



## 38<sup>TH</sup> PHILIPPINE CHEMISTRY CONGRESS (38PCC)

IN TANDEM WITH

## 2024 INTERNATIONAL CONFERENCE ON CHEMISTRY (IC<sup>2</sup>)

CHEMINNOVATION:

Sustaining a Better Tomorrow

New Ideas, New Developments, New Technologies

## POSTER PRESENTATIONS

Posters should be printed in portrait [Size: A0 (841 x 1189 mm or 33.110 x 46.811 inches)]. It should include the header (title, author(s), affiliation(s), contact detail(s), abstract, introduction, methodology, results and discussion, conclusions, and references/acknowledgments.

The poster should be posted by **8:00 am** in the designated area at the SMX Convention Center, SM-Lanang, Davao City on **July 22, 2024**. Please be in the poster area during the poster sessions.

**Competing posters:** Posters with **A** as the first code are competing posters. The presenters are students (SHS, undergraduate or graduate students). Best poster awards will be determined among the competing posters by a set of judges.

**Non-competing posters:** Posters with **B** as the first code are non-competing posters.

## COMPETING POSTERS

1. MATERIALS CHEMISTRY AND NANOTECHNOLOGY		
A1-P01	Fabrication of gold and silver nanoparticle-functionalized cotton textiles with color-stable and infrared-driven photothermal properties	<b>Lorenzo Angelo Mapalo</b> , Rufus Mart Ceasar Ramos, Michelle Regulacio <i>University of the Philippines Diliman [IC], Philippines</i>
A1-P02	Gold nanoparticle-diatom biosilica from <i>Thalassiosira</i> sp as photonic Surface-enhanced Raman spectroscopy (SERS) substrate	<b>Marie Edrienne Bucag</b> , Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
A1-P03	Hydrothermal synthesis and characterization of fluorescent N-doped carbon dots derived from niacin (Vitamin B3)	<b>Charles Edward Tumale</b> , Samuel Sabularse, John Dahrell Vilela <i>Polytechnic University of the Philippines - Manila, Philippines</i>
A1-P04	Silver nanoparticles synthesized from Pomelo ( <i>Citrus maxima</i> ) albedo extract for colorimetric detection of mercury (II) ions	<b>Anne Kristi Sabangan</b> , Franklin Amandy <i>Adamson University, Philippines</i>
A1-P05	Evaluation on aqueous ammonia sensing capability of green-synthesized copper-mediated silver nanostructures using <i>Chromolaena Odorata</i> leaf extract as reducing agent	<b>Dinah Silvor</b> , Aira May Hortal, John Dahrell Vilela <i>Polytechnic University of the Philippines, - Manila, Philippines</i>
A1-P06	In vivo nanotoxicity of GSH-CuInS <sub>2</sub> /ZnS quantum dots in larval zebrafish ( <i>Danio rerio</i> )	<b>Camille Kate Palomares</b> , Erwin Enriquez, Olivia Erin Buenafe <i>Ateneo de Manila University, Philippines</i>
A1-P07	Synthesis of methacrylated sago starch and methacrylated TiO <sub>2</sub> : innovative precursors for heavy metal adsorbent hydrogels	<b>Shaira Mae Maeda</b> , Chlee Casundo, Mary Jayper Mangao, John Lloyd Gildo, Mark Anthony Lavapie, Christina Loquere, Brigette Orog, Temmy Vales <i>Caraga State University, Philippines</i>
A1-P08	Polymer-based hydrogel with <i>Volkameria inermis</i> L. as a drug delivery system for wound application	<b>Sophia Marie Palcon</b> , Gracelyn Alexis Balanga, Dominique Julia Balingit, Liliana Coleen Pajarillaga, Lena Alexine Syjongtian, Ysabel Ann De Ocampo, Mary Jho-Anne Corpuz <i>University of Santo Tomas, Philippines</i>
A1-P09	Synthesis and characterization of silica aerogel derived from <i>Manihot esculenta</i> periderm through modified sol-gel method and ambient pressure drying	<b>Hannah Caryl Eah Rodrigo</b> , Sonny Romero Jr., Renz Bareo, Aldrinne Phillip Trance <i>Polytechnic University of the Philippines, Philippines.</i>



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<b>A1-P10</b>	Enhanced stability and drug release characteristics of chitosan-alginate nanoparticles crosslinked with hexametaphosphate for drug encapsulation	<b>Mayreen Angela Habal</b> , Laurice Reign Lanto, Mackenzie Kobe Gabriel San Agustin, Alangelico San Pascual, Eliard Roswell Yanza <i>Philippine Science High School – Main Campus, Philippines</i>
<b>A1-P11</b>	Preparation of imidazolium-functionalized chitosan polymer blends as potential support for lipase immobilization	<b>Miguel Karlo Santos</b> , Susan Arco <i>University of the Philippines Diliman [IC], Philippines</i>
<b>A1-P12</b>	Synthesis of sago-based hydrogels for heavy metal ion remediation	<b>Mary Jayper Mangao</b> , Shaira Mae Maeda, Chlee Casundo, John Lloyd Gildo, Mark Anthony Lavapie, Christina Loquere, Brigette Orog, Temmy Vales <i>Caraga State University, Philippines</i>
<b>A1-P13</b>	Assessment of mechanical performance of poly(lactic acid) bioplastic reinforced with graphene synthesized via turbulence-assisted shear exfoliation	<b>John Mark Lucero</b> , Ian-Mar Valledor, Renz Bareo <i>Polytechnic University of the Philippines, Philippines</i>
<b>A1-P14</b>	Optimization and characterization of PVA-based electrospun nanofibers loaded with Malachite green	<b>Natasha Marie Aquino</b> , Allan Christopher Yago <i>University of the Philippines Diliman [IC], Philippines</i>
<b>A1-P15</b>	Evaluation of sodium-modified and potassium-modified Philippine Natural Zeolite for the adsorption of aqueous zinc (II) ions	<b>Elaiah Asperin</b> , Art Delos Santos, Ogden Michael Javier, Alangelico San Pascual, Catherine Joy Dela Cruz <i>Philippine Science High School – Main Campus, Philippines.</i>
<b>A1-P16</b>	Surfactant-modified natural zeolite (SMNZ) adsorbents for the removal of antineoplastic drug (AND) contaminants from simulated wastewater	<b>Ray Vincent Pelayo</b> , Ethan Angelo Gaw, Aldrin P. Bonto, Christian Gabriel Seagan, Julius Andrew Nuñez <i>University of the Philippines Manila, Philippines; De La Salle University Philippines</i>
<b>A1-P17</b>	Biodegradation of pharmaceuticals using Zeolite-Biofilm of <i>Bacillus thuringiensis</i> and <i>Enterobacter hormaechei</i>	<b>Rhythm Paolo Cabrera</b> , Ethan Angelo Gaw, Aldrin Bonto, Christian Gabriel Seagan, Julius Andrew Nuñez <i>University of The Philippines Manila, Philippines; De La Salle University, Philippines</i>
<b>A1-P18</b>	Enhanced removal of acetylsalicylic acid using surfactant-modified natural zeolites	<b>Marvince John Araneta</b> , Ethan Angelo Gaw, Aldrin Bonto, Christian Gabriel Seagan, Julius Andrew Nuñez <i>University of the Philippines Manila, Philippines; De La Salle University Philippines</i>
<b>A1-P19</b>	Synthesis of L-histidine metal-organic frameworks (MOFs) and their application in the separation of xylene isomers	<b>Alexandra Loja</b> , Marlon Conato <i>University of the Philippines Diliman [IC], Philippines</i>
<b>A1-P20</b>	Enhanced electrochemical detection of mercury (II) ions using screen-printed carbon electrodes functionalized with mesoporous silica films	<b>Gwyn Mae Benigian</b> , Deomila Basnig-Mamaoag, Sarah May Nacario <i>Caraga State University, Philippines; Mineral Resources Management Research and Training Center (MinRes), Philippines</i>
<b>A1-P21</b>	Surfactant-modified biochar derived from water hyacinth ( <i>Eichhornia crassipes</i> ) as adsorbent for bisphenol A in aqueous media: optimization of adsorption parameters using Response surface methodology	<b>Fatima Medina</b> , Jonyl Garcia, Franklin Amandy <i>Adamson University, Philippines</i>
<b>A1-P22</b>	Valorization of rice husk and rice husk-derived cellulose through TEMPO-mediated oxidation for sustainable material production	<b>Justine Kuchler</b> , Jose Paolo Bantang, Joan Candice Ondevilla, Toni Beth Lopez, Gil Nonato Santos, Lenie Quiatchon-Baeza, Feiyang Wang, Cedric Delattre, Aldrin Bonto <i>Université Clermont Auvergne, France; De La Salle University, Philippines; University of the Philippines Los Banos, Philippines; Institut Universitaire de France, France</i>



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A1-P23	Preparation and characterization of polymer blends from polysulfone and cellulose acetate derived from sugarcane bagasse for oil-water separation	<b>Jonella Paulmanal</b> , Ckhriztine Mae Angeline Lumpas, John Dahrell Vilela, Jezza Bayot, Dahlia Apodaca <i>Polytechnic University of the Philippines, Philippines; Mapua University, Philippines</i>
A1-P24	Investigating the humidity stability of doped lead-free MASnCl <sub>x</sub> I <sub>3-x</sub> perovskite photovoltaic layer	<b>Rojons Evangelista</b> , Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
A1-P25	Photonic sintering of inkjet-deposited starch-stabilized gold nanoparticles on poly(ethylene naphthalate)	<b>Arron Jacob Galenzoga</b> , Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
A1-P26	Photocatalytic degradation of Eriochrome Black T using g-C <sub>3</sub> N <sub>4</sub> /Fe <sub>2</sub> O <sub>3</sub> photocatalyst	Avelina Grace Deocampo, Malachi Erniz Maramot, Ellyssa Joyce Marin, <b>Jeroen Ralph Tenorio</b> , Christian Gabriel Seagan, Adrian Go, Jose Paolo Bantang, Rey Eliseo Torrejos, Francis dela Rosa, Eric Punzalan <i>De La Salle University [SHS, Chem Dept], Philippines; Adamson University, Philippines; DOST - Philippine Textile Research Institute, Philippines</i>
A1-P27	Anthropomorphic concrete: facilitating autogenous self-healing through hydration of calcium silicate	<b>Alroy Ortega</b> , Hillary Bon, Princess Niña Dela Cruz, Leigh Vincent Legaspi, Maria Lourdes Tamares, Mary Grace Delos Santos, Aces Joseph San Pedro <i>Dr. Yanga's Colleges, Inc. [SHS, CAS], Philippines;</i>
<b>2. COMPUTATIONAL CHEMISTRY</b>		
A2-P28	In silico analysis of flavonoids from selected Philippine medicinal plants as potential inhibitors of sodium-glucose cotransporter 2 – MAP17 (SGLT2 – MAP17) protein	<b>John Francis Antiola</b> , Bong Carlo Remillion, Cervinia Manalo, Maritess Lacquio, Mariam Recuenco <i>University of the Philippines Los Baños [IC], Philippines</i>
A2-P29	Molecular dynamics of SARS-CoV-2 omicron variants from Philippine isolates against Hesperidin as an emerging spike protein inhibitor	<b>June Alexis Santos</b> , Searle Duay, Arturo Gaitano III <i>Adamson University, Philippines; De La Salle University, Philippines</i>
A2-P30	In silico analysis of the induced protein-ligand stabilization in glycerol-water binary mixtures	<b>Joshua Jener Lopez</b> , Jokent Gaza, Ricky Nellas <i>University of the Philippines Diliman [IC], Philippines</i>
A2-P31	Binding-in-tandem: Discovery of a tandem CBM15-CBM4 xylan-binding protein from <i>Teredinibacter turnerae</i>	<b>Lyle Ijssel de Guzman</b> , Renato Carpina, Joan Catherine Chua, Eizadora Yu <i>University of the Philippines Diliman [IC, MSI], Philippines</i>
A2-P32	Insights on the binding of oligosaccharides with a bifunctional xylanase/acetylxylan esterase from <i>Teredinibacter turnerae</i>	<b>Renato Carpina</b> , Joshua Jener Lopez, Eizadora Yu, Ricky Nellas <i>University of the Philippines Diliman [IC, MSI], Philippines</i>
A2-P33	Investigating the allosteric probe-dependence of BMS-986121 in $\mu$ -opioid receptor G-protein complex through contact correlation analysis	<b>Jherome Brylle Woody Santos</b> , James Peter Lim, Mac Kevin Braza, Ricky Nellas <i>University of the Philippines Diliman [IC], Philippines; University of California, San Diego, USA</i>
A2-P34	In silico screening of plant-derived peptides exhibiting antioxidant activity as possible dual inhibitors of MDM2 and MDMX	<b>Mary Christie Espinosa</b> , Fatima Joy Cruz <i>University of the Philippines Manila, Philippines</i>
A2-P35	Development of a workflow for metal-metal surface interaction characterization based on periodic DFT	<b>Senfred Matthew Merca</b> , Bernard Ramos, John Rae Escosio, Emily Castriciones <i>University of the Philippines Diliman [NSRI, IC], Philippines</i>



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A2-P36	In-silico analysis of the Angiotensin Converting Enzyme (ACE) inhibitory properties of active biopeptides derived from the 11S globulin of pecan nuts ( <i>Carya illinoensis</i> )	<b>Jeremy Sean Canja</b> , Fatima Joy Cruz <i>University of the Philippines Manila, Philippines</i>
A2-P37	In silico investigation of human hemoglobin binding interactions with plastic oligomers: insights from docking and molecular dynamics simulations	<b>Vince Erick Reyes</b> , Fatima Joy Cruz <i>University of the Philippines Manila, Philippines</i>
A2-P38	In silico evaluation of potential blocking antibodies of CD39 and CD73 using molecular docking and dynamics: Shedding light on tuberculosis pathogenesis	<b>Kyle Louie Vitug</b> , Fatima Joy Cruz, Leonard Guevarra Jr. <i>University of the Philippines Manila, Philippines; University of Santo Tomas, Philippines</i>
A2-P39	Evaluation of the anti-diabetic potential of Jamaican berry ( <i>Muntingia calabura</i> L.) polyphenols through molecular docking	<b>Nathan Kelsey Omandam</b> , Mark Ryan Tripole <i>Visayas State University, Philippines</i>
A2-P40	In silico design and synthesis recommendations for novel monoterpene analogs with bio-repellent potential against rice weevil ( <i>Sitophilus oryzae</i> )	<b>Johnxis Romeo Siat</b> , Jerwin Quirante, Al Jerome Magsino, Ricky Nellas <i>University of the Philippines Los Baños [IC], Philippines; University of the Philippines Diliman [IC], Philippines</i>
A2-P41	Investigating the effects of mutations on the APE1-XRCC1-DNA complex of the base excision repair pathway	<b>Jalen Ross Galvez</b> , James Peter Lim, Gardee Peña, Mervin June, Eizadora Yu, Ricky Nellas <i>University of the Philippines Diliman [IC, MSI], Philippines; University of Santo Tomas, Philippines</i>
<b>3. ENVIRONMENTAL CHEMISTRY, BIOTECHNOLOGY, AND BIOCHEMISTRY</b>		
A3-P42	Detection of multiclass antibiotics in Angat, Pampanga, Marikina, and Pasig Rivers	<b>Katrina Marie Sta. Ana</b> , Ma. Avelina Montalaba, Kate Coleen Galera, Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>
A3-P43	Occurrence of natural and industrial phenolic compounds in Mega Manila Rivers	<b>Kate Coleen Galera</b> , Katrina Marie Sta. Ana, Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>
A3-P44	Spatiotemporal variabilities of nitrate-N flux in river systems draining into Manila Bay	<b>Kathleen Marie Sumbong</b> , Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>
A3-P45	Copper determination from Calancan Bay sea water: A method optimization and ruggedness analysis	<b>John Paul Arcilla</b> , Ginger Ashely King, Kathlia De Castro-Cruz <i>Mapúa University, Philippines</i>
A3-P46	Preliminary quantification and characterization of microplastic present in commercial fishes from Navotas fishport	<b>Nyala Laika Cagas</b> , Keith Limuel Bejasa <i>Adamson University, Philippines</i>
A3-P47	Preliminary assessment of microplastic pollution in Pasig River: characterization, comparison, & ecological implications	<b>Andrea Nicole Aguila</b> , Kiana Colline Santos, Donita Faye Tan, Kathlia De Castro-Cruz <i>Mapúa University, Philippines</i>
A3-P48	Nutrient composition (PO <sub>4</sub> , NO <sub>3</sub> <sup>-</sup> NO <sub>2</sub> <sup>-</sup> , and NH <sub>3</sub> ) of aerosol particles in Bolinao, Pangasinan	<b>Richard Redil</b> , Irene Rodriguez <i>University of the Philippines Diliman [MSI], Philippines</i>
A3-P49	Whisking alikabok away: Taming dust with <i>Zea mays</i> (corn) straw and <i>Eucheuma cottonii</i> (red algae)-based bio-dust suppressants for dirt roads	<b>Mariel De Leon</b> , Carmela Roxas, Mariel Divine Del Rosario, Mark Justin Mateo, Hersay Plana, Jane Andrea Sison, Mary Grace Delos Santos, Aces Joseph San Pedro <i>Dr. Yanga's Colleges, Inc. [SHS, CAS], Philippines</i>





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A3-P50	Removal of trimethoprim (antibiotic) using persulfate-based advanced oxidation and sulfite-based advanced reduction processes	<b>Hanna Shaira Santillan</b> , Adrian Go, Francis dela Rosa, Eric Punzalan <i>De La Salle University, Philippines; Adamson University, Philippines</i>
A3-P51	Optimizing soil fertility through naturally chitosan-rich <i>Luffa aegyptiaca</i> (loofa) peel	<b>Lorenzo Miguel Bongat</b> , Adrian George Andres Lascano, James Nicolai Neric <i>Don Bosco Technical Institute – Makati, Philippines</i>
A3-P52	Macronutrient evaluation of frass leachate derived using <i>Hermetia illucens</i> L. prepared under varying pre-composting treatments	Trisha Negro, <b>Jezrahiah Quizana</b> , John Dahrell Vilela <i>Polytechnic University of the Philippines, Philippines.</i>
A3-P53	Extraction & chemical characterization of a natural dye in Philippine sappanwood ( <i>Biancaea sappan</i> (L.) Tod.) for textile applications	<b>Christian Gabriel Seagan</b> , Virgilio Linis, Jose Paolo Bantang, Mark Nathaniel Evan Dolina, Melvin Sabalo, Aldrin Bonto, Candice Ondevilla, Wilfred Espulgar, Maria Carmen Tan <i>De La Salle University, Philippines</i>
A3-P54	Evaluation of local commercial fabrics as seawater evaporation rate enhancer in solar desalination still	<b>Gabriel Emmanuel Undag</b> , Antonio Basilio <i>Ateneo de Davao University, Philippines</i>
A3-P55	Corrosion inhibitor using a formulated acidify metallic halide solution for metal corrosion defense	<b>Juan Benigno Luarca</b> , Blessie Basilia <i>Mapua University, Philippines</i>
A3-P56	From threads to charges: Polyaniline/modified ZnO coconut husk biochar on banana ( <i>Musa acuminata</i> ) - cotton blended fabric for supercapacitor applications	Junella Ruth Banawa, Hidenori Tomimatsu, David Joseph Alzate, Felicidad Christina Peñafiel, Christina Binag <i>University of Santo Tomas, Philippines</i>
A3-P57	Polyaniline with coconut husk-derived biochar with ZnO on pineapple ( <i>Ananas comosus</i> )-cotton fabric composite as electrode materials for supercapacitor devices	Andrea Nicole Abarcar, David Joseph Alzate, Hidenori Tomimatsu, Felicidad Christina Ramirez-Peñafiel, Christina Binag <i>University of Santo Tomas, Philippines</i>
A3-P58	Phosphoproteins with aberrant expression in Filipino NSCLC candidates for biomarker development	<b>Lara Beatrice Suñga</b> , Baby Rorielyn Dimayacyac-Esleta, Eloise Prieto, Herdee Gloriane Luna, Lorenzo Zarate, Ferdinand Mira <i>University of the Philippines Diliman [IC, NIMBB], Philippines; Lung Center of the Philippines</i>
A3-P59	Metagenome sequencing reveals bacterial and antibiotic resistance diversity in Philippine farm soils.	<b>Joshua Despabiladeras</b> , Ma. Avelina Montalaba, Ma. Anita Bautista, Maria Pythias Espino <i>University of the Philippines Diliman [IC, NIMBB], Philippines</i>
A3-P60	Effect of iron availability on nitrogen utilization by Symbiodiniaceae <i>Symbiodinium microadriaticum</i> and <i>Cladocopium goreaui</i> in batch cultures	<b>Joshua James Versola</b> , Tung-Yuan Ho, Hannah Reich, Irene Rodriguez <i>University of the Philippines Diliman [MSI], Philippines; Academia Sinica, Taiwan; State University of New York, USA</i>
A3-P61	Chemotype evaluation of <i>Teredinibacter turnerae</i> 1022X under different culture conditions	<b>Jacquelyn Peran</b> , Lilibeth Salvador-Reyes <i>University of the Philippines Diliman [MSI], Philippines</i>
A3-P62	Utilizing fluorescently labeled markers to detect DNA fragments for downflow molecular analyses	<b>Lorna Santos</b> , Ann Maureen Malonzo, Loida Perez <i>Philippine National Police Forensic Group, Philippines; Philippine Rice Research Institute, Nueva Ecija, Philippines</i>
A3-P63	Proteomic profiling of the venom of <i>Conus mustelinus</i>	<b>Isobel Suba</b> , John Aidan Resoles, Eizadora Yu <i>University of the Philippines Diliman [IC, MSI], Philippines</i>



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A3-P64	Fruitomics: highlighting Philippine fruit biodiversity through LC-MS metabolomics	<b>Juliana Loo</b> , Camille Rodriguez, Hiyas Junio <i>University of the Philippines Diliman [IC], Philippines</i>
A3-P65	Nuclear Magnetic Resonance (NMR) based metabolomics of larval zebrafish ( <i>Danio rerio</i> )	<b>Philip Gabriel Opao</b> , Fabian Dayrit, Olivia Erin Buenafe <i>Ateneo de Manila University, Philippines</i>
A3-P66	Phenotype and gene-editing evaluation of Cas9-GFP expressing <i>Daphnia magna</i>	<b>Rob Lumio</b> , Hilbert Magpantay, Naruki Shibata, Nikko Adhitama, Yasuhiko Kato, Hajime Watanabe <i>De La Salle University, Philippines; Angeles University Foundation, Philippines; Osaka University, Japan</i>
A3-P67	Acetoxime esters as acylating agent for lipase-assisted synthesis of lipid-drug conjugates	<b>Brynt Yuan Lord Placides</b> , Julius Adrie Garcia, Armando M. Guidote Jr. <i>Ateneo de Manila University, Philippines; Philippine Institute of Pure and Applied Chemistry (PIPAC), Philippines.</i>
<b>4. NATURAL PRODUCTS, MEDICINAL, AGRICULTURAL, AND FOOD CHEMISTRY</b>		
A4-P68	Chemical constituents from different dichloromethane extracts of selected succulents in Central Luzon	<b>Rhanney Gonzales</b> , Vincent Antonio Ng, Chien-Chang Shen, Consolacion Ragasa(t) <i>De La Salle University, Philippines; Central Luzon State University, Philippines; National Research Institute of Chinese Medicine, Ministry of Health and Welfare, Taiwan</i>
A4-P69	Secondary metabolites from the leaves of mulberry ( <i>Morus alba</i> ) grown under different light conditions: <sup>13</sup> C NMR analysis	<b>Jesza Mei Ganiron</b> , Fabian Dayrit <i>Ateneo de Manila University, Philippines</i>
A4-P70	Phytochemical, proximate, and mineral analysis of Himbabao ( <i>Broussonetia luzonica</i> ) leaves	<b>Rizelle Faye Cruz</b> , Julius Adrie Garcia, Ian Ken Dimzon, Armando Guidote Jr. <i>Ateneo de Manila University, Philippines; Philippine Institute of Pure and Applied Chemistry (PIPAC), Philippines</i>
A4-P71	New lyso-ornithine lipid isolated from the shipworm symbiont <i>Teredinibacter turnerae</i>	<b>Ernest Guiller Pineda</b> , Jeremiah Batucan, Zildjian Acyatan, Shalice Susana, Jacquelyn Peran, Lilibeth Salvador-Reyes <i>University of the Philippines Diliman[MSI], Philippines</i>
A4-P72	Phenolic content, radical scavenging activity and alpha-amylase inhibition of <i>Clitoria ternatea</i> L. flower extract and in silico docking analysis of selected phenolics against alpha-amylase	<b>Paula Riza Alarcon</b> , Maritess Lacquiao, Cervinia Manalo, Mariam Recuenco <i>University of the Philippines Los Baños [IC], Philippines University of the Philippines Diliman [IC, MSI], Philippines</i>
A4-P73	Phytochemical study of the ethyl acetate extract of <i>Calamus zollingeri</i> subsp. merrillii Becc. leaves with $\alpha$ -glucosidase inhibitory activity	<b>Joshua Aaron Cabando</b> , Gian Carlo Tambago, Jacob Noel Inguito, Camille Ann Sapico, Evangeline Amor <i>University of the Philippines Diliman [IC], Philippines</i>
A4-P74	Effects of starter cultures on the metabolite content, antioxidant, and anti-aging activities of Tapuy lees	<b>Edward Kevin Braçais</b> , Paul Mark Medina <i>University of the Philippines Manila, Philippines</i>
A4-P75	In-vitro anti-tyrosinase activity of selected seaweeds of Cebu	<b>Ladashia Blessiliza Po</b> , Angel Lyn Kristin Tan <i>University of San Carlos, Philippines</i>
A4-P76	Endemic <i>Pandanus clementis</i> Merr. A potential candidate against oxidation and COX-2 inflammation	<b>Gerald Glenn Hernandez</b> , Mario Tan, Melfei Bungihan, Agnes Castillo, Maribel Nonato <i>University of Santo Tomas, Philippines</i>
A4-P77	A study of the in vitro antibacterial activity of <i>Calophyllum inophyllum</i> L. plant extracts against <i>Staphylococcus aureus</i> ,	<b>Christianne Sofia Vicente</b> , Fabian Dayrit <i>Ateneo de Manila University, Philippines</i>



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	and its phytochemical profiling using <sup>13</sup> C Nuclear Magnetic Resonance spectroscopy and thin-layer chromatography	
A4-P78	Acute toxicity, in silico and anti-angiogenic property of noni ( <i>Morinda citrifolia</i> L.) aqueous leaf and fruit juice extract by inhibition of fin regeneration in zebrafish, <i>Danio rerio</i>	<b>Vince Guiller Recinto</b> , Kellyrose Moniva, Nyssa Anne Nepomuceno, Liana Marlyn Paradero, Fergie Holy Parallon, Raven Coleen Rivera, Honeymae Alos, Oliver Villaflores, Ross Vasquez <i>University of Santo Tomas, Philippines; University of the Philippines Manila [NIH], Philippines</i>
A4-P79	From spice to science: An in vitro analysis and investigation of the effects of turmeric on the proliferation of <i>Saccharomyces cerevisiae</i> (Baker's Yeast)	<b>Rose Ann Benedicto</b> , Kent Caesar Gervacio, Ma. Cristina Ramos <i>University of Santo Tomas, Philippines</i>
A4-P80	Effects of <i>Curcuma longa</i> l. Spray-dried aqueous extract in prednisolone-induced osteoporosis in zebrafish ( <i>Danio rerio</i> )	Elyssa Nicole Ablaza, Alyssa Danielle Alicuman, Shirley Ann Arciaga, <b>Kurt Cyrus Babas</b> , Denzel Dick Baena, Andrea Balico, Ronilo Bermudo II, Ross Vasquez, Oliver Villaflores <i>University of Santo Tomas, Philippines</i>
A4-P81	Antiangiogenic analysis of selected medicinal plants found in Pampanga, Philippines	<b>Marion Grace Arias</b> <i>Angeles University Foundation, Philippines</i>
A4-P82	Antifungal activities of <i>Dracontomelon dao</i> (Dao), <i>Ziziphus talanae</i> (Balakat), and <i>Terminalia catappa</i> (Talisay) found in Pampanga against <i>Aspergillus niger</i>	<b>Maeveline Ghayle Flores</b> , Carolyn Arbotante, Zenaida Mergal <i>Angeles University Foundation, Philippines</i>
A4-P83	Antibacterial activities of the leaf extracts of <i>Dracontomelon dao</i> (Dao), <i>Ziziphus talanae</i> (Balakat), <i>Terminalia catappa</i> (Talisay), against <i>Escherichia coli</i> and methicillin-resistant <i>Staphylococcus aureus</i>	<b>Andrea Liezl Andres</b> <i>Angeles University Foundation, Philippines</i>
A4-P84	Phytochemical analysis and in vitro antioxidant activities of <i>Dracontomelon dao</i> , <i>Terminalia catappa</i> and <i>Ziziphus talanae</i> leaves from Pampanga, Philippines	<b>Jamela Mae Escoto</b> <i>Angeles University Foundation, Philippines</i>
A4-P85	Investigating the antioxidant and photoprotective properties of <i>Manihot esculenta</i> extract as a natural complement to commercial sunscreens	<b>Galaena Marla Alferes</b> , Athena Gabrielle Kimwell, Marie Emmanuelle Martinez, Restituto Cortez Jr., Eliard Roswell Yanza <i>Philippine Science High School – Main Campus, Philippines</i>
A4-P86	Application of ATR-FTIR coupled with hierarchical cluster analysis for the rapid screening of <i>Solanum torvum</i> species found in the Philippines	<b>Angelica Teñoso</b> , Ronald Jefferson Narceda <i>Adamson University, Philippines; Philippine Drug Enforcement Agency, Philippines</i>
A4-P87	ATR-FTIR characterization and multivariate analysis discrimination of different commercial propolis extracts	<b>Rodel E. Quero</b> , Elmer-Rico Mojica <i>University of the Philippines Los Baños, Philippines; Pace University, New York, USA</i>
A4-P88	Potential FTIR/ATR spectral signature development on psychoactive Solanaceae plants using multivariate analysis	<b>Jag Soliven</b> , Ronald Jefferson Narceda, Arturo Gaitano III <i>Adamson University, Philippines; Philippine Drug Enforcement Agency, Philippines</i>
A4-P89	NMR spectroscopy and chemometric modeling to determine soybean oil adulteration in virgin coconut oil: finding potential chemical marker	<b>Annabelle Flores</b> , Drexel Camacho <i>DOST - Industrial Technology Development Institute, Philippines; De La Salle University, Philippines</i>
A4-P90	Determination of tartrazine and caffeine in Cobra energy drink using UV-vis spectrophotometry and HPLC	<b>Kristine Anne Ladines</b> , John Voltaire Jalalon, Allan Christopher Yago <i>University of the Philippines Diliman [IC], Philippines</i>



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A4-P91	Exploring the chemical properties of commercially available Philippine herbal teas: A chemometric analysis	<b>Judy Kristel Bayalas</b> , Elmer-Rico Mojica <i>University of the Philippines Los Baños, Philippines. Pace University, New York, USA</i>
A4-P92	Salt beyond tradition: chemical profiling of Tultul artisanal salt	<b>Julienne Margarete Coronel</b> , Ahleia Wyne Antanani, Mark Adrian Sanchez, Jeremiah Pedral, Christian Jay Bautista <sup>1</sup> <i>Polytechnic University of the Philippines – Manila, Philippines</i>
A4-P93	The plant growth promotion effect ultrasonicated κ-carrageenan on <i>Brassica napus</i> var. chinensis (black behi pechay)	<b>Althea Marie Rivere</b> , Drexel H. Camacho <i>De La Salle University, Philippines</i>
<b>5. ANALYTICAL, PHYSICAL, &amp; NUCLEAR CHEMISTRY</b>		
A5-P94	Electrochemical detection of hydroquinone on fluorine-doped tin oxide (FTO) electrode modified with mesoporous silica thin film	<b>Donna Pacaldo</b> , Deomila Basnig-Mamaoag, Sarah May Nacario <i>Caraga State University, Philippines.</i>
A5-P95	Naked-eye detection of mercury (II) ions using glutathione-functionalized silver nanoparticles (GSH-AgNPs)	<b>Erniel Egypto</b> , Deomila Basnig-Mamaoag, Margarito G. Caadan <i>Caraga State University, Philippines; Mineral Resources Management Research and Training Center, Philippines</i>
A5-P96	Electrochemical detection of Hg <sup>2+</sup> based on mesoporous silica material functionalized with glutathione in aqueous solution	<b>Ronel Mutia</b> , Deomila Basnig-Mamaoag, Sarah May Nacario <i>Caraga State University, Philippines; Mineral Resources Management Research and Training Center, Philippines</i>
A5-P97	Renewable energy community desalination systems (RECODES) project: designing a portable desalination system (PHILSTILL)	Rick Laurence Inting, <b>Joshua Johnn Carballo</b> , Doris Montecastro, Antonio Basilio <i>Sophia University, Japan; Ateneo de Davao University, Philippines</i>
A5-P98	Label-free detection of <i>Listeria monocytogenes</i> in meat buffer extracts using phage-modified screen-printed electrodes	<b>Beatrice Marie Carreon</b> , Donna May Papa, Jose Bergantin, Jr. <i>University of Santo Tomas, Philippines</i>
A5-P99	Development and validation of a method to determine lauric acid and monolaurin in pig's blood plasma by Gas Chromatography - Mass Spectrometry (GC-MS)	<b>Joyce Candidato</b> , Ian Ken Dimzon <i>Ateneo de Manila University, Philippines</i>
A5-P100	Development of an alternative turbidity standard reagent for water and wastewater analysis	Kathy Janda, <b>Erika Marie Javines</b> , Christian Jay B. Cambador <i>Polytechnic University of the Philippines – Philippines.</i>
A5-P101	Spectroscopic investigation on the effect of red dragon fruit rinds ( <i>Hylocereus costaricensis</i> ) anthocyanin extract to free furfural concentration using High Performance Liquid Chromatography Diode Array Detector (HPLC-DAD)	<b>Carl Lyster Gocotano</b> , Nathan Ray Alim, Ian Marc Cabugsa, Joval Afalla <i>Ateneo de Davao University, Philippines; DOST - Philippine Textile Research Institute, Philippines; De La Salle University, Philippines</i>
A5-P102	Electrochemical detection of mercury ion using mesoporous silica thin film functionalized with methylene blue	<b>Diane Joy Tagra</b> , Deomila Basnig-Mamaoag, Sarah May Nacario <i>Caraga State University, Philippines; Mineral Resources Management Research and Training Center (MinRes), Philippines</i>





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<b>A5-P103</b>	On the improved properties of proton-exchange membranes based on polysulfone reinforced with iota-carrageenan and cellulose acetate from sugarcane bagasse	Jezza Bayot, Jonella Paulmanal, <b>Ckhriztine Mae Angelina Lumpas</b> , Dahlia Apodaca <i>Mapua University, Philippines; Polytechnic University of the Philippines, Philippines</i>
<b>A5-P104</b>	Decoding humanity's past at the molecular level: current chemical approaches at the UP School of Archaeology	<b>Patricia Cecille Monica Panganiban</b> , Lee Anthony Neri, Rhayan Melendres, Arturo Joseph Tablan III, Jay Rone Acasio, Igal Jada San Andres, Francis Claravall, D.J. Mello, Sarah Agatha Villaluz, Janine Ochoa, Michael James Herrera, Fairuz Bangahan, Mark Laurence Garcia, Raquel Rubio, Angel Bautista VII, Hiroyuki Matsuzaki, Alexandria Tanciongco, Angelo Guirgio, Katherine Pernia, Roland Rallos, Eleanor Marie Lim, Michelle Eusebio <i>University of the Philippines Diliman [SA, NSRI], Philippines; University of the Philippines Diliman - Extension Program in Pampanga, Philippines; DOST - Philippine Nuclear Research Institute, Philippines; Micro Analysis Laboratory, Tandem Accelerator (MALT), The University of Tokyo, Japan; University of the Philippines-Los Baños [SESM], Philippines</i>
<b>A5-P105</b>	Elemental and gammametric analysis of heavy metal and radionuclide levels in coastal sediments of Obando, Bulacan	<b>Matthew Louis Olaer</b> , Migel Antonio Catalig, Raymond Suggang, Arvin Jagonoy, Karla May Sayen <i>University of the Philippines Manila, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>A5-P106</b>	Assessment of heavy metals and radionuclides in soil of Smokey Mountain, Tondo, Manila, Philippines	<b>Jo Maline Mamangun</b> , Migel Antonio Catalig, Raymond Suggang, Karla May Sayen <i>University of the Philippines Manila, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>A5-P107</b>	Assessment of heavy metals and natural radioactive materials in farmland soil near Taal Volcano, in the Municipality of Mataas na kahoy, Batangas	<b>John Nemuel Fajutagana</b> , Migel Catalig, Karla Sayen, Raymond Suggang, Arvin Jagonoy <i>University of the Philippines Manila, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>A5-P108</b>	A surveillance study on commercially available ashitaba products using isotope-ratio mass spectrometry coupled with chemometrics	Ma. Carmela Sarina Tapang, Ronald Jefferson Narceda, Raymond Suggang <i>Adamson University, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>

### NON-COMPETING POSTERS

1. MATERIALS CHEMISTRY AND NANOTECHNOLOGY		
<b>B1-P109</b>	Green synthesis of surface passivated ethane-1,2-diamine carbon quantum dots from sugarcane bagasse	<b>Ariane Blanch Maraon</b> , Patrick John Lim <i>University of San Carlos, Philippines; Davao Medical School Foundation, Inc., Philippines</i>
<b>B1-P110</b>	Biosynthesis and structural characterization of zinc nanoparticle from butterfly pea ( <i>Clitoria ternatea</i> ) leaf extracts and evaluation of its wound healing activity	April Denise Balabbo, Melody Langcay, Johny Malsit, Marvin Ventula, Denuel Binalay, <b>Maria Luz Isabel Daisa</b> <i>Cagayan State University Carig Campus, Philippines</i>
<b>B1-P111</b>	Influence of toasting on the chemical properties of <i>Eucalyptus camaldulensis</i> and its impact on wood barrel applications	Kim Wilmer Balagot, <b>Princess Himalay</b> , Kimberly Delica-Balagot, Cherrie Mae Martinez, Rebecca Lapuz <i>DOST – Forest Products Research and</i>



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		<i>Development Institute, Philippines</i>
<b>B1-P112</b>	Development and characterization of bioplastic film composites using alugbati ( <i>Basella alba</i> ) mucilage and cellulose	Louie Cabilin, Deanielle Mae Tapales, Merivic Catada, <b>Edwin Romano, Jr.</b> <i>Negros Oriental State University-Main Campus, Philippines; Negros Oriental State University-Pamplona Campus, Philippines</i>
<b>B1-P113</b>	Bio-based materials from Philippine rice bran and husk	<b>Christine Hernandez</b> , Niklas Wahlstrom, Marjorie Ladd Parada, Francisco Vilaplana <i>University of the Philippines Diliman [IC], Philippines. KTH Royal Institute of Technology, Stockholm, Sweden</i>
<b>B1-P114</b>	Synthesis of carrageenan, gelatin, and starch biopolymer films with lecithin-emulsified essential oil for sustainable food packaging applications	Kristine Caoagas, Arbyne Dorado, <b>Romnick Sulit</b> , Steve Janagap, Cathrina Bagarinao, Ann Selma Morata, Jay Martizano <i>University of the Philippines Visayas, Miagao, Iloilo, Philippines</i>
<b>B1-P115</b>	Biosynthesis and characterization of bangbangsit ( <i>Lantana camara</i> ) leaf extract-mediated gold nanoparticles and its antifungal properties	Anne Pauline Rivera, Patrick John Mariñas, Kurl Klenner Malana, Jeremy Marwin Uy, <b>Yvonne Grace Besinga</b> <i>Cagayan State University Carig Campus, Philippines</i>
<b>B1-P116</b>	Process optimization by Response Surface Methodology-Central Composite Design for the biosynthesis of silver nanoparticles using Garcinia intermedia extract and its antibacterial property	<b>Theddy Jhun Argame</b> , Queenie Rufino, Ronald Pascual <i>University of Southern Mindanao, Philippines University of The Immaculate Conception, Philippines</i>
<b>B1-P117</b>	Fabrication of cellulose-based aerogel with heat insulation properties from <i>Ganoderma lucidum</i> spent mushroom substrate (SMS)	<b>Gabrielsony Mendoza</b> , Roque Porcel, Chester Deocariz, Lourdes Alvarez <i>Polytechnic University of the Philippines, Sta. Mesa, Manila, Philippines; University of Santo Tomas, Philippines; Bicol University, Philippines</i>
<b>B1-P118</b>	Central Composite Design for optimizing the green synthesis of silver nanoparticles using <i>Macaranga tanarius</i> leaf extract and investigating antibacterial activity	<b>Kier Domingo</b> , Lydia Pascual, Harem Roca <i>Philippine Science High School- Southern Mindanao Campus, Philippines; University of Southern Mindanao, Philippines</i>
<b>B1-P119</b>	Investigation of planetary ball milling of biogenic hydroxyapatite	<b>Mihoko Angela Artieda</b> , Ana Margarita San Juan, Adam Turner, Soma Chakraborty, Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
<b>B1-P120</b>	Regression and classification model designs for optimization of mechanical properties of 3D-printed scaffolds with triply periodic minimal surfaces (TPMS) geometries	<b>Doreen Pua</b> , Mihoko Angela Artieda, Ana Margarita San Juan, Erwin Enriquez, Soma Chakraborty, Adam Turner <i>Ateneo de Manila University, Philippines</i>
<b>B1-P121</b>	Surface modification of 3D-printed poly(lactic) acid scaffolds with milkfish ( <i>Chanos chanos</i> ) hydroxyapatite for bone tissue repair	<b>Ana Margarita San Juan</b> , Mihoko Angela Artieda, Soma Chakraborty, Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
<b>B1-P122</b>	NTA-functionalized chitosan microbeads: Comparison of preparation methods and application for Histidine-tagged protein extraction	<b>Jude Reyes</b> , Alexandra Melise Hulog, Miguel Francisco Jose Ordoñez, Ricardo Jose Guerrero <i>Ateneo de Manila University, Philippines</i>
<b>B1-P123</b>	Photodegradation of levofloxacin using hydroxyapatite derived from <i>Perna viridis</i>	<b>Adrian Go</b> , Francis dela Rosa, Drexel Camacho, Eric Punzalan <i>De La Salle University, Philippines; Adamson University, Philippines</i>
<b>B1-P124</b>	Microwave-assisted synthesis and optimization of pectin biofilms from waste Puyat durian rind	Ed Ivan Bardoquillo, Mi-Ann Pingol, <b>Arl Andale Mohanty</b> , Antonio M. Basilio



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		<i>Ateneo de Davao University, Philippines</i>
<b>B1-P125</b>	Spectroscopic characterization of clays from Antique	<b>Jessebel Gadot</b> , Sheryl Valera, Valerie Joy Naviamos, Jay Martizano <i>University of Antique, Philippines; University of the Philippines Visayas Miagao, Philippines.</i>
<b>B1-P126</b>	Physico-spectrochemical characterization of Sibalom River valuable gemstones in Antique	<b>Jessebel Gadot</b> , Sheryl Valera <i>University of Antique, Philippines</i>
<b>B1-P127</b>	Green synthesis, optimization, and characterization of magnetic semiconductor spinel copper ferrite nanocrystals mediated by blue butterfly pea ( <i>Clitoria ternatea</i> L.) flower aqueous extract	<b>Andrian Kelly Aquila</b> <i>University of the Immaculate Conception Philippines</i>
<b>B1-P128</b>	Optimization of the treatment and pyrolysis conditions of rice straw – derived biochar as low-cost and sustainable materials for supercapacitor electrodes	David Joseph Alzate, <b>Felicidad Christina Peñafiel</b> , Christina Binag <i>University of Santo Tomas, Philippines</i>
<b>B1-P129</b>	Synthesis of Fe-N-C catalyst with porous carbon support material for oxygen reduction reaction	<b>Hannah Joy Drapisa</b> , Maricor Divinagracia-Luzadas, Joey Ocon <i>University of the Philippines Diliman [DCE, NGSE], Philippines.</i>
<b>B1-P130</b>	Green synthesis of carbon quantum dots from calamansi ( <i>Citrus microcarpa</i> ) pomace and their application in photocatalysis	Joemark Ortiz, <b>Cesar Ortinero</b> <i>Central Luzon State University, Philippines</i>
<b>B1-P131</b>	Adsorption studies on removal of Cu(II) ions in aqueous solution using EDTA-modified graphene oxide	Phoebe Ann Magallanes, <b>Glenn Ongayo</b> <i>University of Science and Technology of Southern Philippines, Philippines</i>
<b>B1-P132</b>	Fabrication and antibacterial testing of nanoTiO <sub>2</sub> -decorated and silanized rotary jet-spun polypropylene (PP) fibers	Karl Vincent Alvarez, <b>Lea Cristina Macaraig</b> , Erwin Enriquez <i>Ateneo de Manila University, Philippines</i>
<b>2. COMPUTATIONAL CHEMISTRY</b>		
<b>B2-P133</b>	Density functional theory study on metformin degradation by NaClO	<b>Karen Jean Diez</b> , Elmer Rico Mojica, Mae Joanne Aguila <i>University of the Philippines Los Baños, Philippines; Pace University, New York, USA</i>
<b>B2-P134</b>	Molecular docking analysis of DNA aptamers against microcystin-LR protein	<b>Alyana Yanni Salen</b> , Bin Jeremiah Barba, Tammara Grace Angeles, Pauline Gonzales, Celine Grace Causapin, Aileen Mendoza <i>DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B2-P135</b>	Potential natural therapeutic against the non-structural protein 1 of dengue virus type-4 (DENV4-NS1)	Jerylle Joie Bautista, Cherry May Delos Santos, Jherby Kyle Teodoro, <b>Dyanne Jane Duldulao</b> <i>Nueva Ecija University of Science and Technology, Philippines</i>
<b>3. ENVIRONMENTAL CHEMISTRY, BIOTECHNOLOGY, AND BIOCHEMISTRY</b>		
<b>B3-P136</b>	Eco-friendly wood stain from natural dye	<b>Alexis Dorado</b> , Aralyn Quintos-Cortiguerra, Ailene Tagolabong, James Anthony Chan, Chris Johnnie France Rana <i>DOST -Forest Products Research and Development Institute, Philippines</i>



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<b>B3-P137</b>	pH and Temperature-dependent biosorption of lead (II) ions from aqueous solution using <i>Sansevieria trifasciata laurentii</i> leaf mass	<b>Ann Marian Lou Eslopör</b> , Higinio Barros Jr <i>Xavier University-Ateneo de Cagayan, Philippines</i>
<b>B3-P138</b>	Development of styrofoam waste laminates with sunscreen protection for climate change response	<b>Abigail Salazar</b> , Jonas Sean Leonardo, Marcia Elena Clarke, Joylen Rose Leonor, John Robin Yee, Raymond Sugcang <i>I Learn Child Center, Aklan, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B3-P139</b>	Background levels of legacy persistent organic pollutants in ambient air from Mt. Sto. Tomas, Benguet	<b>Roger Evangelista, Jr.</b> , Sammy Aytona, Ma. Fatima Anneglo Molina, Takuya Shiozaki, Tomonori Takeuchi <i>DENR - Environmental Management Bureau, Philippines; Japan Environmental Sanitation Center, Kawasaki-City, Japan</i>
<b>B3-P140</b>	Determination of heavy metal concentration of Pared river in Baggao, Cagayan	Samuel Trinidad, <b>Helen Danganj</b> , Kate Cabang, Jeffrey Detera <i>Cagayan State University, Philippines</i>
<b>B3-P141</b>	Seasonal variations of water quality gradient and trophic state in three shallow lakes in Laguna Province	<b>Arianna Dumlao</b> , Charlestone Antatico, Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>
<b>B3-P142</b>	Initial screening of total UV-absorbing contaminants in plastic labo commonly used for oily foods in the 4th District of Metro Manila	<b>Winnie Alejandro</b> , Elyson Keith Encarnacion, Anne Alcantara, April Star Canonizado, Harold Armario <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B3-P143</b>	Preliminary validation and screening of di(2-ethylhexyl)phthalate (DEHP) in plastic-based fast food packaging	<b>Anne Alcantara</b> , Elyson Keith Encarnacion, Harold Armario, Winnie Alejandro <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B3-P144</b>	Analysis of physicochemical properties, trihalomethane levels, and trihalomethane formation potential in Cagayan de Oro City's primary drinking water source	<b>Ronnie Besagas</b> , Romeo Del Rosario, Angelo Mark Walag <i>University of Science and Technology of Southern Philippines, Philippines</i>
<b>B3-P145</b>	Did typhoon Haiyan impact the groundwater quality of Tacloban City?	<b>Charles Darwin Racadio</b> , Raymond Sugcang, Jeff Darren Valdez, Greg Skrzypek <i>DOST - Philippine Nuclear Research Institute, Philippines; The University of Western Australia (M090), Perth, Australia</i>
<b>B3-P146</b>	Exploring arsenic, drinking water and human health nexus from a Philippine highland community perspective	<b>Cruzette Mejia</b> , Angela De Guzman, Agnes Rola, Botvinnik Palattao <i>DOST - Philippine Nuclear Research Institute, Philippines; University of the Philippines Los Baños, Philippines</i>
<b>B3-P147</b>	Comparison of FTIR-ATR and FTIR microscopy in the analysis of microplastics in milkfish	Lynne Jerisa Castro, <b>Jane Cathleen Gabunada</b> , Charisse Mendoza, Clarisse Jasmine Carlos, Angelene Alcain, Kim Christopher Aganda <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B3-P148</b>	Potential biomedical applications of Knifefish skin	<b>Rafael Kyle Bitangcor</b> , Maria Ysabel Domino, Davison Baldos, Gilbert Diano, Custer Deocarís, Charito Tranquilan-Aranilla <i>DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B3-P149</b>	Internal phosphorus and nitrogen release from sediment in three Philippine Lakes	Charlestone Antatico, Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>





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<b>B3-P150</b>	Degradation of eriochrome black T using UV/TiO <sub>2</sub> /persulfate system	Agatha Marie Subagan, Ninna Felichi Bugay, Adrian Go, Hanna Shaira Santillan, Francis dela Rosa, <b><u>Eric Punzalan</u></b> <i>De La Salle University, Philippines; Adamson University, Philippines</i>
<b>B3-P151</b>	Textile energy: Abaca ( <i>Musa textilis</i> )-cotton and banana ( <i>Musa acuminata</i> ) - cotton fabrics coated with polypyrrole/zinc oxide-coconut husk biochar as composites for supercapacitor electrodes	Pamela Claire Quetua, Willie Denz Tan, <b><u>Hidenori Tomimatsu</u></b> , David Joseph Alzate, Felicidad Christina Peñafiel, Christina Binag <i>University of Santo Tomas, Philippines</i>
<b>B3-P152</b>	Genomics and metabolomics assessment of the chemical diversity from the sponge-associated microorganism <i>Streptomyces cacaoi</i> strain R2A-843A from the Philippines	Zabrina Bernice Malto, Joeriggo Reyes, Bernard Isaiah Lo, Kevin Bossie Davis, Gisela Concepcion, <b><u>Lilibeth Salvador-Reyes</u></b> <i>University of the Philippines Diliman [MSI], Philippines</i>
<b>B3-P153</b>	Preparation and characterization of lipotides prepared from protein extracts of mung beans ( <i>Vigna radiata</i> (L.))	Ericsson David, Joshua William Tamayo, <b><u>Rafael Espiritu</u></b> <i>De La Salle University, Philippines</i>
<b>B3-P154</b>	Streamlining urine metabolomics: enhancing LC-MS sample preparation for precise biomarker discovery	<b><u>Jestoni Bracero</u></b> , Genevieve Tupas, Agnes Padilla, John Mark Revilla, Jason Alcano <i>Davao Medical School Foundation, Inc., Philippines</i>
<b>B3-P155</b>	Exploring serum metal levels in stunted children and mothers in Caraga, Davao Oriental	Jestoni Bracero, <b><u>John Mark Revilla</u></b> , Genevieve Tupas <i>Davao Medical School Foundation, Inc., Philippines</i>
<b>B3-P156</b>	FTIR-based metabolic fingerprinting for discrimination of non-severe and severe dengue among pediatric patients: A pilot study	<b><u>Nelly Grace Toñacao</u></b> , Ariane Blanch Maraon, Genelynne Juruena-Beley, Charisse Lim, Genevieve Dable-Tupas <i>Davao Medical School Foundation Inc., Philippines; Southern Philippines Medical Center, Philippines.</i>
<b>B3-P157</b>	Evaluation of biochemical parameters in type 2 diabetic patients	Carl Vincent Cabanilla, <b><u>Johanne Guilaran</u></b> , Ma. Lourdes Cumagun, Imelda Angeles-Agdeppa, Michael Serafico, Adorie Sabenecio, Darlah Marcela Leonardo, Myquie Nicole De Guzman <i>DOST – Food and Nutrition Research Institute, Philippines</i>
<b>B3-P158</b>	Influence of phosphate and zinc co-limitation on Symbiodiniaceae species <i>Durisdinium trenchii</i> and <i>Cladocopium goreaui</i> in batch cultures	Joshua James Versola, Tung-Yuan Ho, <b><u>Irene Rodriguez</u></b> <i>University of the Philippines Diliman [MSI], Philippines; Academia Sinica, Taiwan</i>
<b>B3-P159</b>	Biomass production and lipid composition of marine microalgae, <i>Tetraselmis tetrahele</i> under varying nitrate and iron concentrations	<b><u>Dolly Manic</u></b> , Richard Redil, Irene Rodriguez* <i>University of the Philippines Diliman [MSI], Philippines</i>

### 4. NATURAL PRODUCTS, MEDICINAL, AGRICULTURAL, AND FOOD CHEMISTRY

<b>B4-P160</b>	UHPLC-PDA methods for monitoring of potential anti-cancer drugs in in vivo assays	<b><u>Harriet Jane Caleja-Ballesteros</u></b> , Angel Mhae Lingaya, Lisette Kjell Lorenzo, Liezel Mari Abaya, Conrado Pabustan IV, Jeanne Lorraine Amponin, Irene Villasenor <i>University of the Philippines Diliman, Philippines</i>
<b>B4-P161</b>	Determination of amphetamine and methamphetamine in oral fluid (saliva) using liquid chromatography-tandem mass spectrometry	Augusto Misolas, <b><u>Marie Joy Rellona</u></b> , Laura Magat, Maria Veronica Eulogio, Jennifer Deoduco-Mercado <i>DOH - East Avenue Medical Center, Philippines</i>
<b>B4-P162</b>	Sesquiterpenes from Philippine marine sponges <i>Stelodoryx procera</i> Topsent 1904 and <i>Rhabdastrella</i> sp.	Yusoph Manalundong II, Hendrik Luesch, Mylene Uy <i>Mindanao State University-Iligan Institute of Technology, Philippines; University of Florida,</i>



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		Gainesville, Florida, USA; Mindanao State University-Main Campus, Philippines
B4-P163	Morphological, phyto-physicochemical, and nutritional characteristics of seaweeds in Cagayan	Andy Catulin, Jerome Tamayao, <b>Rommel Culili</b> Cagayan State University-Carig Campus, Philippines
B4-P164	<i>Musa acuminata</i> and <i>Zingiber officinale</i> leaves as swine feed additives	Ian Jhay Meso, <b>Gina Barbosa</b> Central Mindanao University, Philippines
B4-P165	Effect on varying the alkali concentration on the extraction of sodium alginate from <i>Sargassum siliquosum</i> collected in Cebu, Philippines	<b>Maria Kathryn Denaga</b> , Angel Lyn Kristin Tan University of San Carlos, Philippines
B4-P166	Standardization and evaluation of antioxidant activity of <i>Coleus blumei</i> extracts by HPLC-DPPH assay	Anne Margaret Macaya, Kymreigne Fressie Baluyot, Adrian Vincent Zarco, Eisen John Aguilar, <b>Mariah Issabella Grace Barba</b> , Kevin Jace Miranda Adamson University, Philippines
B4-P167	Bioactive compounds from endolichenic fungi of Ramalina against ESKAPE clinical pathogens	<b>Melfei Bungihan</b> , Andrianna de Guzman, Trizia Adversario, Sofia Fritz Joi Mamuyac, Thomas Edison dela Cruz University of Santo Tomas, Philippines
B4-P168	Antioxidant properties of leaf extracts from selected bamboo species in the Philippines	Jennifer Tamayo, Loreto Novicio, Angela Jhanel Martin, Melvie Emprese, Karen Grace Lulo, <b>Kate Navor</b> DOST – Forest Products and Research Development Institute, Philippines
B4-P169	LC-MS analysis of calabash ( <i>Crescentia cujete</i> ) fruit extract	<b>Sheena Bulaong</b> , Genevieve Dable-Tupas Davao Medical School Foundation, Inc., Philippines
B4-P170	Exploring the antifungal activity of fractionated extract of endophytic fungi from Sasmuan mangroves against clinical isolates of <i>Aspergillus niger</i> and <i>Candida albicans</i>	Levi Nicole Gabrielle Buenafe, Jasper Cedrick Atienza, Jaycie Liej Bernal, Czarren Kenji Delos Reyes, Fleurdeliz Maglangit, Royce Marjheane Arcigal, <b>Kevin Jace Miranda</b> Adamson University, Philippines; University of the Philippines Cebu, Philippines
B4-P171	Metabolic profiling of mature <i>Mitragyna speciosa</i> (korth.) leaves, and in silico study	Maria Karmella Apaya, <b>Jaedy Declarador</b> , Maria Jamaica Trexy Magdayao, Anthony Salvador Albaladejo West Visayas State University, Philippines; University of the Philippines Visayas, Miagao, Iloilo, Philippines
B4-P172	Exploring bioactive potential and cytotoxic activity against cell line HCT-116 human colorectal carcinoma of selected plants in Bukidnon, Philippines	<b>Jylla Angway</b> , John Mark Revilla, Airah Sheen Galiposo, Emma Buncales, Marck Jason Tagapan Central Mindanao University, Bukidnon, Philippines; Davao Medical School Foundation, Inc., Philippines; Davao Analytical Laboratories, Inc., Philippines
B4-P173	Exploring nutritional composition and bioactive components of young and mature <i>Allaeanthus luzonicus</i> (Blanco) fern. -fill male flowers	<b>Rosenda Bronze</b> , Chin Kia Bautista, Karen Sentales, Aeros Villacruel, Rysheer Quiatchon, Roanne Tolosa, Marielli Katherine Untalan Batangas State University, Philippines
B4-P174	Bioactive components and antioxidant activities of ethanolic and dichloromethane extracts of propolis collected in selected areas in Oriental Mindoro, Philippines	Rosenda Bronze, <b>Emelie Ona</b> , Rea Rebecca Clarete, Henry Jems Fabello, Rhaven Glenn Ligaya Batangas State University, Philippines
B4-P175	Antibacterial properties of methanolic extracts from fungal endophytes of Philippine endemic plants against <i>Pseudomonas aeruginosa</i> , <i>Staphylococcus aureus</i> , and <i>Klebsiella pneumoniae</i>	<b>Micah Therese Fajardo</b> , Gabrielsony Mendoza, Hans Christian Arturo, Allan Patrick Macabeo, Melfei Bungihan University of Santo Tomas, Philippines



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<b>B4-P176</b>	Quantification of total phenolics, flavonoids, and tannins in the leaves of different commercial mango ( <i>Mangifera indica</i> L.) varieties in the Philippines	<b>Gideon Legaspi</b> <i>De La Salle University-Dasmarias, Philippines</i>
<b>B4-P177</b>	Phytochemical profiles and concentrations of major antioxidative substances of selected medicinal plant leaves	<b>Jennifer Barroso</b> , Romeo Del Rosario, Angelo Mark Walag <i>Bukidnon State University, Philippines; University of Science and Technology of Southern Philippines, Philippines</i>
<b>B4-P178</b>	Evaluation of antioxidant activity in spice combinations of cinnamon, lemongrass, bay laurel, and clove	Helms Christian Pahuyo, <b>Nestev John Agosto</b> <i>University of Science and Technology of Southern Philippines, Philippines</i>
<b>B4-P179</b>	Total phenolic content and antioxidant activity of the ethanolic leaf and stem extracts of <i>Cnidioscolus aconitifolius</i>	Franco Kapa, <b>Kristianie Lomonsod</b> <i>University of Science and Technology of Southern Philippines, Philippines.</i>
<b>B4-P180</b>	Demethylzeylasteral from <i>Costus dubius</i> (Afzel.) K. Schum Leaves inhibits cyclooxygenase (COX-2) enzyme	Evangeline Amor, <b>Anabel Abulencia</b> <i>University of the Philippines Diliman, Philippines; University of the Philippines Manila, Philippines</i>
<b>B4-P181</b>	Antioxidant assay and chemical characterization of napier grass ( <i>Pennisetum purpureum</i> )	Frizalin Ramiscal, <b>Emely Agatep</b> <i>Cagayan State University Carig Campus, Philippines</i>
<b>B4-P182</b>	Phenolic compounds, antioxidant properties, nutritional contents, and SEM/EDS imaging of sieved fractions of <i>Aquilaria malaccensis</i> tea as potential basis for tea grading	Kimberly Delica-Balagot, <b>Cherrie Mae Martinez</b> , Kim Wilmer Balagot, Edmark Kamantigue, Florena Samiano, Rebecca Lapuz <i>DOST - Forest Products Research and Development Institute, Philippines</i>
<b>B4-P183</b>	Toasting techniques influence the chemical properties of eucalyptus wood and may enhance the derived aroma and flavor profiles	<b>Kim Wilmer Balagot</b> , Kimberly Delica-Balagot, Princess Himalay, Cherrie Mae Martinez, Florena Samiano, Rebecca Lapuz <i>DOST - Forest Products Research and Development Institute, Philippines</i>
<b>B4-P184</b>	Determination of phosphorus concentration of locally-produced branded fish and fish products using a verified AOAC 995.11 method	<b>John Cyrus Alfaro</b> , Isaiah Sta. Ana, Michael Lagmay, Ma. Rachel Parcon, Leonard Montero, Jan-Ervin Guerrero, Theresa Aviles, Andrea Tero <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B4-P185</b>	Detection of nitrite levels in processed meat using ion chromatography	<b>Anina Marielle Medel</b> , Isaiah Sta. Ana, John Cyrus Alfaro, Cherrylean Bembenuto, Gladys Ann Bautista, Ma. Rachel Parcon <i>DOST - Industrial Technology Development Institute; DOST – Science Education Institute, Philippines</i>
<b>B4-P186</b>	Optimizing untargeted metabolomic analysis of Cacao ( <i>Theobroma cacao</i> L.) beans using different extraction methods and GCMS parameters	<b>Laurice Glen Gamayot</b> , Ian Marc Cbugsa <i>Malagos Agri-Ventures Corp, Philippines; Ateneo de Davao University, Philippines</i>
<b>B4-P187</b>	Bamboo and its versatile uses for Water Sanitation and Hygiene (WASH) in the Philippines	<b>Jennifer Tamayo</b> <i>DOST – Forest Products and Research Development Institute, Philippines</i>
<b>B4-P188</b>	Proximate chemical analysis of bamboo charcoal and granular bamboo activated carbon (GBAC) derived from kawayan Kiling ( <i>Bambusa vulgaris</i> )	Jennifer Tamayo, <b>Cheyenne Marqueses</b> , Queennie Rose Magallon <i>DOST – Forest Products and Research Development Institute, Philippines</i>



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<b>B4-P189</b>	Enhancing the potential of acai ( <i>Euterpe oleracea</i> Mart.) berry: Evaluating pretreatment effects on polyphenol content and antioxidant activity for functional food development	Madelaïne Dumandan, Romel Felismino, <b>Lloyd Earl Flandez</b> , Anna Rina Albacea, Ma. Cristina Ilano, Joshua Benedicto, Katherine Ann Castillo-Israel <i>Bukidnon State University, Philippines; University of the Philippines Los Baños [IFST, OVCRE], Philippines; DOST - Science Education Institute, Philippines</i>
<b>B4-P190</b>	Inhibition of advanced glycation end products (Age) precursor by dietary supplement L-citrulline and its antioxidant capacity	<b>Jessa Marielle Paulines</b> , Patrick Nwabueze Okechukwu, Charlie Lavilla Jr. <i>Mindanao State University-Marawi Philippines; University College Sedaya International, Kuala Lumpur, Malaysia; Mindanao State University-Iligan Institute of Technology, Philippines</i>
<b>B4-P191</b>	Breakthrough in Hygiene and Sanitation Monitoring (ATP+AMP+ADP)	<b>Odina Lorraine Fungo</b> <i>Glenwood Technologies International, Inc.</i>
<b>B4-P192</b>	Assessment of four lipid extraction methods for comparative lipidomic analysis of dried fermented cacao beans from selected regions in Mindanao and South America	<b>Ian Marc Cabugsa</b> , Abbigail Ranzel Sampaga, Laurice Glenn Gamayot <i>Ateneo de Davao University, Philippines</i>
<b>B4-P193</b>	Quantifying folic acid retention in fortified flour-based products	<b>Abbie Padrones</b> , Richard Alcaraz, Maricar Alba, Jordan Vincent Tiama, Junimer Lala <i>DOST - Food and Nutrition Research Institute, Philippines</i>
<b>B4-P194</b>	Synthesis and characterization of slow-release biochar-based nitrogen fertilizer from bamboo	<b>Cherish Baylon</b> , Carlito Basay Jr., Ronald Pascual <i>Notre Dame of Marbel University, Philippines; University of Southern Mindanao Philippines; Chulalongkorn University, Thailand</i>
<b>B4-P195</b>	Valorization of residual fish waste from Nile tilapia ( <i>Oreochromis niloticus</i> ) and seaweed ( <i>Eucheuma cottonii</i> ) as potential feeds	<b>Hanna Jane Miguel</b> , Estrella Dela Cruz, Maria Irinea Candelita <i>Environmental Conservation and Protection Center, Alabel, Sarangani, Philippines; University of Southern Mindanao, Philippines.</i>
<b>B4-P196</b>	A national call to fight honey adulteration: experiences, insights, and way forward	<b>Remjohn Aron Magtaas</b> , Andrei Joshua Yu, Joshua Kian Balaguer, Mary Margareth Bauyon, Rachelle Clieñ Reyes, Jessica Baroga-Barbecho, Cleofas Cervancia, John Leonard Labides, Roland Rallos, Norman Mendoza, Angel Bautista VII <i>DOST – Philippine Nuclear Research Institute, Philippines; University of the Philippines Los Baños [IBS], Philippines</i>
<b>B4-P197</b>	Levels and health risk assessment of polycyclic aromatic hydrocarbons (PAHs) in smoked fishes	<b>Kathlene Cleah Benitez</b> , Allysa Ross Almagro, Karl Bryan Perelonia, Pearly Anne Owog Owog, Bryan Tanyag, Flordeliza Cambia, Ulysses Montojo <i>DA - National Fisheries Research and Development Institute, Philippines</i>
<b>B4-P198</b>	Assessment of the mercury levels in green mussels ( <i>Perna viridis</i> ) from the top three mussel-producing regions in the Philippines	<b>Alleni Junsay</b> , Ian Deniell Magsino, Janesky Esplana, Clarissa Gatchalian <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B4-P199</b>	Correlation of phenolic and flavonoid content with antioxidant activity of commercial tea samples using multivariate techniques	<b>Rollan Paul Parakikay</b> , Elmer-Rico Mojica <i>University of the Philippines Los Baños, Philippines; Pace University, New York, USA</i>





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<b>B4-P200</b>	Philippine reference material for toxic elements in sugar: Assessment of homogeneity and stability	<b>Ian Deniell Magsino</b> , Christian Laurio, Clarissa Gatchalian, Janesky Esplana, Alleni Junsay, Benilda Ebarvia <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B4-P201</b>	Wheat flour fortified with freeze-dried <i>Moringa oleifera</i> seeds (MOS): Evaluation of the functional and physicochemical properties	Karen Ngo, Russell Lim, Rachel Anne Yadao, Marissa Noel, <b>Aldrin Bonto</b> , Raymond Malabed <i>De La Salle University, Philippines</i>
<b>B4-P202</b>	Physicochemical and microbiological analyses of banana flour produced from peeled and unpeeled green saba ( <i>Musa acuminata</i> ) banana	<b>Karen Alianza</b> , Lynn Esther Rallos, Bien Nathaniel Gerodias <i>Mindanao State University - General Santos, Philippines</i>
<b>B4-P203</b>	Gut microbiota composition and glycemic index upon consumption of white and brown rice	<b>Amster Fei Baquiran</b> , Diana Glades Ronquillo, Melissa Borlagdan, Fritz Benedict Villacarlos, Charlotte Anne Dolores, Jahn Philip De Leon, Aida Mallillin <i>DOST – Food and Nutrition Research Institute, Philippines</i>
<b>B4-P204</b>	Elemental composition of bee pollen and propolis products sourced from different localities in the Philippines	<b>Genne Patt Samar</b> , Elmer-Rico Mojica <i>University of the Philippines Los Banos, Philippines; Pace University, New York, USA</i>
<b>B4-P205</b>	Proximate analysis and comparative evaluation of ZamPen native chicken	Susan Montebon, Reynante Autida, <b>Jayson Francisco</b> <i>Western Mindanao State University, Philippines</i>
<b>B4-P206</b>	Optimization of protein extraction from cowpea, pigeon pea, rice bran, and coconut meal	<b>Norli Aidasani</b> , Annabelle Flores, Lourdes Montevirgen <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B4-P207</b>	Impact of Ag-Zn nanoparticle-based biopesticides on BM tyrosine hydroxylase and Hsp90 gene expression in armyworm ( <i>Spodoptera exigua</i> )	Rubigilda Paraguison-Alili, Ellen Romero, Aljun Tusi, <b>Danila Paragas</b> <i>Central Luzon State University, Philippines</i>
<b>B4-P208</b>	Synthetic strategy and method exploration for the access of 4-carboxylated 2-phenylquinazoline from Isatin	<b>Jeanette Durante</b> , Merhyl Kit Angeline Paraluman, Mark Tristan Quimque <i>Mindanao State University – Iligan Institute of Technology, Philippines</i>

### 5. ANALYTICAL, PHYSICAL, NUCLEAR CHEMISTRY AND CHEMISTRY EDUCATION

<b>B5-P209</b>	Digital image colorimetric analysis of total water alkalinity using <i>Cordyline fruticosa</i> extracts as visual indicator	Christian Alex Parungao, <b>Darwin Reyes</b> <i>Nueva Ecija University of Science and Technology, Philippines</i>
<b>B5-P210</b>	Rice straw and rice husk biochar as anode catalyst support for direct ethanol fuel cells: a comparative study	Keno Marcellano, Matthew Villanueva, Justienne Rei Laxamana, Hannah Grace Necesito, <b>Bernard John Tongol</b> <i>University of Santo Tomas, Philippines</i>
<b>B5-P211</b>	Development of a LC-MS/MS method for multiclass antibiotics in environmental samples	<b>Ma. Avelina Montalaba</b> , Katrina Marie Sta. Ana, Maria Pythias Espino <i>University of the Philippines Diliman [IC], Philippines</i>
<b>B5-P212</b>	Biochar-based ORR catalyst versus Pt/C in direct ethanol fuel cell testing: Hot-pressing optimization and Nafion-based ionomer evaluation	Sophia Katherine Sarmiento, <b>Jarren Neil Ricafort</b> , Hannah Grace Necesito, Bernard John Tongol <i>University of Santo Tomas, Philippines</i>
<b>B5-P213</b>	Biogenic synthesis of palladium particles from <i>Citrofortunella microcarpa</i> (calamansi) peel extract as bio-metal anode	Angel Rheubens Sulit, <b>Matthew Villanueva</b> , Hanna Grace Necesito, Justienne Rei Laxamana, Bernard John



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	catalyst for direct ethanol fuel cell (DEFC)	Tongol <i>University of Santo Tomas, Philippines</i>
<b>B5-P214</b>	Quick & easy mercury analysis - turning enormous Hg measurement time into your time	<b>Mei Shin Tan</b> <i>Nippon Instruments Corporation</i>
<b>B5-P215</b>	Method development for the determination of total Vitamin D (25-HydroxyvitaminD) in serum by LC-MS/MS method	<b>Abegail Escarcha</b> , Jan Kathryn Garcia <i>Metametrics Laboratory, MetaDiagnostics, Inc, Philippines</i>
<b>B5-P216</b>	Comparing total flavonoid content measurement: Andrew+ pipetting robot vs. conventional auto-pipetting by lab analysts	<b>Lovelle Mae Galia-Marasigan</b> , Genevieve Tupas <i>Davao Medical School Foundation, Inc Philippines</i>
<b>B5-P217</b>	Electrochemical analysis of a Ruthenium Salen Nitrosyl complex	<b>Jomarie Seclon</b> , Joel Jorolan <i>Mindanao State University-Marawi, Philippines; MSU-Iligan Institute of Technology, Philippines</i>
<b>B5-P218</b>	Development and preliminary validation of a method for the detection of epoxidized soybean oil (ESBO) potentially migrating from bottled oil-based food products	<b>Harold Armario</b> , Elyson Keith Encarnacion, Anne Alcantara, Winnie Alejandro <i>DOST- Industrial Technology Development Institute, Philippines</i>
<b>B5-P219</b>	Optimization of Liquid Chromatography- Tandem Mass Spectrometry (LC-MS/MS) parameters for the determination of perfluorooctanoic Acid (PFOA) and perfluorooctanesulfonic acid (PFOS) in paper-based food packaging	<b>April Star Canonizado</b> , Elyson Keith Encarnacion, Anne Alcantara, Harold Armario, Winnie Alejandro, Aaron Dacuya <i>DOST - Industrial Technology Development Institute Philippines</i>
<b>B5-P220</b>	Validation of a method for the extraction and quantification of tropane alkaloids (Atropine and Scopolamine) in soybean by LC-MS/MS	Rufielyn Gravador, <b>Christy Daniel</b> , Simon Haughey, Anne Nugent, Christopher Elliott <i>Queen's University Belfast, United Kingdom; DOST - Industrial Technology Development Institute, Philippines</i>
<b>B5-P221</b>	Method validation studies for the analysis of water-soluble chloride and sulfate in cement	<b>Leonard Montero</b> , Admer Rey Dablo, Christy Daniel, Michael Lagmay, Johanna Andrea Valdueza, Jan-Ervin Guerrero, Ruth Damian, Andrea Tero, Mark Antony Principe <i>DOST - Industrial Technology Development Institute, Philippines</i>
<b>B5-P222</b>	Development of forced degradation profile and considerations to prevent breakdown of Quercetin in onion ( <i>Allium cepa</i> L.) using RP-HPLC-DAD	Leah Jane Ofima, <b>Jessica Enciso</b> , Genevieve Tupas <i>Davao Medical School Foundation Inc., Philippines</i>
<b>B5-P223</b>	Method development of MBAS method for quantifying anionic surfactants in wastewater	Gerome Joseph Pitero, <b>Dharmatov Rahula Albano</b> <i>University of Santo Tomas, Philippines; CHEMPRO Analytical Services Laboratories, Inc., Philippines</i>
<b>B5-P224</b>	Archaeometallurgical investigation of Spanish-era Philippine metal cannons using portable X-ray fluorescence spectroscopy	Sean Angelo Del Rosario, <b>Alan Rodelle Salcedo</b> , Fortunato Sevilla III <i>University of Santo Tomas, Philippines</i>
<b>B5-P225</b>	Understanding the effects of electron beam sterilization on intravenous fluid delivery system: physicochemical changes, functional performance and biocompatibility assessment	Jeric Flores, Alvin Kier Gallardo, Bin Jeremiah Barba, Lorna Relleve, Gilbert Diano, Haydee Solomon, <b>Charito Tranquilan-Aranilla</b> <i>DOST - Philippine Nuclear Research Institute, Science Education Institute, Philippines</i>
<b>B5-P226</b>	Effect of electron beam irradiation on polypropylene/high-density polyethylene blends	<b>John William Montojo</b> , Bin Jeremiah Barba, Celine Grace Causapin, Patrick Jay Cabalar, John Andrew Luna, Haydee Solomon, James Harold Guillermo, Franklin Pares, Giuseppe Filam Dean, Mar Christian Que, Dale Mhar Burgos Alfeche, Jethroe Napay, Marissa



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		Paglicawan, Jordan Madrid <i>DOST - Philippine Nuclear Research Institute; DOST - Industrial Technology Development Institute, Philippines</i>
<b>B5-P227</b>	From contaminant to power source: advancing uranium extraction technology from wet-process phosphoric acid in the Philippines	Jennyvi Ramirez, Botvinnik Palattao, Ryan Joseph Aniago, Estrellita Tabora, Socorro Intoy, John Conrad Ramirez, <b>April Caitlin Dadibalos</b> <i>DOST – Philippine Nuclear Research Institute, Philippines.</i>
<b>B5-P228</b>	Elevated Iodine-129 levels of seawater in the West Philippine Sea	<b>Rachelle Clien Reyes</b> , Angela de Guzman, Remjohn Aron Magtaas, Mary Margareth Bauyon, Andrei Joshua Yu, Joshua Kian Balaguer, Jeff Darren Valdez, Sophia Jobien Limlingan, Jeffrey Munar, Edwin Dumalagan Jr. Caroline Marie Jaraula, Fernando Siringan, Haruka Kusuno, Miwako Toya, Hiroyuki Matsuzaki, Angel Bautista VII <i>DOST – Philippine Nuclear Research Institute, Philippines; University of the Philippines Diliman [MSI], Philippines; The University of Tokyo, Japan</i>
<b>B5-P229</b>	Comparison of machine-learning assisted matrix correction in development of quantitative elemental determination of pressed-powder samples using low-powered wavelength X-ray fluorescence spectrometer	Botvinnik Palattao, <b>Genie Belle Bulaong</b> , Danicah Agub, Jennyvi Ramirez, Ryan Joseph Aniago, Estrellita Tabora, Socorro Intoy <i>DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B5-P230</b>	Age dating of sediment cores in Sorsogon Bay, Philippines using 210Pb method: A revisit	<b>Jennyvi Ramirez</b> , Angel Bautista, Jordan Madrid, Efren Sta. Maria, Fernando Siringan, Soledad Castañeda, Mylene Cayetano <i>DOST - Philippine Nuclear Research Institute, Philippines; University of the Philippines Diliman [IESM, MSI], Philippines; Professional Regulations Commission, Philippines</i>
<b>B5-P231</b>	Airborne radiation: Monitoring radon inside a radioactive waste management facility	<b>Angelo Panlaqui</b> , Ronald Piquero, Kristine Marie Dean <i>DOST – Philippine Nuclear Research Institute, Philippines</i>
<b>B5-P232</b>	Comparison of portable X-ray Fluorescence (pXRF) and Inductively Coupled Plasma (ICP) Mass Spectrometry (MS) and Optical Emission Spectrometry (OES) analyses for elemental determination in Marine Sediments	Jennyvi Ramirez, Estrellita Tabora, Socorro Intoy, Ryan Joseph Aniago, Madel Pineda, Botvinnik Palattao, April Caitlin Dadibalos, <b>John Conrad Ramirez</b> <i>DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B5-P233</b>	Determination of body composition and total energy expenditure in Filipino infants and young children using stable isotope techniques	<b>Carl Vincent Cabanilla</b> , Amster Fei Baquiran, Johanne Guilaran, Ma. Lourdes Cumagun, Melissa Borlagdan, Roselle Sapanghila, Neil Tungol, Mary Aguidene Ramos, Norman Mendoza, Mario Capanzana, Imelda Angeles-Agdeppa <i>DOST - Food and Nutrition Research Institute, Philippines; DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B5-P234</b>	Estimation of natural radioactivity of beach sands collected in Baler, Philippines and health risk assessment due to natural radiation exposure	<b>Arvin Jagonoy</b> , Cedrick Jay San Antonio, Joseph Michael Racho, Raymond Suggang <i>DOST - Philippine Nuclear Research Institute, Philippines</i>
<b>B5-P235</b>	Assessment of the water quality conditions of the PRR-1 SATER	Joshell Mharielle Sion, Rafael Miguel Dela Cruz, Ryan Olivares <i>DOST - Philippine Nuclear Research Institute, Philippines</i>



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<b>B5-P236</b>	Insights on student capabilities of Argao National High School STEM students towards international STEM competitions	<b><u>Venessa Carbon</u></b> , Stephen Bryan Asenjo, Jayfe Anthony Abrea, Gee Elle Carumba, Lucas Omboy, Marjhun Ricarte, Mary Joy Villamora <i>Philippine Science High School – Central Visayas Campus, Cebu, Philippines</i>
<b>B5-P237</b>	Development of a General Chemistry Laboratory Manual for Senior High School STEM Students	<b><u>Janielle Bernice Guion</u></b> <i>Philippine Science High School - Central Visayas Campus</i>