10:00	Coffee Break
10:00-10:45	<b>Keynote Presentation I (Online)</b> by Prof. Dr. Morinobu Endo (Shinshu University, Japan) <i>“Carbon Nanotubes: Mass Production and Applications for Sustainability”</i>
10:45-11:30	<b>Keynote Presentation II</b> By Dr. Adisorn Tuantranont (National Science and Technology Development Agency, Thailand) <i>“Graphene Technology for Energy Storage Devices”</i>
11:30-12:00	Special Talks
12:00-13:00	Lunch

## Friday, 5 August 2022 (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 (OEM I)</u></b>	<b><u>Energy&amp;Environment I (EEM I)</u></b>	<b><u>Sensor &amp; Sensing Materials I (SSM I)</u></b>		<b><u>Bio-Carbon Materials (BCM)</u></b>
13:15-13:30	<b>Invited I:</b> <b>Prof. Dr. C.K. Jayasankar</b> <i>“Compositional Dependence Spectroscopic Studies of Dy<sup>3</sup>-doped Glasses for Optical Device Applications”</i>	<b>Invited I (Online):</b> <b>Prof. Balaji Rao Ravuri</b> <i>“Variation on Long Term Electrochemical Stability of Sodium–Vanadium Glass and Glass-ceramic Anode Half-cell Network Mixed with ZnO”</i>	<b>Invited I:</b> <b>Asst. Prof. Dr. Theerakiat Kerdcharoen</b> <i>“Digitalization of Smell: Development of Chemical Sensors from Lab to Startup Business”</i>		<b>Invited I:</b> <b>Assoc. Prof. Dr. Dheerawan Boonyawan</b> <i>“Nightingale@: a Novel Source for Plasma-Driven Biocatalysis”</i>
13:30-13:45	<b>Invited II:</b> <b>Asst. Prof. Dr. Piyachat Meejitlaisan</b> <i>“Broadband 1.53 μm Emission Characteristics of Er<sup>3+</sup> Doped Alkali Oxyfluorophosphate Glass for Fiber Optic Communication Material”</i>	<b>EEM-OR01 (Ab-ID015):</b> <i>“Effect of Processing Parameters on Dielectric, Ferroelectric and Energy Storage Properties of Nd<sub>2</sub>O<sub>3</sub> Modified BNT-based Lead-free Ceramics”</i>	<b>SSM-OR01 (Ab-ID069):</b> <i>“The Sensitivity Improvement of Electrochemical Non-enzymatic Glucose Sensor by Means of Solar-radiation on Gold Nanoparticles-decorated Iron Oxide Nanorods”</i>		<b>Invited II:</b> <b>Assoc. Prof. Dr. Pakorn Opaprakasit</b> <i>“Functional Materials from Responsive Polymeric Hybrid Nanoparticles”</i>
13:45-14:00		<b>EEM-OR02 (Ab-ID046):</b> <i>“Biocompatible and Biodegradable Gamma Glycine Treated Bacterial Cellulose Nanofibrils Based on Hybrid Piezoelectric-Triboelectric Nanogenerator”</i>	<b>SSM-OR02 (Ab-ID091):</b> <i>“The Effect of Temperature on Carbaryl Pesticide Detection by Using Ion-Sensitive Field Effect Transistor”</i>		
14:00-14:15	<b>OEM-OR01 (Ab-ID035):</b> <i>“Improvement of Luminescence Performance by Addition Potassium Fluoride in Li<sub>2</sub>O-AlF<sub>3</sub>- NaF-P<sub>2</sub>O<sub>5</sub> Glass Doped with Eu<sub>2</sub>O<sub>3</sub> Content for Efficient Reddish-Orange Applications”</i>	<b>EEM-EOR01 (Ab-ID080): (Online)</b> <i>“Energy Harvesting of Time-dependent Electromagnetic Field Wasted from Triboelectric Generators”</i>	<b>SSM-OR03 (Ab-ID065):</b> <i>“Photoelectrochemical Hydrogen Peroxide Detections based on Bismuth Vanadate Thin Film Prepared by Pulsed Laser Deposition System”</i>	<b>Special Symposium I: MRS and JASTIP (13.45-17.15)</b>	<b>BCM-OR01 (Ab-ID036):</b> <i>“Synthesis of Nano Porous Carbon Derived from Vinasses Wastes for Trihalomethanes Adsorption Application”</i>
14:15-14:30	<b>OEM-OR02 (Ab-ID030):</b> <i>“Luminescence Behavior of Sm<sup>3+</sup> Ion Doped Pottasium Aluminium Gadolinium Phosphate Glasses as Orange Laser and Photonics Applications</i>	<b>Coffee break</b>	<b>SSM-OR04 (Ab-ID072):</b> <i>“Vehicle-Theft Detection Device with Image Recognition on Google Cloud Vision”</i>		<b>BCM-OR02 (Ab-ID039):</b> <i>“Synthesis of Lignin Extracted from Black Liquor to Nano Porous Carbon Materials for Tetracycline Adsorption Application”</i>

Friday, 5 August 2022 (P.2)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
14:30-14:45	<b>OEM-OR03 (Ab-ID031):</b> "Development Luminescence and Energy Transfer from $Gd^{3+}$ to $Sm^{3+}$ of Tungsten Calcium Silicoborate Glass for Orange Emission Material Application"	<b>Coffee break</b>	<b>SSM-EOR01 (Ab-ID056): (Online)</b> "IoT-Based Real Time pH Monitoring of University of Mindanao's Chemical Laboratory Wastewater"		<b>BCM-OR03 (Ab-ID042):</b> "Bacterial Cellulose Nanopaper: Preparation, Characterization and Its Applications as Sensing Platforms"
14:45-15:00	<b>OEM-OR04 (Ab-ID034):</b> "A Study on Physical and Luminescence Properties of $Sm^{3+}$ Ions Doped $Li_2O:Al_2O_3:La_2O_3:B_2O_3$ Glasses"	<b>Nanomaterials I (NMA I)</b>  <b>Invited I:</b> <b>Dr. Waluree Thongkam</b> "Thailand Nanosafety and Nanotechnology Ethics Implementation"	<b>Coffee break</b>	<b>Special Symposium I: MRS and JASTIP (13.45-17.15)</b>	<b>BCM-OR04 (Ab-ID097):</b> "The Preparation Characterization and Bioactivity Study of Bioactive Glass Nanoparticles"
15:00-15:15	<b>OEM-OR05 (Ab-ID044):</b> "Influence of Calcium Fluoride on the Radiative Properties of $Sm^{3+}$ Doped Zinc Borophosphate Glasses"		<b>Material Fabrication (MFM)</b>  <b>Invited I:</b> <b>Dr. Tossaporn Lertvanithphol</b> "Design and Fabrication of Nanoscale Plasmonic Structures for Optical Sensor Devices"		<b>BCM-OR05 (Ab-ID098):</b> "A Study on Conversion of Liquid Benzene Derivatives to Value-added Carbon Nanotubes Using Fe and Ni on Alumina Catalysts"
15:15-15:30	<b>Coffee break</b>	<b>Invited II (Online): Prof. Dr. Takashi Ikuno</b> "High-yield Conversion of Plastics into Carbon Nanotubes"		<b>Coffee break</b>	
15:30-15:45	<b>Optics &amp; Electronics II (OEM II)</b>  <b>Invited III:</b> <b>Prof. Dr. Supon Ananta</b> "Perovskite Ferroelectric Ceramics: Domain Evolution Behavior and Dielectric Properties"		<b>Invited II:</b> <b>Dr. Pinit Kiddhantod</b> "X-ray Absorption Spectroscopy: The State of the Art Synchrotron-based Characterization"	<b>Special Symposium II: MRS and JASTIP (13.45-17.15)</b>	<b>Materials for Health Science (MHS)</b>  <b>Invited I:</b> <b>Assoc. Prof. Dr. Paul Gleeson</b> "Probing Inorganic Catalytic Materials and Biological Enzymes using Computational Simulations"
15:45-16:00		<b>NMA-EOR01 (Ab-ID064): (Online)</b> "Direct Fabrication of Carbon Nanotube Wirings on Plastic Films Using a Laser Thermal Transfer Method"			

**Friday, 5 August 2022 (P.3)**

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2	Meeting room 3
16:00-16:15	<b>OEM-OR06 (Ab-ID033):</b> “Investigation of Manganese Oxide (Mn <sub>2</sub> O) Doped in Calcium Sodium Borosilicate Glasses for Photonics Materials Application”	<b>NMA-EOR02 (Ab-ID060): (Online)</b> “Improvement of Output Power of Triboelectric Generators by Adding TiO <sub>2</sub> Particles into PDMS Films”	<b>MFM-OR01 (Ab-ID019):</b> “Design and Fabrication of Flexible Thermoelectric Generator: An Experimental and Simulation Study”	<b>Special Symposium II: MRS and JASTIP (13.45-17.15)</b>	<b>MHS-OR01 (Ab-ID017):</b> “Effects of Ag-doped Content on Antimicrobial Activity and Substrate Color of Chromium Thin Films Deposited by DC Magnetron Sputtering”
16:15-16:30	<b>OEM-OR07 (Ab-ID025):</b> “X-ray Source Using Pyroelectric Crystals under UV Laser Irradiation”	<b>NMA-OR01 (Ab-ID047):</b> “Flexible Bacterial Cellulose–Titania Nanotubes Composite for Wireless Motion Sensor”	<b>MFM-OR02 (Ab-ID057):</b> “Effect of Copper Percentage in Copper Tungsten Electrode on Ti <sub>6</sub> Al <sub>4</sub> V by Electrical Discharge Machining”		<b>MHS-OR02 (Ab-ID048):</b> “Analysis of Asbestos Contamination Found in Talc Powder Products Marketed in Thailand Using X-ray and Infrared Spectroscopies”
16:30-16:45	<b>OEM-OR08 (Ab-ID106):</b> “Giant Dielectric Properties of (Sn/Ta) Co-doped TiO <sub>2</sub> Ceramics”	<b>NMA-OR02 (Ab-ID061):</b> “The effect of Annealing Treatment on WO <sub>3</sub> Thin Film Prepared by Reactive DC Magnetron Sputtering for Photo-electrochemical Water Splitting Application”	<b>MFM-OR03 (Ab-ID068):</b> “Role of Sb Species on Electrical Properties of Sb-doped ZnO Prepared by Pulsed Laser Deposition”		
16:45-17:00	<b>OEM-OR09 (Ab-ID010):</b> “Investigation on Optically Ultraviolet Response of Low-dimensional ZnO Structures Prepared by Chemical Processes”	<b>NMA-OR03 (Ab-ID062):</b> “Surface Modification on ZnO Nanorod as a Template Substrate for ELISA Technique and Dengue Virus Detection Application”	<b>MFM-OR04 (Ab-ID084):</b> “Production of Elastomeric Fibers from Natural Rubber Latex by Electrospinning”		
17.00-17.15		<b>NMA-OR04 (Ab-ID083):</b> “Hydrothermal Fabrication of Nanosheets on Electrospun Titanium Dioxide Nanofibers”	<b>MFM-OR05(Ab-ID102):</b> “TOPSIS Based Selection of Optimal Parametric Combination during Laser Surface Texturing of Zirconia Ceramic”		
17:00-18:30	Poster Session I (All sessions)				
19.00-21.00	Conference Banquet				

Saturday, 6 August 2022

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2
08:30-09:30	Registration			
09:15-10:30	Poster Session II (All sessions and Online poster)			
10:30-10:45	Coffee break			
10:15-10:45			<b>Computational (COM)</b>  <b>Invited I (Online):</b> <b>Prof. Dr. Siriporn Jungstuwong</b> <i>"Encouraging Metal-free Catalyst Reactivity with a Synergistic Effect on Phosphorus and Nitrogen co-doped Graphene for Catalyzed co-oxidation Reaction"</i>	
10:45-11:00	<b>Sensor&amp;Sensing Materials II (SSM II)</b>  <b>Invited II:</b> <b>Prof. Dr. Toru Aoki</b> <i>"TIBr Single Crystal Growth and Device Process for Radiation Detector"</i>	<b>Special Session: Biomedical Applications</b>  <b>(09.45-12.00)</b>	<b>Advanced Functional &amp; Nanomaterials II (AFM) &amp; (NMA II)</b>  <b>Invited I (Online):</b> <b>Prof. Dr. Andrej Kuznetsov</b> <i>"Disorder Induced Ordering in Materials: Discovery of a New Nanoscale Process Resulting in Macroscopic Transformations"</i>	<b>Energy&amp;Environment II (EEM II)</b>  <b>Invited II (Online):</b> <b>Prof. Dr. Puangrat Kajitvichyanukul</b> <i>"Pesticide Removal from Environmental Media Using Physico-chemical and Biological processes"</i>
11:00-11:15				
11:15-11:30	<b>SSM-OR05 (Ab-ID009):</b> <i>"Gas Sensors Based On Tellurium-Filled Carbon Nanotubes"</i>		<b>AFM-OR01 (Ab-ID020):</b> <i>"Design and Construction of Lanthanide Coordination Polymers for Highly Performance Catalysts in CO<sub>2</sub> Cycloaddition Reactions"</i>	<b>EEM-OR03 (Ab-ID086):</b> <i>"Mercury Removal Efficiency of Disulfide- and Thiol-functionalized Lanthanide Coordination Polymers"</i>
11:30-11:45	<b>SSM-OR06 (Ab-ID022):</b> <i>"Study of Novel Neutron Detector Using Vertical Type BGaN Semiconductor"</i>		<b>NMA-OR05 (Ab-ID104):</b> <i>"Comparison of TOPSIS, ARAS and MOORA MCDM Techniques in Optimization of Photochemical Machining Process"</i>	<b>EEM-OR04 (Ab-ID107):</b> <i>"Synthesis and Characterization of 2-Dimensional ZSM-5 Catalyst Using C22-6-6Br2 Template"</i>

## Saturday, 6 August 2022 (P.1)

Time	Ballroom 1	Ballroom 2	Meeting room 1	Meeting room 2
11:45-12:00	<b>SSM-OR07 (Ab-ID023):</b> <i>"Comparison of X-ray Penetration Image Contrast between CdTe and TlBr Detectors"</i>	<b>Special Session: Biomedical Applications</b>  (09.45-12.00)	<b>NMA-OR06 (Ab-ID109):</b> <i>"Functional Magnetic Polymeric Nanoparticles and Their Applications in Medical and Industrial Applications"</i>	<b>EEM-OR05 (Ab-ID108):</b> <i>"Cobalt-based Catalysts Supported on Urea-Modified Sheet-Like ZSM-5 for Hydrodeoxygenation of Fatty acid Methyl Esters"</i>
12.00-13.30	Lunch			
13.30-14.30	Closing Ceremony and Award			
14.30-15.00	Coffee break			