

NATIONAL ACADEMY OF SCIENCE AND TECHNOLOGY PHILIPPINES

45TH ANNUAL SCIENTIFIC MEETING July 12-13 2023

THEME: "Agham at Teknolohiya para sa Demokrasya (Science and Technology for Democracy)"

Scientific Posters 2023

MATHEMATICAL AND PHYSICAL SCIENCES DIVISION

DIV #	EMAIL	AUTHORS	MAJOR	PRESENTING	AFFILIATIONS	CONTACT NO	TITLE
MPSD - Chemistry							
MPS-01	clarissagatchalian@gmail.com	Clarissa J. Gatchalian, Theresa F. Aviles, Jan-Ervin C. Guerrero, Christian D. Laurio, Alleni T. Junsay	Alleni T. Junsay	Clarissa J. Gatchalian	Department of Science and Technology, Industrial Technology Development Institute (DOST-ITDI), National Metrology Laboratory of the Philippines (NML), Metrology in Chemistry Section	09277264841	Assessment of Homogeneity and Stability of a Candidate Reference Material for Total Hardness in Water using Validated Automated Photometric Titration Method
MPS-02	rmquierrez@pnri.dost.gov.ph	Rico Neil M. Quierrez, Jessie O. Samaniego, Cris Reven L. Gibaga, Alexandria M. Tanciongco, John Henry C. Gervasio, and Rachele Clien G. Reyes	Rico Neil M. Quierrez	Rico Neil M. Quierrez	DOST- Philippine Nuclear Research Institute	09994056245	Assessment of Potentially Toxic Elements in Total Suspended Solids in Groundwater Samples Impacted by a Legacy Mercury Mine
MPS-03	jgbernabe@up.edu.ph	Danica Marie A. Baricuatro, John Rupert G. Bernabe, Ma. Avelina C. Montalaba, Kristel Joyce T. Occena, Timothy Jemuel E.	Ma. Avelina C. Montalaba	John Rupert G. Bernabe	Institute of Chemistry, College of Science, University of the Philippines - Diliman	09971228797	Carboxylic Acid-Functionalized Chitosan Synthesized from Seafood Waste for the Removal of Metronidazole in Aqueous Solution
MPS-04	vglagrada@up.edu.ph	Val Jason G. Lagrada, Arvin Paul P. Tuaño, Florinia E. Merca, and Clarissa B. Juanico	Val Jason G. Lagrada	Val Jason G. Lagrada	Institute of Chemistry, College of Arts and Sciences, University of the Philippines Los Baños, College, Laguna	09173084446	Changes in Grain Composition and Physicochemical Properties of Los Baños Lagkitan Corn Grits after Nixtamalization
MPS-05	cwchua1@up.edu.ph	Ma. Janella M. Borromeo, Chloe Kelly W. Chua, Judelyn F. Lacosta, Lawrence L. Mercado, Yasmin D.G. Edañol	Judelyn F. Lacosta	Ma. Janella M. Borromeo	Institute of Chemistry, College of Science, University of the Philippines Diliman	09265000307	Corn Husk-derived Cellulose-Polyethylene Glycol Composite Films as Potential Food Packaging Material
MPS-06	jrsmagalong@iskolarngbayan.pup.edu.ph	Jeff Ryan S. Magalong, Jeann M. Bumatay, Joshua Z. Dela Cruz, and Chester C. Deocarís	Jeff Ryan S. Magalong	Jeff Ryan S. Magalong	Polytechnic University of the Philippines, Sta. Mesa, Manila, 1016	+639175118012	Development of PUPAK An R Package for Solving Adsorption Kinetic Models

MPS-07	bzlorete@up.edu.ph	Jannah Nicole N. Cortez, Angeli Via V. Festin, Billie Elica Z. Lorete, Myxie Tana D. Rogado, Edward Jairus T. Doce, and Timothy Gemuel E. Talusan	Billie Elica Z. Lorete	Billie Elica Z. Lorete	Institute of Chemistry, University of the Philippines Diliman, Quezon City, Philippines	09274895837	Effect of Molecular Mass of Polymer on Stability and Photocatalytic Ability of Redispersed ZnO/Poly(Acrylic Acid) Nanocomposites
MPS-08	jpj.johnny@gmail.com	Juanito P. Jimenez, Jr., Rebecca B. Lapuz	Juanito P. Jimenez, Jr.	Juanito P. Jimenez, Jr.	DOST-FPRDI	09268362367	Effect of Tree Species on the Formaldehyde Emission of Plywood
MPS-09	lloydarvinmalaluan@gmail.com	Lloyd Arvin M. Malaluan, Roberto M. Malaluan	Lloyd Arvin M. Malaluan	Lloyd Arvin M. Malaluan	Natural Science and Mathematics Division-Bp.Pueblos, Father Saturnino Urios University	09925668373	Fractionation of Agusan RC216 Rice Bran (Oryza sativa) Variety Using Supercritical Carbon Dioxide (SC-CO ₂)
MPS-10	rklazaro@up.edu.ph	Pamela Bianca Aguila, Bianca Julliana Marie Bat-og, Rosela Mae Lazaro, Leila Andrea Pineda, Timothy Gemuel Talusan	Rosela Mae Lazaro	Rosela Mae Lazaro	Institute of Chemistry, College of Science, University of the Philippines - Diliman, Quezon City, Philippines 1101	+639260722310	Green synthesis of hair-capped silver nanoparticles for the photodegradation of Brilliant Blue G
MPS-11	ydedanol@up.edu.ph	Yasmin D.G. Edañol, Christine Jurene O. Bacal, Marlon T. Conato, Ken Aldren S. Usman	Yasmin D.G. Edañol	Yasmin D.G. Edañol	Institute of Chemistry, College of Science, University of the Philippines, Diliman, Quezon City, 1101, Philippines	639491593490	Lahar-derived Nano-zeolite Adsorbents for Organic and Heavy Metal Contaminant Remediation
MPS-12	pauladriango@gmail.com	Adrian D. Go, Matthew Denwell R. Herrera, Mark Tristan J. Quimque, and Allan Patrick G. Macabeo	Adrian D. Go	Adrian D. Go	University of Santo Thomas	09394007621	Library Synthesis and Characterization of Antitubercular 2-Arylquinoline Esters Inhibitory to Mycobacterium tuberculosis Gyrase
MPS-13	amtanciongco@pnr.i.dost.gov.ph	Alexandria Tanciongco, Jessie Samaniego, Gawen Jenkin, Cris Reven Gibaga	Alexandria M. Tanciongco	Alexandria M. Tanciongco	Department of Science and Technology – Philippine Nuclear Research Institute	+639268278362	Mercury Deposition in Mine Tailings from Abandoned Mercury Mine in Palawan: Implications in Environmental Impact
MPS-14	johnnesterdm@gmail.com	Johnnester D. Maniego, Cyril C. Ramil, Angelo Bryan R. Lazo, Pauline Ann M. Quiton, Elyson Keith P. Encarnacion, Aaron C. Dacuya, Benilda S. Ebarvia	Johnnester D. Maniego	Johnnester D. Maniego	Department of Science and Technology, Industrial Technology Development Institute (DOST-ITDI), National Metrology Laboratory of the Philippines (NML), Metrology in Chemistry Section	09171240618	Method Validation of Liquid Chromatography – Isotope Dilution Mass Spectroscopy and Optimized Monier Williams Distillation for the Characterization of Sulfite in Desiccated Coconut Proficiency Test Material

MPS-15	jvediza@gmail.com	John Vincent P. Ediza, Olivia Mae D. Candelaria, Archer V. Mallari, James Angelo C. Parco, Janelle V. Reyes, Venice Eurika D.	John Vincent P. Ediza	Venice Eurika D. Rodrigo	Institute of Chemistry, University of the Philippines Diliman	09564022620	Mg-Al-CO ₃ Layered Double Hydroxides as a Reusable Adsorbent of Anionic Dye Pollutants
MPS-16	jakerafaelmendoza@gmail.com	Jake Rafael M. Mendoza, Gian Carlo P. Jores, Marie Celestine A. Dela Cruz, John Ryan P. Mechilina, Yasmin D. Edañol	Jake Rafael M. Mendoza	Gian Carlo P. Jores	Institute of Chemistry, University of the Philippines, Diliman, Quezon City	09176146354	Mixed Cobalt-Copper Oxides for Methylene Blue Photodegradation
MPS-17	pcgonzales.ptri@gmail.com	Zailla F. Payag, and Julius L. Leaño Jr.	Paula Bianca C. Gonzales	Paula Bianca C. Gonzales	Research and Development Division, Philippine Textile Research Institute, Department of Science and Technology	09278055543	Optimization of Enzyme Finishing Application on High Blends of Woven LyocellPineapple Leaf (<i>Ananas comosus</i>) Fiber Blended Fabrics
MPS-18	abrosales2@up.edu.ph	Andrea Felice F. Mantilla, Kylie Nicole A. Mendoza, Anton Paolo B. Rosales, Jazneir P. Serrano	Anton Paolo B. Rosales	Anton Paolo B. Rosales	Institute of Chemistry, University of the Philippines - Diliman	09062462104	Photocatalytic Activity of Co-BDC Metal Organic Framework (MOF) for Malachite Green Degradation
MPS-19	ldlapitan@ust.edu.ph	Ethel Jarine P. Cerezo, Jonyl L. Garcia, and Lorico D.S. Lapitan, Jr.	Lorico D.S. Lapitan Jr	Ethel Jarine P. Cerezo	University of Santo Tomas	09273233751	Polydopamine-Based Molecularly- Imprinted Thin Films for Electrochemical Sensing of Pyocyanin
MPS-20	dtagub@up.edu.ph	Danicah T. Agub*, Joshua Kian G. Balaguer, Diego B. Sarte, Joel James D. Navarroza, Juan Antonio C. Urbi,	Danicah Agub	Joshua Kian Balaguer	Institute of Chemistry, University of the Philippines Diliman	09554400070	Preparation of Hybrid Ni/Co Oxalate Metal-Organic Frameworks via Convenient Synthetic Routes for Cadmium and Lead Removal
MPS-21	alvindomingo321@gmail.com	Alvin Domingo, Jayson Cariaga, Bjorn Santos, and Shirley Agrupis	Alvin Domingo	Alvin Domingo	National Bioenergy Research and Innovation Center, Mariano Marcos State University	0995 893 8314	Production of Cellulose Hydrogel from Nipa (<i>Nypa fruticans</i> Wurmb) Frond
MPS-22	hmsalvacion@up.edu.ph	Raine Chloe A. Vesrubio, Hanz Joshua M. Salvacion, Larz Emmanuel V. Labsan, Jhiemar Jay B. Maggay, Yasmin D.G.	Raine Chloe A. Vesrubio	Hanz Joshua M. Salvacion	Institute of Chemistry, University of the Philippines, Diliman, Quezon City 1101	09605393530	Rice Husk-based Cellulose-Metal Organic Framework (celloMOF) Composites as Potential Adsorbents for Nuclear Waste Remediation

MPS-23	somerca@up.edu.ph	Ramel John Anthony Biñas, Julius Caesar M. Damo II, Senfred Matthew O. Merca, Catherine Angeli R. San Jose, Hannah Kristel D. Vargas, Yasmin Edañol	Senfred Matthew O. Merca	Hannah Kristel D. Vargas	University of the Philippines - Diliman	981-8500 local 3652	Synthesis and Characterization Of Copper-Iron (Cu-Fe) Oxide for the Photodegradation of Fuchisine
MPS-24	ccantolin1@up.edu.ph	Caesar Angelo Antolin, Robert Ace Kadusale, Ma. Cita Faye Laman, Miguel Luis Lim, Frances Kyla Reyes, Kayla Adrienne Tiangco	Caesar Angelo C. Antolin	Kayla Adrienne Tiangco	Institute of Chemistry, University of the Philippines Diliman, Quezon City	09489380785	Synthesis of MnO ₂ Nanoparticles using Zea mays Husk Extract for Degradation of Brilliant Blue Dye
MPS-25	ribautista@up.edu.ph	Aces Joseph San Pedro, Mark Ely Namoro, Princess Vinia Putulin, Rogie Bautista, Yasmin Edañol	Mark Ely Namoro	Princess Vinia Putulin	Institute of Chemistry, University of the Philippines, Diliman, Quezon City	+63 927 833 5962	The Effect of pH on the Photocatalytic Activity of Aminophenol-functionalized ZnO Nanoparticles
MPS-26	jkramos@up.edu.ph	Simond Lars Darwin Lenon, Ranver Castillo, John Rae Escosio, Jose Gabriel Javellana, Jedd Bernardo Ramos, Yasmin Edañol	Simond Lars Darwin Lenon	Simond Lars Darwin Lenon	Institute of Chemistry, University of the Philippines Diliman, Quezon City, Metro Manila	09970767664	UV-Degradation of Brilliant Green with zeolite-immobilized FeO/Fe ₂ O ₃ /CuO
MPS-27	kcaganda@gmail.com	Kim Christopher Aganda, Anna Lee	Kim Christopher C. Aganda	Kim Christopher C. Aganda	ITDI-DOST	09158098399	Visible-Light-Mediated Synthesis of Dibenzoselenophenes
MPSD - Mathematics							
MPS-28	geleenag@apc.edu.ph	Geleena A. Gestiada	Geleena A. Gestiada	Geleena A. Gestiada	Asia Pacific College, Magallanes, Makati City	09667293357	Characterizing the Junior High School Mathematics Curriculum of the Philippines: A Network Approach
MPS-29	mloyola@ateneo.edu	Mark L. Loyola	Mark L. Loyola	Mark L. Loyola	Ateneo de Manila University	09285018242	Geometric Realizations of Alternating Semiregular Abstract Polyhedra with Automorphism Group H ₃
MPS-30	rtcastillo1@up.edu.ph	Rolly Czar Joseph Castillo, Victoria May Mendoza, Jose Ernie Lope, and Renier Mendoza	Rolly Czar Joseph Castillo	Rolly Czar Joseph Castillo	Institute of Mathematics, University of the Philippines Diliman	09605099060	Trend analysis of COVID-19 in selected provinces of the Philippines using Sobolev polynomials