

The 1st International Conference on Advanced Materials for Printed Electronics and Sensors (ICAMPS2020),  
10-11 September 2020, E-Conference, Faculty of Science, Chiang Mai University, Thailand

Agenda: DAY 1: September 10, 2020					
Time	Schedules				
8.00 - 9.00	Registration (via ICAMPS2020 Website)				
9.00 - 9.30	Opening Ceremony (Main Meeting Room)				
9.30 - 10.30	Plenary speaker I >> Professor Dr. Yasuhiro Shimizu Editors-in-Chief, Sens. Actuators B Chem, Nagasaki University, Nagasaki, JAPAN Title: <a href="#">Development of Gas Sensor Technology for Safety and Health</a> Chair: <i>Chaikarn Liewhiran</i> (Main Meeting Room)				
10.30 - 10.45	Break				
10.45 - 11.45	Plenary speaker II >> Dr. Adisorn Tuantranont National Security and Dual-use Technology Center (NSD), NSTDA, THAILAND Title: <a href="#">Graphene Technology for Sensing and Energy Storage Applications</a> Chair: <i>Pisith Singjai</i> (Main Meeting Room)				
11.45 - 13.00	Lunch Break				
13.00-14.00	Plenary speaker III >> Professor Dr. Nicolae Barsan Institute for Physical and Theoretical Chemistry, University Tuebingen, GERMANY Title: <a href="#">Gas Sensors Based on Semiconducting Metal Oxides: Fundamentals and Applications</a> Chair: <i>Chaikarn Liewhiran</i> (Main Meeting Room)				
Session	Session A1	Session	Session B1	Session	Session C1 and C4
Symposia	Sensing materials for Chemical Sensors Chair: <i>Chaikarn Liewhiran</i>	Symposia	Perovskite and Emerging Solar Cell Technologies Chair: <i>Supab Choopan</i>	Symposia	Recent developments in polymer design and synthesis / Bioplastics and polymers for sustainability Chair: <i>Robert Molloy / Runglawan Somsunan</i>
Room	Meeting Room A	Room	Meeting Room B	Room	Meeting Room C

14.00 – 14.20	Invited Speaker: Dr. Anurat Wisitsoraat, NSD, NSTDA Title: <a href="#">Development of Multi-dimensional Metal-oxide Nanostructures for Environmental Gas-Sensing Applications</a>	14.00 – 14.20	Invited Speaker: Dr. Pisist Kumnorkaew, NANOTEC, NSTDA Title: <a href="#">Semiconductor Nanomaterial for Low-Cost and Stable Perovskite Solar Cell Fabrication</a>	14.00 – 14.20	Invited Speaker: Assoc. Prof. Dr. Pakorn Opaprakasit, Thammasat University Title: <a href="#">Trash to Treasures: Chemical Recycling of Polyesters for Use as Value-added Functional Materials</a>
14.20 – 14.35	OA1-01: Anupong Sukee Title: Flame-made AgO-loaded LaFeO <sub>3</sub> -based Acetylene Gas Sensor	14.20 – 14.35	OB1-01: Suparok Yarin Title: SnO <sub>2</sub> Quantum Dots Prepared by Electrochemical Process for Perovskite Solar Cell Application	14.20 – 14.40	Invited Speaker: Assoc. Prof. Dr. Chiravoot Pechyen, Thammasat University Title: <a href="#">Cellulose-based Smart Materials : Modifications, Industrial Applications and Sustainability</a>
14.35 – 14.50	OA1-02: Mameaseng Siriwalai Title: Flame-made Ru-functionalized WO <sub>3</sub> Nanoparticles for H <sub>2</sub> S Sensing	14.35 – 14.50	OB1-02: Woraprom Passatorntaschakorn Title: Low-temperature Carbon Electrode with Solvent Exchange Process for Planar Hybrid Perovskite Solar Cells	14.40 – 14.55	OC1-01: Tu Pham Le Phuong Title: Two-Dimensional FTIR Correlation Spectroscopy for Investigation of Self-folding Structure of Polyampholytes
14.50 – 15.05	OA1-03: Prapakorn Rattanawarinchai Title: Crucial role of gold nanoparticles functionalized zinc oxide nanorods for a non-enzymatic glucose detection	14.50 – 15.05	OB1-03: Nutchka Khamboonkoed Title: Slot-die-coated Zinc Tin Oxide Film for Carbon-based Methylammonium-free Perovskite Solar Cells	14.55 – 15.10	OC1-02: Manita Dumklang Title: Ring-Opening Polymerization of ε-Caprolactone Using a Soluble Tin(II) n-Butoxide-L-lactide Macroinitiator
15.05 – 15.20	OA1-04 : Tanom Lomas Title: Synthesis of few layers graphene–sodium dodecylbenzenesulfonate (SDBS) via electrolytic exfoliation for screen printed supercapacitor electrodes			15.10 – 15.25	OC4-01: Rattaphat Bunkerd Title: Synthesis and Characterization of Chemically-Modified Cassava Starch Grafted with Poly(2-Ethylhexyl Acrylate) for Blending with Poly(Lactic Acid)
15.20 – 15:35	OA1-05: Nur Fatin Liyana Salwadi Title: Copper(II) and palladium(II) complexes with 4-[(2-hydroxybenzylidene)amino]benzoic acid: synthesis, characterization and potential application in non-enzymatic detection of hydrogen peroxide			15.25 – 15.40	OC4-02: Angkhana Wongchalee Title: Preparation, Characterization and Property Testing of Biocomposites of PLA and Modified Longan Shell Powder
15.20-15.40	Coffee break				
Session	Session A2	Session	Session B2 and B5	Session	Session C2
Symposia	Sensing materials for Biosensors <i>Chair: Sukon Phanichphant / Jaroon Jakmumee</i>	Symposia	Flexible IoT Devices for Medical and Agricultural Applications And Photocatalysts for Sustainable Energy <i>Chair: Burapat Inceesungvorn / Sulawan Kaowphong</i>	Symposia	Polymer processing and printing <i>Chair: Adisorn Tuantranont / Winita Punyodom</i>

Room	Meeting Room A	Room	Meeting Room B	Room	Meeting Room C
15.40 - 16.00	<p>Invited Speaker: Assoc. Prof. Jaroon Jakmunee, CMU</p> <p>Title: <a href="#">Label-free colorimetric aptasensor utilizing cationic perylene probe and localized surface plasmon resonance of gold nanoparticles for rapid detection of Aflatoxin B1</a></p>	15.40 – 16.00	<p>Invited Speaker: Assist. Prof. Dr. Teerakiat Kerdcharoen, MU</p> <p>Title: <a href="#">Digitization of Human Body Odor – Method, Devices and Application in Digital Health</a></p>	15.40 - 16.00	<p>Invited Speaker: Assist. Prof. Dr. Winita Punyodom, CMU</p> <p>Title: <a href="#">Surface Modification for Improved Biocompatibility of Absorbable Nerve Guides Fabricated by Electrospinning and 3D Printing</a></p>
16.00 – 16.15	<p>OA2-01: Chamhari Pothipor</p> <p>Title: Label-free Electrochemical Biosensor for Detection of microRNA Cancer Biomarker based on Signal Amplification using Redox Probe Methylene blue and a Gold Nanoparticles/ Polypyrrole/Graphene Electrode</p>	16.00 – 16.20	<p>Invited Speaker: Asst. Prof. Dr. Burapat Inceesungvorn, CMU</p> <p>Title: <a href="#">WO3/BiOBrheterojunction photocatalysts: Activity improvement and mechanistic study on selective oxidation of benzylamine</a></p>	16.00 – 16.15	<p>OC2-01: Jirawan Jindakaew</p> <p>Title: Solvent-infusion cold drawing of poly(L-lactide) filaments</p>
16.15 – 16.30	<p>OA2-02: Jittrapun Soongsong</p> <p>Title: A colorimetric aptasensor for chlorpyrifos detection based on gold nanoparticles aggregation and cationic polymer</p>	16.20 – 16.35	<p>OB2-01: Mattawan Japa</p> <p>Title: Nitrogen-doped TiO<sub>2</sub> via Thermal Hydrolysis and Photocatalytic Performance in Selective Oxidation Under Visible Light of Benzyl Alcohol and Benzylamine Under Visible Light</p>	16.15 – 16.30	<p>OC2-02: Nattanicha Chaiya</p> <p>Title: Fabrication of Poly(L-lactic acid)-Based Colorimetric Humidity Sensors by Printing Technology</p>
16.30 – 16.45	<p>OA2-03: Supakeit Chanarsa</p> <p>Title: Label-free Electrochemical Immunosensor based on Polyaniline /Poly(acrylic acid) Film for Detection of Human immunoglobulin G</p>	16.35 – 16.50	<p>OB2-02: Apinya hankhntod</p> <p>Title: Effect of humidity on physical property of TiO<sub>2</sub> nanoparticulate films prepared by facile sparking process</p>	16.30 – 16.45	<p>OC2-03: Paveena Tikakosol</p> <p>Title: Assessment of Rheological Properties in Relation to Fabrication Conditions of Medical-grade Poly(L-lactide-co-glycolide) for Use as Resorbable Bone Fixation Devices</p>
		16.50-17.05	<p>OB2-03: Supanan Anuchai</p> <p>Title: Development of Bismuth Oxyhalide Solid Solutions for Selective Organic Synthesis</p>	16.45 – 17.00	<p>OC2-04: Kittisak Yarungsee</p> <p>Title: Effect of Rheological Properties on the Melt Extrusion of Poly(L-lactide-co-ε-caprolactone) Monofilament Absorbable Surgical Sutures</p>
<b>Poster Session (5-min oral presentation)</b>					
	<p>Session A</p> <p><i>Chair: Chaikarn Liewhiran</i></p> <p>(Meeting Room A)</p>		<p>Session B</p> <p><i>Chair: Thapanee Sarakonsri / Supab Choopan</i></p> <p>(Meeting Room B)</p>		<p>Session C</p> <p><i>Chair: Winita Punyodom / Patnarin Worajittiphon</i></p> <p>(Meeting Room C)</p>
17:00 – 17:05	PA1-01: Chanthawut Jetjamnong	17:00 – 17:05	-	17:00 – 17:05	PC1-01: Boontharika Thapsukhona

	Title: Glancing Angle Deposition of Nanocolumnar NiWO Film Gas Sensor by Reactive Co-magnetron Sputtering with Glancing Angle Deposition				Title: Tin(II) n-hexoxide as a new initiator for the ring-opening polymerization of $\epsilon$ -caprolactone: Isoconversional kinetic analysis by non-isothermal DSC
17:05 – 17:10	<b>PA1-02: Pranawee Sukhan</b> Title: Hydrogen Sulfide Gas Sensor Based on Cadmium and Zinc Ferrite Nanoparticles	17:05 – 17:10	<b>PB2-01: Wattikon Sroila</b> Title: Photoinduced current generation and photocatalytic activity of $\text{TiO}_2\text{-Fe}_2\text{O}_3$ nanoparticles coated MWCNTs films prepared by sparking process	17:05 – 17:10	<b>PC1-02: Tanyaluck Mekpothi</b> Title: Synthesis and Characterization of Poly(methylenelactide-g-L-lactide) Graft Copolymers via Ring-Opening Polymerization
17:10 – 17:15	<b>PA3-01: Chakkarin Maksuk</b> Title: Simple Preparation of Porous Gold Modified Gold Screen-Printed Electrode for Non-enzymatic Hydrogen Peroxide Detection	17:10 – 17:15	<b>PB4-01: Chatwarin Poochai</b> Title: $\alpha$ - $\text{MnO}_2$ nanofibers decorated N&S-co doped reduced graphene oxide and carbon nanotubes as cathode by printing method for ionic liquid additive- aqueous rechargeable $\text{Zn/MnO}_2$ batteries	17:10 – 17:15	<b>PC2-01: Manasanan Namhongsa</b> Title: Fabrication of Poly(L-lactide-co- $\epsilon$ -caprolactone) and Poly(L-lactide-co-glycolide) by Combined 3D printing and Electrospinning for Use as Absorbable Nerve Guides
17:15 – 17:20	<b>PA5-01: Supasit Hirunsak</b> Title: Development of Screen-Printed Graphene Electrode by Overoxidation for Simultaneous Determination of Sunset yellow and Tartrazine			17:15 – 17:20	<b>PC2-02: Itchaya Thinnakorn</b> Title: Fabrication of Medical-grade Poly(L-lactide) by Microinjection Molding for Use as Resorbable Plates and Screws
17:20 – 17:25	<b>PA5-02: Kriengkri Timsorn</b> Title: Artificial Olfactory System Based on a Combination of Metal Oxide and Nanostructure Gas Sensors for Applications in Agricultural Quality			17:20 – 17:25	<b>PC3-01: Tharnthip Krasian</b> Title: Fibrous Membranes of Poly(lactic acid) and their Nanocomposites for Adsorption Application
				17:25 – 17:30	<b>PC3-02: Pattarakamon Chaiwan</b> Title: Effect of Organo-modified Montmorillonite Nanoclay on Mechanical and Thermal Properties of Carbon Fiber-reinforced Phenolic Composites
				17:30 – 17:35	<b>PC3-03: Nidchamon Jumrus</b> Title: Influence of annealing and etching on physical and wetting properties of acrylic surface
				17:35 – 17:40	<b>PC4-01: Benjawan Khantho</b> Title: Preparation and Characterization of Biodegradable Film Based on Poly(lactic acid) Incorporate with Herbal Oils
				17:40 – 17:45	<b>PC4-02: Montida Chaiphut</b>

					Title: Development of the Mulch Film from Poly(lactic acid) Incorporated Natural Fillers
				17:45 – 17:50	PC5-01: Vitsarut Primpray Title: Development of Poly lactic-co-glycolic acid and graphene composite for tissue engineering applications
				17:50 – 17:55	PC5-02: Chanon Suyamud Title: Silk-Fibroin Coated Liposomes for Sustained Release of Doxorubicin in Drug Delivery System
				17:55 – 18:00	PC5-03: Waraporn Jenvoraphot Title: Development of Drug-loaded Biodegradable Electrospun Membranes for the Treatment of Periodontitis
				18:00 – 18:05	PC3-04: Kritsadayut Lekjinda Title: UCST-type Thermo-responsive Nanocarriers for Synergistic Image-guided, Photothermal- and Chemo-therapy
18.00 – 20.00	Conference Dinner (Invitation Only)				

## Agenda: DAY2: September 11, 2020

9.00 – 10.00	Plenary speaker IV>> Dr. Jupiter Hu Deputy General Director of Electronic and Optoelectronic System Research Laboratories, TAIWAN Title: <a href="#">Flexible electronics at ITRI</a> <i>Chair: Pisith Singjai</i> (Main Meeting Room)
10.00-10.15	Break

Session	Session A3	Session	Session B3	Session	Session C3
Symposia	Sensing for Diagnostics and Healthcare <i>Chair: Kontad Ounnunkad</i>	Symposia	Thermoelectric Materials and Flexible Thin Films for Energy Conversion Devices <i>Chair: Anucha Watcharapasorn</i>	Symposia	C3: Polymer Nanostructures and Nanocomposites <i>Chair: Patnarin Worajittiphon</i>
Room	Meeting Room A	Room	Meeting Room B	Room	Meeting Room C
10.15– 10.35	Invited Speaker: Assoc. Prof. Dr. Rina Patramanon, KKU Title: <a href="#">Digitalizing biosensor: Next generation of bionano-electrochemical based sensing</a>	10.15– 10.35	Invited Speaker: Assoc. Prof. Dr. Aparporn Sakulalavek, KMITL Title: <a href="#">Fabrication of Wearable Thermoelectric Power Generator</a>	10.15– 10.35	Invited Speaker: Assoc. Prof. Dr. Panya Sunintaboon, Mahidol University

					Title: <a href="#">Trimethylated Chitosan-based Nanoparticles: Their Syntheses and RNA/DNA Delivery Carriers</a>
10.35 – 10.50	OA3-01: Pijika Mool-am-kha Title : Hybrid electrocatalytic nanocomposites based on carbon nanotubes/nickel oxide/nafion toward an individual and simultaneous determination of serotonin and dopamine in human serum	10.35 – 10.50	OB3-01: Athorn Vora-ud Title: Thermoelectric Properties of Copper Iodide Transparent Thin Films	10.35 – 10.50	OC3-01: Supachok Tanpichai Title: Transparent Cellulose Nanofiber Reinforced Composites with Superior Performances for Electronic Applications
10.50 – 11.05	OA3-02: Kulrisa Kuntamong Title: Label-Free Electrochemical Immunosensors Based on Redox Gold Nanoparticles for Simultaneous Detection of Cancer Biomarkers	10.50 – 11.05	OB3-02: Thammanoon Kapanya Title: A combination of point defects and nano-sized grains to minimize lattice thermal conductivity of Sn and Se co-doped CoSb <sub>3</sub> via mixed ball milling and SPS	10.50 – 11.05	OC3-02: Kittiya Plermjai Title: A Comparison of Thermal and Functional Group Characterization of Cellulose between Sugarcane Bagasse and Hemp
11.05 – 11.20	OA3-03: Jantima Upan Title: A label-free electrochemical aptasensor using platinum nanoparticles on carboxylated-graphene oxide for alpha-fetoprotein detection	11.05 – 11.20	OB3-03: Poom Prayoonphokkharat Title: Thermoelectric Properties of Pr-substituted YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-y</sub> Ceramics	11.05 – 11.20	OC3-03: Pattranuch Pongsuk Title: Effects of Fabrication Method on Ionic Conductivity, Crystallinity and Thermal Properties of PEO-LiCF <sub>3</sub> SO <sub>3</sub> -HNTs Composite SPE
11.20 – 11.35	OA3-04: Patrawadee Yaiwong Title: Label-Free Electrochemical Immunosensor Based on Methylene Blue adsorbed a 2D Molybdenum disulfide/Graphene Oxide Nanocomposite for Detection of Matrix Metalloproteinase-7 Immunosensor Based on Methylene Blue adsorbed a 2D Molybdenum disulfide/Graphene Oxide Nanocomposite for Detection of Matrix Metalloproteinase-7			11.20 – 11.35	OC3-04: Chariya Kaewsaneha Title: Fabrication and Properties of Hollow Poly(lactic acid-co-glycidyl methacrylate) Particles via Phase Inversion Emulsification
11.35 – 13.00	Lunch Break				
Session	Session A4 and A5		Session B4		Session C5
Symposia	Applications of Chemical Sensors / Sensors for Security and Safety Applications <i>Chair: Sukon Phanichphant</i>		Printed Electronics Technology for Energy Storage <i>Chair: Thapanee Sarakonsri</i>		Biomedical polymers and medical devices <i>Chair: Kiattikhun Manokruang</i>
Room	Meeting Room A		Meeting Room B		Meeting Room C

13.00 – 13.20	Invited Speaker: Assoc. Prof. Dr. Satreerat Hodak, CU Title: <a href="#">Rapid and Highly Selective Detection of H<sub>2</sub>S by Ag and Ni doped CaCu<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub> Film Sensors</a>	13.00 – 13.20	Invited Speaker: Mr. Chakrit Sriprachuabwong, NSD, NSTDA Title: <a href="#">Recent Progress in Printed Electrode for Energy Storage Applications</a>	13.00 – 13.20	Invited Speaker: Dr. Chanpen Karuwan, NSD, NSTDA Title: <a href="#">Portable graphene-based electrochemical genosensor for rapid Mycobacterium tuberculosis detection</a>
13.20 – 13.40	Invited Speaker: Dr. Kata Jaruwongrunsee, NECTEC, NSTDA Title: <a href="#">Recent progress in the development of non-MEMS MOS gas sensing platform at NECTEC-NSTDA</a>	13.20 – 13.35	OB4-01 Anan Tanwilaisiri Title: Carbon Conductive Paint For Manufacturing Energy Storage Devices Using Integration Of 3D Printing Techniques	13.20 – 13.35	OC5-01: Maytinee Yooyod Title: Functionalised pH Responsive Hydrogels for Controlled Release
13.40 – 13.55	OA4-01: Wisan Chananchana Title: Flow injection amperometric sensor for expedient determination of orthophosphate in soil and water	13.35 – 13.50	OB4-02: Johannes Mensing Title: Aqueous asymmetric supercapacitors based on rGO/PANI/MnO <sub>2</sub> anodes and rGO/MoS <sub>2</sub> /CuO-NiO cathodes	13.35 – 13.50	OC5-02: Nantaprapa Tuancharoensri Title: Fabrication of core-shell nanofiber scaffolds of PVASS - PLGA for skin tissue engineering applications
13.55 – 14.10	OA4-02: Pimpakhan Kaewpangchan Title: Screening of Coffee Impurity Using a Homemade NIR Sensor System	13.50 – 14.05	OB4-03 Naruephon Mahamai Title: Synthesis and Characterization of SbSi on N-doped Graphene Composites as Anode Materials for Li-ion Batteries	13.50 – 14.05	OC5-03: Donraporn Daranarong Title: Design and Fabrication of Biomedical-grade Polymer Membranes for Use in Oral Surgery Applications
14.10 – 14.25	OA4-03: Nutthatida Phuangsaikai Title: Fabrication of Low-Cost NIR Sensor for Detection of Agricultural Products				
14.45 – 15.00	Closing Ceremony and Poster Awards (Main Meeting Room)				
15.00 – 17.00	Research Team Meeting				
17.00 – 20.00	Dinner (Research Team Only)				