

<b>SCIENTIFIC POSTERS - LIST OF ACCEPTED ABSTRACTS - ENGINEERING</b>					
<b>No.</b>	<b>Title of Abstract (Please do not use All Caps.)</b>	<b>Names of authors</b>	<b>Major Author -</b>	<b>Presenting</b>	<b>Affiliations with Addresses</b>
ESTD-01	Design and Development of a Smart Wireless Irrigation System for Rice: A Simulation Model	Jezreel Abasolo, Camille Maestrecampo, and Lharie Mae Becina, * Jonalyn Castaño*, Lorcelie Taclan, Melquiades Garrino, Elmer Joaquin, and Edwin Balila	Jezreel Abasolo, Camille Maestrecampo, and Lharie Mae Becina,	Jonalyn C. Castano	Electronics Engineering Department, College of Science and Technology, Adventist University of the Philippines
ESTD-02	A Mathematical Model for the Planning of Negative-Emissions Biochar Systems	Jesus Gabriel Flores, Patricia Nicole Rafer, Cristine Mestizo, Beatriz Belmonte	Beatriz A. Belmonte	Beatriz A. Belmonte	Chemical Engineering Department/Research Center for the Natural and Applied Sciences, University of Santo Tomas, España Blvd., 1015 Manila, Philippines
ESTD-03	Antifouling and Anticorrosion Properties of Superhydrophobic Coatings Based on Stearic Acid-Modified Geothermal SiO <sub>2</sub> Particles	Rose Anne E. Acedera, Mark Verndick A. Cabading, Kyzyl B. Sencil, Mary Donnabelle L. Balela	Rose Anne E. Acedera	Rose Anne E. Acedera	Sustainable Electronic Materials Group, Department of Mining, Metallurgical, and Materials Engineering, University of the Philippines Diliman, Diliman 1101, Quezon City, Philippines
ESTD-04	Biochar from agricultural residues as adsorbents for phytohormones extracted from waste coconut water	Veronica P. Migo, Glenn Christian P. Acaso, Nicole Bianca J. Catli	Veronica P. Migo	Veronica P. Migo	University of the Philippines Los Baños, College, Laguna
ESTD-05	Characterization and sterilization of Philippine bentonite via $\gamma$ -irradiation	Eleanor M. Olegario, Mon Bryan Z. Gili	Eleanor M. Olegario	Mon Bryan Z. Gili	Philippine Nuclear Research Institute, Commonwealth Avenue, Diliman, Quezon City 1101, Philippines

ESTD-06	Development and Evaluation of Terra Sigillata Slip Utilizing Clay from Cagayan and Rice Hull Silica-Based Deflocculant as Thin Coating Material for Ceramics	Emie Salamangkit Mirasol, Jenny R. Catenza	Emie Salamangkit Mirasol	Emie Salamangkit Mirasol	Department of Materials Science and Engineering (Ceramic Engineering Program) College of Engineering, Mariano Marcos State University, City of Batac, Ilocos Norte, Philippines
ESTD-07	Development of Biodegradable Saba ( <i>Musa acuminata</i> x <i>balbisiana</i> ) Starch-based Food Films with Ginger ( <i>Zingiber officinale</i> ) Oil as Additive	Alyssa Mae Borillo, William Limbitco, Jan Eren Peñan and Lola Domnina B. Pestaño	Lola Domnina B. Pestaño	Lola Domnina B. Pestaño	Chemical Engineering Department, University of Santo Tomas, España City of Manila 1008 Metro Manila, Philippines
ESTD-08	Effect of Pyrolysis Conditions on the Adsorption Capacity of Rice Straw Derived Biochar	Judy Anne Mae M. Del Rosario, Juan Miguel V. Esporlas, Justienne Rei P. Laxamana and Jhulimar C. Castro	Jhulimar C. Castro	Judy Anne Mae M. Del Rosario	Department of Chemical Engineering and Research Center for Natural and Applied Sciences, University of Santo Tomas, España, Sampaloc, Manila
ESTD-09	Emergency Water Disinfection System	Rochelle Retamar, Rodelma Perez, Prima Joy Margarito, Dante Vergara, Reynaldo Esguerra	Rochelle Retamar	Rochelle Retamar	Department of Science and Technology Industrial Technology Development Institute Gen. Santos Ave., Bicutan, Taguig City, Philippines
ESTD-10	Enhanced adsorption property of gamma-irradiated NaOH-modified Philippine natural zeolite (PNZ)	Mon Bryan Z. Gili, Franklin A. Pares, Andrea Luz G. Nery, Neil Raymund D. Guillermo, Edanjarlo J. Marquez, Eleanor M. Olegario	Mon Bryan Z. Gili	Mon Bryan Z. Gili	Philippine Nuclear Research Institute, Commonwealth Ave., Diliman, Quezon City
ESTD-11	Evacuation Routing Assessment during Earthquake Occurrence in Butuan City Using GIS Techniques	Arturo G. Cauba Jr.*Sam Nickolette S. Ignacio	Arturo G. Cauba Jr.	Arturo G. Cauba Jr.	Caraga State University, Ampayon, Butuan City, Philippines

ESTD-12	Fabrication of Electrospun Poly(vinyl Alcohol)/Cellulose Acetate Nanofibers Impregnated with Ag Nanoparticles Synthesized using Ionic Liquids	Maria Laya C. De Guzman, Jonathan N. Patricio, Ser John Lynon P. Perez, Susan D. Arco	Susan D. Arco	Maria Laya C. De Guzman	Synthetic Organic Chemistry Laboratory, Institute of Chemistry, University of the Philippines Diliman, Quezon City 1101
ESTD-13	Flexural Performance of Bamboo Reinforced Concrete Beams	Andie- V L. Brotonel, Bryan Anthony M. Casao, Krishna M. Datinguino, Jowella De Guzman, Nicole R. De Leon, Ian Kyle Terenz G. Gupit, Michaela Falcutila, SiddArtha B. Valle	Andie- V L. Brotonel	Andie- V L. Brotonel	Civil Engineering Department, College of Engineering, University of Batangas, Batangas City
ESTD-14	Improving the Physico-Mechanical Properties and Powderpost Beetle Resistance of Bamboo Through Thermal Modification	Juanito P. Jimenez, Jr.*, Michaela Germaine M. Macalinao, Gilberto N. Sapin	Juanito P. Jimenez, Jr.*	Juanito P. Jimenez, Jr.*	Department of Science and Technology (DOST), Forest Products Research and Development Institute (FPRDI) College, Laguna

ESTD-15	Kapok-Cotton Carbon Sponges for Oil Recovery	Wayne Christian Datiles, Mary Donnabelle Balela, Marvin Herrera, Ronniel Manalo, Monet Concepcion Detras, and Cybelle Concepcion Futalan	Wayne Christian P. Datiles	Wayne Christian P. Datiles	Sustainable Electronic Materials Group, Department of Mining, Metallurgical and Materials Engineering, University of the Philippines Diliman, 1101 Quezon City, Metro Manila, Philippines; Institute of Mathematical Sciences and Physics, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines; Department of Forest Products and Paper Science, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines; Department of Chemical Engineering, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines; Department of Environmental Science, Ateneo de Manila University, 1108 Quezon City, Metro Manila, Philippines
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ESTD-16	Musa Textilis Fiber Mat as Prevention to Soil Erosion	Leslie Mari B. Legaspi, Maricess Henessy L. Caponpon, Archel M. Capuno, Cherry Ghen E. Erigbuagas, Joy Catherine D. Ilagan, Carl Jayson C. Merhan, Shane Angelica D. Raviza, SiddArtha B. Valle	Leslie Mari B. Legaspi	Leslie Mari B. Legaspi	Civil Engineering Department, College of Engineering, University of Batangas, Batangas City
ESTD-17	Natural Pigments Derived from Talisay (Terminalia catappa) leaves, Coffee (Coffea sp.) pulp, and Mahogany (Swietenia macrophylla) tree barks for the Restoration of Historical Paintings	Malachi Simon C. Dingcong, Josiah M. Poyugao, Kimberly P. Viron, Zailla F. Payag	Zailla F. Payag	Malachi Simon C. Dingcong	Department of Science and Technology - Philippine Textile Research Institute, Gen. Santos Ave., Bicutan, Taguig City

ESTD-18	One-Step Preparation of Calcium Stearate-Coated Kapok Fibers for Oil Sorption	Aimee Lorraine Blaquera, Mary Donnabelle Balela, Marvin Herrera, Ronniel Manalo, Monet Concepcion Maguyon-Detras, Cybelle Concepcion Futralan	Aimee Lorraine M. Blaquera	Aimee Lorraine M. Blaquera	Sustainable Electronic Materials Group, Department of Mining, Metallurgical and Materials Engineering, University of the Philippines Diliman, Diliman, 1101 Quezon City, Philippines Institute of Mathematical Sciences and Physics, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines Department of Forest Products and Paper Science, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines Department of Chemical Engineering, University of the Philippines Los Baños, 4031 Los Baños, Laguna, Philippines Department of Environmental Science, Ateneo de Manila University, Loyola Heights, 1108 Quezon City, Philippines
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ESTD-19	Optimization of Bioethanol Yield from Sugarcane ( <i>Saccharum officinarum</i> ) Press Mud via Enzymatic Saccharification and Fermentation Process	Aikovin O. Clerigo, Lois Anne M. Aguila, Grazielle Anne C. De Torres, Feanne Aveline I. Rivera, Rhonalyn V. Maulion	Aikovin O. Clerigo	Rhonalyn V. Maulion	Chemical and Food Engineering Department, College of Engineering, Architecture & Fine Arts Batangas State University, Batangas City
ESTD-20	Optimization of Pretreatment and Enzymatic Hydrolysis of Sugarcane Bagasse for Polyhydroxybutyrate (PHB) Production	Princess J. Requiso, Hazel Joy C. Barrameda, Ryan Christian R. Suplito, Catalino G. Alfafara, Fidel Rey P. Nayve, Jr., Jey-R S. Ventura	Princess J. Requiso	Princess J. Requiso	Department of Engineering Science, College of Engineering and Agro-Industrial Technology (CEAT), University of the Philippines (UP) Los Baños  Department of Chemical Engineering, CEAT, UP Los Baños  National Institute of Molecular Biology and Biotechnology, UP Los Baños
ESTD-21	PhysicoChemi- Mechanical, Thermal, and Rheological Properties Analysis of Pili Tree ( <i>Canarium Ovatum</i> ) Resin as Aircraft Integral Fuel Tank Sealant	Mark Kennedy E. Bantugon	Mark Kennedy E. Bantugon	Mark Kennedy E. Bantugon	Philippine State College of Aeronautics- Villamor Campus / Piccio Garden, Villamor, Pasay City
ESTD-22	Pineapple Leaf ( <i>Ananas comosus</i> ) Fiber-blended Textiles as Alternative Fabric Support for Remedial Conservation of Historical Textiles	Josiah M. Poyugao, Malachi Simon C. Dingcong, Kimberly P. Viron, Zailla F. Payag	Zailla F. Payag	Josiah M. Poyugao	Research and Development Division, Philippine Textile Research Institute, Department of Science and Technology, Bicutan, Taguig City, 1631, Philippines,

ESTD-23	Post-Treatment of Food Processing Wastewater Effluent for Nutrient Removal	Reynaldo L. Esguerra (Major Author), Myra L. Tansengco, David L. Herrera, Joven R. Barcelo (Presenting Author), Mario Josefino V. Capule, Ma. Theresa C. Artuz	Reynaldo L. Esguerra	Joven R. Barcelo	Environment and Biotechnology Division, DOST-ITDI, DOST Compound, Bicutan, Taguig City
ESTD-24	Production and Characterization of Epoxidized Kraft Lignin from Acacia mangium Wood	Vynce Gracielyn Q. Ong <sup>1</sup> , Denise Ester S. Sanchez <sup>1</sup> , Maria Victoria M. Sumagang <sup>1</sup> , Ronniel D. Manalo <sup>2*</sup>	Vynce Gracielyn Q. Ong	Ronniel D. Manalo	1Department of Chemical Engineering, College of Engineering and Agro-industrial Technology, University of the Philippines Los Baños  2Department of Forest Products and Paper Science, College of Forestry and Natural Resources, University of the Philippines Los Baños
ESTD-25	Production and Evaluation of Biodiesel from Rambutan (Nephelium lappaceum) Seed Oil	Rejie C. Magnaye*, Arjie F. Aguila, John Carlo M. Arellano, Kim Dowell D. Panganiban	Kim Dowell D. Panganiban	Rejie C. Magnaye	Batangas State University, Alangilan, Batangas City
ESTD-26	Production of Cellulose Acetate from Pineapple (Ananas comosus) Leaves for Filtration of Sugar Industry Wastewater	Mike Joshua D. Lejano, Kris C. Cacao, Kim Lalie M. Esleta, Rhonalyn V. Maulion	Mike Joshua D. Lejano	Rhonalyn V. Maulion	Chemical and Food Engineering Department, College of Engineering, Architecture & Fine Arts Batangas State University, Batangas City



ESTD-27	Production of Food Packaging Bioplastic Film From <i>Gracilaria verrucosa</i> (Red Seaweed)	Symon Arago, Hanna Gonzales, Brad Dimaapi, Naneth Aguado	Brad Dimaapi	Naneth Aguado	Batangas State University
ESTD-28	Propulsion Requirement and Analysis of a Canard Prandtl – Wing Unmanned Aerial Vehicle Platform for Civilian Oriented Missions	Cindy May C. Belivestre, Jonathan C. Maglasang	Cindy May C. Belivestre	Cindy May C. Belivestre	Caraga State University (Ampayon, Butuan City) ; Mindanao State University - Iligan Institute of Technology (Tibanga, Iligan City)
ESTD-29	Retention and Concentration of Embedded Nutritional Contents in AMCHPD Dried Saluyot ( <i>Corchorus olitorius</i> L)	Lorcelie B. Taclan, Emson Y. Taclan, Regina H. Molina, Ronaldo Q. Dominguez, Mark John Ratio, Roy Ephraim M. Umpad and Darwin Garduque	Lorcelie B. Taclan	Lorcelie B. Taclan	Adventist University of the Philippines
ESTD-30	Selected Properties of Zinc Oxide and Copper Oxide Embedded Paper	Miccoh N. Quimio <sup>1</sup> , Denise Ester S. Sanchez <sup>1</sup> , Maria Victoria M. Sumagang <sup>1</sup> , Ronniel D. Manalo <sup>2*</sup>	Miccoh N. Quimio	Ronniel D. Manalo	1Department of Chemical Engineering, College of Engineering and Agro-industrial Technology, University of the Philippines Los Baños  2Department of Forest Products and Paper Science, College of Forestry and Natural Resources, University of the Philippines Los Baños

ESTD-31	Selection of a Sanitary Landfill Site in Lipa City, Batangas using GIS and Analytic Hierarchy Process	Ivan Matthew M. Dalisay, Jesther G. De Roxas, Geraldine Joy D. Fajilan, Gian Mickel C. Malabanan, Maribel H. Mallillin, John Laurence A. Ramos, Princess G. Tañas, SiddArtha B. Valle	Ivan Matthew M. Dalisay	Ivan Matthew M. Dalisay	Civil Engineering Department, College of Engineering, University of Batangas, Batangas City
ESTD-32	Synthesis of Iron Oxide Nanoparticles using Coffea liberica Pericarp Extracts Obtained Using Microwave Assisted Method	Rhonalyn V. Maulion, Hazel A. Abrahan, Nica Mariel M. De Castro, Eloisa Jean C. Malaluan, Ralph John Erwin R. Ornales.	Rhonalyn V. Maulion	Rhonalyn V. Maulion	Chemical and Food Engineering Department, College of Engineering, Architecture & Fine Arts Batangas State University, Batangas City
ESTD-33	Synthesis of Polyhydroxybutyrate/Starch/Triethyl Citrate Filaments for 3D Printing Applications	Joemer A. Adorna Jr, Ruby Lynn G. Ventura, Fidel Rey P. Nayve Jr., Jey-R S. Ventura	Joemer A. Adorna	Joemer A. Adorna	1Biomaterials and Environmental Engineering Laboratory, Department of Engineering Science, College of Engineering and Agro-Industrial Technology, University of the Philippines Los Baños
ESTD-34	A simplest method of growing ZnO nanostructures	Mary Donnabelle Balela, Mariel Jeline Jose, Rose Anne Acedera, Charles Lois Flores and Christian Pelicano	Mary Donnabelle Balela	Mary Donnabelle Balela	Sustainable Electronic Materials, Department of Mining, Metallurgical and Materials Engineering, University of the Philippines, 1101 Diliman, Quezon City
ESTD-35	Using MS-Excel(Spreadsheet) & Finite Difference Method in the Numerical Visualization Analysis of Adrian Bejan's Heatlines & Masslines of Convective Heat Transfer	David D.Parial & Alexander Pelonia	David D. Parial	David D. Parial	University of Eastern Philippines

ESTD-36	Utilization of Adsorbent derived from Chicken Feathers for Cadmium Metal (Cd 2+) Adsorption in Simulated Wastewater	Rejie C. Magnaye, Harrieth Zane M. Manalo, Ian Patrick T. Perile	Ian Patrick T. Perile	Rejie C. Magnaye	Batangas State University, Alangilan, Batangas City
ESTD-37	Utilizing Rice Husk-derived Mesoporous Silica as Support Material for Catalytic Bimetallic Particles	Yasmin D.G. Edañol, Ken Aldren S. Usman, Roland L. Barbosa, Leon M. Payawan Jr.	Yasmin D.G. Edañol	Yasmin D.G. Edañol	Natural Sciences Research Institute, University of the Philippines, Diliman, Quezon City 1101, Philippines/ Materials Science and Engineering Program, College of Science, University of the Philippines, Diliman, Quezon City 1101, Philippines/ Institute for Frontier Materials, Deakin University, Waurn Ponds, Geelong, VIC 3216, Australia/ Covalent Metrology Services, Sunnyvale, CA 94085, United States/ Institute of Chemistry, University of the Philippines, Diliman, Quezon City 1101, Philippines
ESTD-38	Water Repellent-Antimicrobial Finishing of Pineapple-Cotton Blended Fabric: A Pilot Scale Approach	Zailla F. Payag, Carlo S. Macaspag, Julius L. Leano Jr.	Zailla F. Payag	Zailla F. Payag	DOST-PTRI Gen. Santos Ave Bicutan Taguig City