



2nd IMEP Conference (IMEP 2016) Program “Engineering Materials for Sustainability” October 27-28, 2016 | Microtel by Wyndham, UP Technohub, Quezon City

Day 1 (27 October 2016)

Time	Program	Speaker
8:00 – 8:45	Registration	
8:45 – 9:00	Opening Ceremony	
9:00 – 9:30	Keynote Talk: PEM fuel cell introduction and current research and development	Dr. Abel Chuang UC Merced, USA, CHED-PCARI, GREENPower PI
9:30 – 10:00	Snack	
10:00 – 12:00	Workshop 1 (Guill-bern Corp.) X-ray Diffraction: Breakthrough Phase Identification Techniques Simulation Software The art of milling – Nano powder produced with High energy Planetary Ball mill	Mr. Taisuke Yoshiki International Area Manager, Rigaku Mr. Wolfgang Simon Director, Fritsch GmbH
12:00 – 13:00	Lunch	
13:00 – 15:00	Workshop 2 (Sigmatech) Field Emission Scanning Electron Microscopy and Thermal Analysis	Mr. Marlon Llana Technical and Operations Director, NASAT
15:30 – 17:30	Workshop 3 (ALV Tech.) Latest development in optical characterization of Nanomaterial: Tip-Enhanced Raman- Fast imaging of nanomaterials	Dr. Florian Nehme Export Are Sales Manager, Horiba Scientific
18:00 – 19:00	Poster Session	
19:00 – 19:15	iMeet2016 Opening and President’s Report	
19:15 – 19:30	Awarding of Membership Certificates	
19:30 – 22:00	Dinner and Fellowship (with Special Performance from Tanghalang Bagong Sibol and music band c/o Appetite Music)	

Day 2 (28 October 2016)

Time	Program	Speaker
8:00 – 8:40	Registration	
8:40 – 8:50	Opening Ceremonies	
8:50 – 9:00	Welcome Remarks	Dr. Rinlee Butch M. Cervera IMEP Pres.
9:00 – 9:30	Keynote Address: The Role of Science and Engineering for Sustainable Development	Dr. William G. Padolina CHED-PCARI Program Manager
9:30 – 10:00	Plenary: Engineering Certification and Practice	Engr. Federico A. Monsada Philippine Technological Council (PTC), Pres.
10:00 – 10:30	Conference Photo and AM Snack	
10:30 – 11:00	Plenary: Green Photonics Researches Based on Molecular and Hybrid Materials Science	Prof. Hisao Yanagi NAIST, Japan
11:00 – 11:30	Plenary: Mitigation of failure mechanisms in industrial tools by surface materials engineering	Dr. Dennis Quinto Beta Nanocoatings Tech., Inc.
11:30 – 12:00	Plenary: Perovskite and related structure for Solar Applications	Prof. Matthew Sherburne UC Berkeley, USA
12:00 – 13:00	Lunch	
13:20 – 15:00	Parallel Sessions 1 <ul style="list-style-type: none"> • Session 1: Nanomaterials and Composites • Session 2: Advanced Metals and Ceramics • Session 3: GREENPower (Materials for Energy) 	Dr. Leslie Joy Diaz, Chair Dr. Adolfo Jesus Gopez, Chair Dr. Rinlee Butch Cervera, Chair
15:30 – 17:00	Parallel Sessions 2 <ul style="list-style-type: none"> • Session 4: Biomaterials and Polymers • Session 5: Electronics and Semiconductor 	Dr. Alberto Amorsolo, Jr., Chair Dr. Manolo Mena, Chair
17:00 – 17:15	Announcement (Best Poster Award) & Closing Remarks	Dr. Manolo G. Mena IMEP Vice Pres.

Parallel Sessions (28 October 2016)

	SESSION 1 Nanomaterials and Composites		SESSION 2 Advanced Metals and Ceramics		SESSION 3 GREENPower (Materials for Energy)	
	Title of Paper	Presenter	Title of Paper	Presenter	Title of Paper	Presenter
1:20-1:40	<i>Utilization of Natural Clay Systems Containing Kaolinite as Reinforcing Filler for Rubber Tire Tread</i>	Mitch-Irene Kate N. Galvan	<i>Electrodeposition of Rhodium on Silver Alloy</i>	Ryan M. Bonifacio	<i>Palladium Electrodeposited on Silver Alloy as Electrocatalyst for Hydrogen Production via Water Electrolysis</i>	Aisa Grace Custodio
1:40-2:00	<i>Comparison of Fe-MMT Nanoparticles and Electrospun Nanofiber Membrane of PCL/Fe-MMT for the Adsorption of Heavy Metals from Aqueous Solution</i>	Nerissa Unielle D. Quenga	<i>Surfactant-Assisted Synthesis of Nickel Nanowires</i>	Luigi Dahonog	<i>Electrochemical Characterization of Lithium Iron Phosphate-Based Cathode Material for Lithium-Ion Batteries</i>	Princess Stephanie P. Llanos
2:00-2:20	<i>Thermal and Viscoelastic Properties of Montmorillonite-Reinforced Chitin-Cellulose Nanocomposite</i>	Myra G. Bungag	<i>High Purity Silica Nanoparticles from Geothermal Waste Brine as Reinforcing Filler in Wire-Bead Insulation</i>	Joann A. Villarias	<i>Fe-Doped Amorphous and Crystalline Nanosilica from Rice Husk as Potential Anode Material for Lithium Batteries</i>	Maricris Cunanan
2:20-2:40	<i>Growth of Hematite Nanostructures on Iron Foil for Environmental Cleaning</i>	Mary Donnabelle Balela	<i>Preparation and Characterization of Lithium Lanthanum Titanate Lithium-Ion Conducting Solid Electrolyte</i>	Andrew C. Dono	<i>Stability of Electrodeposited Rhodium on Silver Alloy in Acidic and Basic Water Electrolysis</i>	Ryan M. Bonifacio
2:40-3:00	<i>Optimization of Nanocellulose Yield from Pineapple Leaf Fibers using Hot Water Treatment Method</i>	Ariel Paolo Maria R. Lavilla	<i>Preparation and Characterization of Li_{7-3x}GaxLa₃Zr₂O₁₂ Lithium-Ion Conducting Solid Electrolyte</i>	Ruziel Larmae T. Gimpaya	<i>Synthesis of NiO-YSZ Composite SOEC Cathode Material via the Glycine-Nitrate Process</i>	Felix Rey C. Bueta

	SESSION 4 Biomaterials and Polymers		SESSION 5 Electronics and Semiconductors	
	Title of Paper	Presenter	Title of Paper	Presenter
3:20-3:40	<i>Optimization of Nanocellulose Yield from Water Hyacinth</i>	Gillene Maye S. Labonete	<i>Leadframe-to-Mold Adhesion Performance of Different Leadframe Surface Morphologies</i>	Matthew M. Fernandez
3:40-4:00	<i>Detection of aspartame via microsphere-patterned and molecularly imprinted polymer arrays</i>	Brylee David B. Tiu	<i>Cost-Effective Manufacturing Using Printing Fabrication Technologies: Towards Printable Perovskite Solar Cell</i>	Lea Cristina D. Macaraig
4:00-4:20	<i>Low Voltage Electrophoretic Deposition of Porcine-Derived Hydroxyapatite on Stainless Steel 316 using Partially Hydrolyzed Polyacrylamide as Medium</i>	Nelly Karen Viktoria Rosales	<i>Mitigation of Tin Whisker Growth in Nickel-over-Copper Substrate in DPAK Package</i>	Robert Dave K. Alonzo
4:20-4:40	<i>Flame Retardance of Big-Leaf Mahogany (Swietenia macrophylla) and Yemane (Gmelina arborea) Treated with Ammonium Phosphate Monobasic</i>	Richard Cornelio	<i>Leadframe Alloys Cu-Fe-P and Cu-Cr as an Alternative to Cu-Zr for Wheel-Speed Magnetic Sensor Package</i>	Matthew M. Fernandez
4:40-5:00	<i>Thin Film Deposition of Polymerized Acetylene for Potential Anti-biofilm Applications</i>	Meliton R. Chiong	<i>Impact of Intermetallic Growth on On-State Resistance of Power MOSFET Devices</i>	Adele Resonable

**Poster Session
27 October 2016**

Title of Paper	Presenter
Analysis of the Effect of RF Plasma Treatment of Paper on Ink Adhesion	Maria Gabriela Sales
Reverse Engineering of Rubber Material for Footwear Application	Benjamin Jose Alfaro
Synthesis of Copper(II) Oxide (CuO) Nanoparticle-modified Zeolite Framework using In-situ Chemical Reduction Method	Airah Osonio
Synthesis and Characterization of Pure and Al-Doped $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Lithium-Ion Conducting Solid Electrolyte via Modified Pechini Method	Benjamin Jose Alfaro
Acid and Heat Treatments of Pyrolytic Carbon (CBp) Derived from the Pyrolysis of Waste Rubber Tires	Myra Ruth Poblete
A Parametric Study of Electrospinning of PCL-NaMMT Nanocomposite Fibers using a Multi-nozzle Electrospinning Assembly	Jenn Acay, Claudyne Almario, Steffany Ann Moreno
The Effect of Particle Size Reduction on the Stability of Iron Modified Montmorillonite-Polycaprolactone (FeMMT-PCL) Suspension	John Carlo Bangayan
Determination of the Effects of Clay and Iron Loading in Fe-Montmorillonite Polycaprolactone Nanofibers	Landlee Mae Fernandez, Honeylyn Herbieta
Suspension Characterization of Porcine-Derived Hydroxyapatite-PHPA for Electrophoretic Deposition on a Non-conducting Substrate	Angelo Jacob Samaniego
Installing the Iron-Modified Montmorillonite Polycaprolactone Nanofiber Adsorbent Membrane in a Column Device for Small-Scale Mining Wastewater Treatment	Sheila Mae Cabusas
Synthesis of cobalt oxide nanowires via electroless deposition and thermal oxidation for supercapacitor applications	Mary Donnabelle Balela
Surface property modification of transparent conductive oxides by plasma treatment for perovskite solar cell application	John Mark Christian Dela Cruz