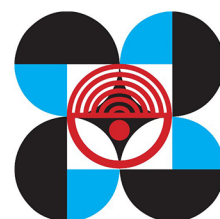


Specialized Philippine Enterprise Reference of Experts and Scientists (SPHERES)

INFORMATION RESOURCES AND ANALYSIS DIVISION
Science and Technology Information Institute
Department of Science and Technology
Gen. Santos Ave., Bicutan, Taguig City, Philippines



ABOUT THE SPECIALIZED PHILIPPINE ENTERPRISE REFERENCE OF EXPERTS AND SCIENTISTS (SPHERES)

The Division of Documentation of the National Institute of Science and Technology published the first volume of the Philippine Men of Science in 1964. It contained one hundred one bio-bibliographies of living men and women in the field of science and technology. It keeps track of our scientists and their contributions for the information and benefit of all. The compilation aims to provide interested users a useful and effective reference.

In 2012, the 24th volume of the Philippine Men of Science was uploaded online to make it more visible and accessible to users. Subsequently, the publication was renamed as the Philippine Men and Women of Science in 2013 to adopt a gender-sensitive title.

Today, the publication is given a new name – Specialized Philippine Enterprise Reference of Experts and Scientists (SPHERES).

The SPHERES brand introduces a new function with a new focus. When it comes to Filipino scientists and experts and their bio-bibliographic information, this compilation serves as a specialized reference for the public. Now with a gender-neutral emphasis and an inclusive sphere of influence, SPHERES is the name to remember.

Each volume of SPHERES consists of two issues annually.

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CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Ancog, Rico C.	1
• Environmental Science	
• Environmental Pollution	
• Water Quality Analysis	
• Waste Management	
Arcilla, Carlo A.	3
• Petrology	
• Geochemistry	
• Geology	
Bautista-Tulin, Anabella Tilan	13
• Soil Chemistry	
• Soil Science	
Bellotindos, Luzvisminda M.	17
• Chemical Engineering	
• Wastewater Treatment	
• Water Treatment	
• Heterogeneous Catalysis	
• Environmental Engineering	
• Environmental Chemistry	
• Wastewater	
• Advanced Oxidation Processes	
• Degradation	
• TOC	
• Sonochemistry	
Biong, Corazon T.	19
• Physical Education	
• Sport Biomechanics	
• Special Education	
• Sport Psychology	
• Physical Fitness	
• Human Performance	
• Disability Studies	
• Sport Training	
• Physical Activity Assessment	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Bucayong, Cecilia Ortiz	21
• Physics Education	
• Pedagogy	
• Science Education Research	
Cariño, Jovito V.	22
• Ethics	
• Politics	
• Religion	
Castillo-Israel, Katherine Ann T.	24
• Food Chemistry	
• Food Biochemistry	
• Food Science	
• Postharvest horticulture	
• Molecular Biology	
• Structural Biology	
Catane, Sandra G.	26
• Environmental Science	
• Volcanology	
• Geohazards	
• Caldera evolution	
• Deep-sea ash layers	
• Explosive volcanism	
• Flow mechanism of volcanic and non-volcanic landslides	
• Geomechanical properties of rock slopes and slope stability assessment	
• High-resolution dating of young tephra deposits	
• Tephra stratigraphy	
• Volcano hazards assessment	
• Water-magma interaction	
Corpuz, Ralph Sherwin A.	29
• Machine Learning	
• Robotics	
• Applied Artificial Intelligence	
• Embedded Systems	
• Quality Assurance	
• Technology Management	
• Fuzzy Logic Control	
• ISO 9001	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Cruz, Faye Abigail T.	31
• Climate	
• Climate Modeling	
• Precipitation	
Dalida, Maria Lourdes P.	35
• Chemical Engineering	
• Wastewater Treatment	
• Photocatalysis	
• Membrane Separation	
• Environmental Engineering	
Destreza, Froilan Gubi	39
• Computer Network	
• IoT	
• Arduino	
• iVerilog	
Dicuangco-Valdez, Lilibeth	42
• Banana Industry	
• Crop Science	
• Plant Breeding and seed Technology	
• Agriculture and Forestry	
Dimzon, Ian Ken D.	42
• Mass Spectrometry	
• Chemical Processes	
• Analytical Chemistry	
• Fatty Acids	
• Partial Least Squares	
• Chromatography	
• Chemometrics	
• Chemical Metrology	
Domingo, Jonas Feliciano C.	44
• Environmental Sciences	
• Phenomenological Research	
• Science Education	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Dreisbach, Jeconiah Louis Mendoza	46
• Social Science	
• Language Contact	
• Intercultural Communication	
• Cultural Politics	
• Intercultural Studies	
• Cross-Cultural Studies	
• Indigenization Theories	
• International Relations	
• Filipino Philosophy	
• Philippine Studies	
• Cultural Studies	
• Multiculturalism	
Galvez, Maria Cecilia Dandan	47
• Atmospheric physics	
• Lasers	
• Optics	
• Environmental Studies	
• Atmospheric pollution	
• Air Pollution Studies	
Gayo, Willy Salazar	53
• Applied Mathematics	
Hadsall, Annalee S.	54
• Plant Systematics	
Ibana, Joyce Altamarino	55
• Microbiology	
• Immunology	
• Cell Biology	
• Drug Discovery	
• Reproductive Immunology	
• Host-Pathogen Interactions	
Jacildo, Arian J.	58
• Information Systems (Business Informatics)	
• Parallel Computing	
• Bioinformatics	
• Algorithms	
• Information Systems (Business Informatics)	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Javier, Dymphna Nolasco	60
• Geoscience education	
• Rainfall-induced landslides	
• Environmental geochemistry	
• Climate change	
Lambio, Ivy Amor Fabreag	64
• Botany	
• Plant Ecology	
• Genetics	
Lizardo, Rona Camille M.	67
• Sensory Evaluation of Foods	
• Food Chemistry	
• Food Processing	
• Nutraceuticals and Functional Foods	
Lambio, Ivy Amor Fabreag	64
• Botany	
• Plant Ecology	
• Genetics	
Loquias, Manuel Joseph Cruz	69
• Mathematics	
• Mathematical Crystallography	
• Combinatorics	
• Numeration	
• Discrete Geometry	
Macalalad, Ernest Pagaran	71
• Atmospheric Physics	
• GNSS Applications	
• Ionospheric Physics	
• Physics	
• Remote Sensing	
• Space Science	
Macatangay, Ronald Cantoria	76
• Environmental Physics	
• Environmental Impact Assessment	
• Spatial Analysis	
• Climate Change	
• Energy	
• Remote Sensing	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
<ul style="list-style-type: none">• Vegetation• Instrumentation• Spatial Statistics	
Magno-Abriol-Santos, Katrina Joy H.	81
<ul style="list-style-type: none">• Information Technology• Web Programming• Digital Anthropometry• Digital Image Processing• Computer Science Education• Information Technology Education	
Maranan, Faith Santiago	84
<ul style="list-style-type: none">• Molecular Biology• Genetics• Bioinformatics• Ecology• Restoration Ecology	
Motin, Borrromeo B.	86
<ul style="list-style-type: none">• Marine Fisheries• Philosophy• Philippine Studies• Biodiversity• Indigenous People's Culture• Indigenous People's Rights• Biodiversity Conservation• Biodiversity Conservation• Society and Culture	
Nacorda, June Owen O.	88
<ul style="list-style-type: none">• Botany• Phycology	
Pascua, Chelo Supnet	89
<ul style="list-style-type: none">• Environmental Minerology• Geochemistry• Material Characterization• Thin Films and Nanotechnology• Clay Mineralogy	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Peleo-Alampay, Alyssa M.	95
• Biostratigraphy	
• Earth Science	
• Geology	
• Paleoceanography	
Rallos, Roland V.	100
• Agriculture	
• Soil Science	
• Agricultural Plant Science	
• Plant Fertilization	
• Animal and Human Nutrition	
• Sustainable Agriculture	
• Water Resources Management	
• Soil Fertility	
• Crop Production	
• Soil Analysis	
• Soil and Water Conservation	
• Fertilizers	
• Climate Change and Agriculture	
• Crop Management	
• Organic Farming	
• Nutrient Management	
• Soil Science	
• Irrigation	
• Evapotranspiration	
• Field Experimentation	
• Soil Physics	
• Precision Agriculture	
• Fertigation	
• Agriculture Research	
• Farming Systems	
• Crop Water Management	
Ringor, Cherry L.	103
• Earth Science	
• Geology	
• Nanomaterials	
• Nanomaterials synthesis	
• Polymerization	
• Nanofabrication	
• Nanoparticle preparation	
• Precipitation	
• Carbon Nanomaterials	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
<ul style="list-style-type: none">• Climate Science• Nanotubes• Nanofibers• Polyaniline• Fabrication	
Sotto, Rachel C.	107
<ul style="list-style-type: none">• Seed Physiology• Botany• Plant Biodiversity Conservation• Horticulture	
Tolosa, Hero Laurenciano	110
<ul style="list-style-type: none">• Probability Theory• Statistics• Applied Mathematics• Data Analysis• Statistical Modeling• R Programming• R Statistical Package• Linear Regression• Time Series Analysis• Multivariate Statistics• Statistical Inference• Stochastic Modeling• Applied Probability• Computational Statistics• Markov Chains• Markov Processes• Normal Distribution• Poisson Distribution• Variance• Model Building• Periodicity• Binomial Distribution	
Torreta, Nerissa K.	112
<ul style="list-style-type: none">• Botany• Phytoplankton Dynamics• Phycology• Plant Morpho-Anatomy• Economic Botany	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Vallar, Edgar A.	114
• Atmospheric Physics	
• Remote Sensing	
• Environment	
• Computing	
• Satellite	
• Particulate Matter	
• Clouds	
Vasquez, Ross D.	120
• Pharmaceutical Botany	
• Immunology	
• Biological Sciences	
• Health	
Velarde, Michael C.	122
• Physiology	
• Biophysics	
• Reproductive Endocrinology	
• Biochemistry	
Villamor, Lilian Pagaduan	126
• Marine Science	
• Marine Biotechnology	
• Animal Genetic Diversity	
• Phylogenetic and DNA Barcoding	
Villarino, Casiana Blanca Jucar	128
• Food Science	
• Sensory Evaluation	
• Food Processing	
Yu Jeco, Bernice Mae Fetalvero	130
• Engineering	
• Multijunction Solar Cell	
• Perovskite Quantum Dot	
• UV disinfection	
• Off-the-grid Power	
• Laser Beam Induced Current Mapping	
• Solar Cell Evaluation	
• Solar Cell Modeling	
• Atomic Force Microscopy	
• Photoluminescence	

CONTENTS

EXPERTS AND SCIENTISTS	PAGE
Yu Jeco, Bernice Mae Fetalvero	130
• Absorbance	
• Solar Cell Synthesis	
• Photoluminescence Spectroscopy	
• Absorption Spectroscopy	
• Microbial Inactivation	
• Membrane Filtering for Water Sampling	

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Organizational Affiliations

Assistant Professor 5, School of Environmental Science and Management (SESAM),
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Fields of Specialization

Environmental Science

Environmental Pollution

Water Quality Analysis

Waste Management

Honors / Awards

Outstanding Young Scientist, DOST - National Academy of Science and Technology
2019

Dr. Elvira O. Tan Award for Best Published Paper, DOST - Philippine Council for
Agriculture, Aquatic and Natural Resources Research and Development 2017

Asian Young Professional on Water Research, University of Tokyo 2009

Researches

Ongoing

Assessing the Implications of Various Resource Use and Management Options in
Laguna de Bay

Papers Presented

2015 June 11-13 Tiongco, M.M., Espaldon, M.V.O., de P. Guzman, L.E., Ancog, R.C., Quiray, A.E.,
Jaffee, S., & Frias, J. (2015 June 11-13). Green Agriculture in the Philippines: An Old
wine in a New Bottle, 16th Annual Global Development Conference, Casablanca,
Morroco.

2014 July 13-19 Buot, M., Ancog, R., & Marilag, V. (2014 July 13-19). Preferences in Leisure Activity As
Affected By Gendered Choice, XVIII ISA World Congress of Sociology, Yokohama,
Japan.

Publications

2019 Ancog, R.C., Ticsay, M.V., & Ruzol, C.D., Status of Climate Change Adaptation in
Agriculture Sector in Asia. In: Alam, M., Lee, J., & Sawhney, P. (Eds.), Status of
Climate Change Adaptation in Asia and the Pacific. Springer Climate, Springer,
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2017 Ruzol, C., Banzon-Cabanilla, D., Ancog, R., & Peralta, E., Understanding water
pollution management: Evidence and insights from incorporating cultural theory in
social network analysis. *Global Environmental Change*, 2017, 45:183-193.

2016 Ancog, R.C., Rebancos, C.M., & Sumalde, Z.M., Levels and determinants of
vulnerability of two indigenous communities in the Philippines: Implications from
using mixed-methods approach. *International Journal of Climate Change Strategies
and Management*, 2016, 8(2):154-174.

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Strategies in a Grassland Reforestation Area in the Philippines. *Forest Policy and
Economics*, 2016, 64:35-45.

Anacio, D.B., Hilvano, N.F., Burias, I.C., Pine, C., Nelson, G.L.M., & Ancog, R.C.,

- Dwelling structures in a flood-prone area in the Philippines: Sense of place and its functions for mitigating flood experiences. *International Journal of Disaster Risk Reduction*, 2016:108-115.
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- 2015 Calicdan, M.A., Rebancos, C., Ancog, R., & Baguion, N., Assessment of mangrove flora of Palau Island landscape and seascape (PIPLS), San Vicente, Sta. Ana, Cagayan Valley, Philippines. *Asian Journal of Conservation Biology*, 2015, 4(1):15-19.
- Ancog, R., & Ruzol, C., Urbanization adjacent to a wetland of international importance: The case of Olango Island Wildlife Sanctuary, Metro Cebu, Philippines. *Habitat International*, 2015, 49:325-332.
- Ancog, R., & Ticsay, M., Challenges and issues for promoting Climate-Smart Agriculture in Southeast Asia. In: Sawhney, P., & Perkins, M.A. (Eds.), *Emerging Climate Change Adaptation Issues in the Asia-Pacific Region*, 2015:18-31.
- 2014 Oquiñena-Paler, M.K.M., & Ancog, R., Copper, Lead and Zinc Accumulation in Catfish (*Clarias macrocephalus* Gunther) from Butuanon River, Metro Cebu, Philippines. *IOSR Journal of Environmental Science, Toxicology and Food Technology*, 2014, 8(11):49-56.
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- Ancog, R., & Flavier, M.E., Comparative Water Quality Analysis of Major River Tributaries of a Large Marine Ecosystem: The case of Verde Island Passage Marine Corridor. *Asia Life Sciences*, 2014, 23(1):93-105.
- 2012 Sajise, A.J., Sombilla, M., & Ancog, R., *Socioeconomics of Climate Change in the Philippines: A Synthesis Approach (1990-2010)*. Los Baños, Philippines: DOST - Philippine Council for Agriculture, Aquatic and Natural Resources Research, 2012.
- Ancog, R.C., Archival, N.D., & Rebancos, C.M., Institutional Arrangements for Solid Waste Management in Cebu City, Philippines. *Journal of Environmental Science and Management*, 2012, 15(2):74-82.
- 2008 Ancog, R.C., Briones, N.D., Florence, L.M., Alcantara, A.J., & Alaira, S.A., Expansion of Environmental Users' Fee System to Households for Enhanced Water Pollution Control in Laguna de Bay, Philippines. *Journal of Environmental Science and Management*, 2008, 11(2):58-67.
- Espaldon, M.V.O., Coladilla, J.O., Ancog, R.C., Saguiguit, S.L.C., Espaldon, M.L.O., & Sumalde, Z.M., Valuation of Socio-economic and Health Impacts of Typhoid Outbreak in Calamba City, Laguna Province. *Journal of Environmental Science and Management*, 2008, 11(2):79-90.

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Sex Male

Organizational Affiliations

Director, Department of Science and Technology -Philippine Nuclear Research Institute (DOST-PNRI), Commonwealth Avenue, Diliman, Quezon City

Education

Doctor of Philosophy in Geotechnical Engineering and Geosciences (Petrology and Geochemistry), University of Illinois at Chicago, 1200 W Harrison St, Chicago, IL 60607, USA 1998

Master of Science in Geology (Petrology and Geochemistry), University of Illinois at Chicago, 1200 W Harrison St, Chicago, IL 60607, USA 1991

Bachelor of Science in Geology (*cum laude*), University of the Philippines, Diliman, Quezon City 1981

Fields of Specialization

Petrology

Geochemistry

Geology

Employment

Director, DOST-Philippine Nuclear Research Institute, 2017 August 1-Present

Expert Witness for the Philippines , International Court of Arbitration, Washington, DC, 2014 February

Keynote Speaker, Annual Geology Conference, Geological Society of the Philippines, 2013 December

Organizer and Commentator, Executive Order 79, Mining Industry of the Philippines Forum, 2012 October

Head, Search Committee for the Archaeological Studies Program (ASP) Directorship, 2011 December

Amicus Curiae on Writ of Kalikasan cases (FPIC pipeline disaster, etc.), Philippine Supreme Court, 2010

Head Consultant , Makati FPIC Pipeline Disaster, City of Makati, 2010 October

Director, National Institute of Geological Sciences, 2007-2017

Project Leader, Bangkal Decontamination Team, City of Makati

Project Leader, Pipeline Integrity Test, Department of Energy

Laboratory Head, Earth Materials Science Laboratory, National Institute of Geological Sciences, University of the Philippines, Diliman, Quezon City

Project Leader, Setting Up of Seismic, Geological Analytical Laboratory, National Institute of Geological Sciences, University of the Philippines, Diliman, Quezon City

Project Leader, Setting up of GEMCOM and PROMAX Laboratories, National Institute of Geological Sciences, University of the Philippines, Diliman, Quezon City

Association Membership

Member, Geological Society of Canada
Member, Sigma Xi
Member, American Geophysical Union
Member, Society of Mining Engineers (Chicago)
Member, Mineralogical Society of America
Member, Geological Society of the Philippines
Member, Microscopy Society of the Philippines
Member, Asia-Oceania Geological Society
Member, Philippine Mineral Exploration Association, Inc.
Member, PMRC-Accredited Competent Person in Geology
Member, Geoscience Foundation, Inc.
Member, University of the Philippines Geological Alumni Association
Member, International Association on the Genesis of Ore Deposits
Member, Geological Society of Canada

Honors / Awards

PRC Eric Nubla Outstanding Professional of the Philippines, Professional Regulation Commission 2014 June
Most Outstanding Geologist, Professional Regulation Commission 2014 June
UP Diliman Centennial Faculty Grant Awardee, "Chemical weathering, river geochemistry and atmospheric carbon fluxes from volcanic and ultramafic regions on Luzon Island, the Philippines", University of the Philippines, Diliman, Quezon City 2011
SEARCA Professorial Chair (AY 2009-2010), Southeast Asian Regional Center for Graduate Study and Research in Agriculture 2010 June
Grant to attend Technical Meeting on Planning nuclear waste disposal in geologic settings in Nottwil, Switzerland , International Atomic Energy Association 2008 April
Grant to attend Technical Meeting on planning nuclear waste disposal activities in Vienna, Austria , International Atomic Energy Association 2007 May
Grant to attend Meeting to plan nuclear waste conference activities and visit Underground Research Laboratory, Sweden, International Atomic Energy Association 2006 May
University of the Philippines System Professorial Chair in General Education - for Innovations and Improvement in teaching Science, Technology and Society (STS) , University of the Philippines 2005
Grant to attend international conference on Radioactive Waste Repository Design Construction and Operation, held in Switzerland, International Atomic Energy Association 2005 November
Grant to attend International Conference on Geological Disposal of Radioactive Waste; held in Czech Republic and Switzerland , International Energy Atomic Association

2004

NIGS Faculty Grant - Investigation of methane generation and extraction from Payatas open dump, University of the Philippines 2002

NIGS Faculty Grant - Palawan OIB volcanism, University of the Philippines 2001

NIGS Faculty Grant - Asbestos research, University of the Philippines 2000

Office of the Vice-Chancellor for Research and Development grant: "Determining source character of Luzon volcanoes", University of the Philippines 1999

National Student-Athlete Day Awardee, Northeastern Illinois University 1997

Selected as Teaching Assistant Consultant, University of Illinois at Chicago Listed in "Who's Who Among Students in American Universities & Colleges", University of Illinois at Chicago 1996

Excellence in Teaching Award, UIC Department of Geological Sciences Club Leader of winning Science Club in Museum of Science & Industry Contest, University of Illinois at Chicago 1995

Foreign Student Service Award, \$1000 per year, University of Illinois at Chicago 1995

Honoree for Teaching Excellence (honored alongside university professors), Office of Student Development Services, University of Illinois, Chicago 1994

Foreign Student Service Award, \$1000 per year, University of Illinois at Chicago 1992

Foreign Student Service Award, \$1000 per year, University of Illinois at Chicago 1991

Fulbright-Hays Fellowship, Bureau of Educational and Cultural Affairs, United States Department of Education 1987-1991

Researches

Completed

Establishment of Baseline Sedimentation Rates During Extreme Rainfall Events: Pasig River Basin

Delineation of one of the world's youngest (Pleistocene) dolomite deposit, Cebu City, Philippines

Gold Occurrence in a Porphyry Copper Deposit, Cebu City, Philippines

Petrology and Geochemistry of the Angat Ophiolite, Luzon, Philippines

Mineralogical and Geochemical Characterization of Pinatubo 1991 Eruption Tephra

Lithosphere-Asthenosphere Interactions in Sources of Arc Volcanoes

Origin of High-Field Strength Element Depletion in Arc Volcanoes

Mantle Structure Beneath the Philippines: Petrologic and Seismological Constraints

Material Science Characterization of Environmentally-related products - Asbestos in Philippine Tiles

Geochemistry and Petrology of Philippine Arc Volcanoes, focusing on mantle source character

Geology, Geochemistry and Mineralogy of Existing and Proposed Landfill Sites in Metro Manila

Geochemistry of Northern Palawan Basaltic Lavas

Environmental Problems in Boracay Island

Igneous Petrology of High Silica Magmas in Macolod Corridor

Geological Disposal of Toxic and Nuclear Waste

Geochemical, Mineralogical, and Geophysical Characterization of Philippine Copper, Nickel and Gold Ores and Related Deposits: Search for New Exploration, Ores Beneficiation and Environmental Benchmarks

Hyperalkaline Studies

Determining the Potential for Carbon Capture and Storage in Southeast Asia

PCARRD (Philippine Science Research funding institution) Geologic mapping and structural study of the Montalban quadrangle

Papers Presented

- 2018 June Arcilla, C.A., & Gibaga, C.R. (2018 June). Young Volcanism in Cuyo Islands, Palawan, Philippines: Example of an Intra-Plate Magmatism in the Palawan Continental Block, Poster session. 15th Annual Meeting Asia Oceania Geosciences Society, Honolulu, Hawaii.
- 2018 June Gibaga, C.R., & Arcilla, A. (2018 June). Petrology and Geochemistry of Volcanic Section of the Palawan Ophiolite: Implication to the Geodynamic History of Palawan Island, Philippines, Poster session. 15th Annual Meeting Asia Oceania Geosciences Society, Honolulu, Hawaii.
- 2016 December Ybañez, R.L., Ballesteros, C.C., Baldago, M.C.B., & Arcilla, C.A. (2016 December). Flood Mitigating Effects of Open-Pit Quarrying in Rizal, Philippines, American Geophysical Union, Fall Meeting 2016, abstract #NH51B-1928.
- 2015 December 8-9 Arcilla, C., Aguda, N., Antonio, R.J., Ong, R.R., Estur, A.F., Botor, R.J.L., & Pinza, J.G. (2015 December 8-9). Mineral Characterization of Black Sands from Zambales and Leyte, Poster session. GEOCON 2015, Hotel Intercontinental Manila, Makati City.
- 2010 October 3-7 Fujii, N., Arcilla, C.A., Yamakawa, M., Pascua, C., Namiki, K., Sato, T., Shikazono, N., & Alexander, W.R. (2010 October 3-7). Natural Analogue Studies of Bentonite Reaction Under Hyperalkaline Conditions: Overview of Ongoing Work at the Zambales Ophiolite, Philippines, ASME 2010 13th International Conference on Environmental Remediation and Radioactive Waste Management, Tsukuba, Japan.
- 2010 September 19-23 Arcilla, C.A., Pascua, C.S., & Alexander, W.R. (2010 September 19-23). Hyperalkaline springs in the Philippines: significance to natural Carbon Capture and Sequestration, 10th International Conference on Greenhouse Gas Control Technologies, Amsterdam, The Netherlands, IEA Greenhouse Gas R&D Programme, IEA, London, UK.
- 2009 October 11-15 Vargas, E., Honrado, M.L.L., Pascua, C., Arcilla, C.A., Alexander, W.R., Yamakawa, M., Fujii, N., Namiki, K., Kawamura, H., & McKinley, I.G. (2009 October 11-15). Developments in hyperalkaline natural analogue studies around the Zambales Ophiolite, Philippines, 12th International Conference on Environmental Remediation and Radioactive Waste Management.
- 2009 June 22-26 Arcilla, C.A., Pascua, C.S., Vargas, E., Honrado, M.L.L., Alexander, W.R., Namiki, K., Fujii, N., Yamakawa, M., Sato, T., & McKinley, I.G. (2009 June 22-26). Reaction pathways for rising hyperalkaline groundwater in a bentonite mine in the Philippines, Goldschmidt 2009 Conference, Davos.
- 2009 June 22-26 Vargas, E., Pascua, C.S., Arcilla, C.A., Honrado, M.L.L., Alexander, W.R., Namiki, K., Fuji, N., Yamakawa, M., Sato, T., & McKinley, I.G. (2009 June 22-26). Origin of the Manleluag Hyperalkaline Hot Spring, Philippines, Goldschmidt 2009 Conference,

Davos.

- 2009 June 22-26 Honrado, M.L.L., Pascua, C.S., Vargas, E., Arcilla, C.A., Alexander, W.R., Namiki, K., Fujii, N., Yamakawa, M., Sato, T., & McKinley, I.G. (2009 June 22-26). Smectite and zeolite formation from the pyroclastic deposits of the Aksitero Formation, Philippines, Goldschmidt 2009 Conference, Davos.
- 2009 June 14-20 Arcilla, C.A., Honrado, M.L.L., Vargas, E., Pascua, C.S., McKinley, I.G., Namiki, K., Fujii, N., Yamakawa, M., & Alexander, W.R. (2009 June 14-20). Bentonite Reaction in Natural Hyperalkaline Groundwaters: Examples from the Philippines, XIV International Clay Conference, Castellaneta Marina, Italy.
- 2009 May 13-14 Arcilla, C.A., Pascua, C.S., Alexander, W. R., & McKinley, I.G. (2009 May 13-14). Natural analogue studies in ophiolite systems and tertiary volcanic deposits of the Philippines, 3rd International Workshop and Conference on Earth Resources Technology, Sapporo Japan.
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Doctor of Philosophy in Soil Science, Iwate University, Morioka, Iwate, Japan 1997

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Researches

Completed

Integrated soil and crop nutrient management in vegetable crops in Southern Philippines

Protected Cropping for Profitable Vegetable Production in the Southern Philippines

Enhancing Cabbage Production in P deficient soil through Integrated Nutrient Management

Indigenous knowledge on natural resource management of people living in the marginal uplands of Eastern Visayas. (under the PHernet Project on Soil and Environmental Quality Enhancement in Climate Change

Microbial -induced mobilization of micronutrient from different soil environments for increased yield and improved nutritional quality of sweet potato and purple yam

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Gerona, R.G., Gonzaga, Z.C., Capuno, O.B., Armenia, P.T., Loreto, M.B., Nuñez, L.B., Borines, L.M., Tulin, A.B., Tauza, E.R., Lusanta, D.C., Dimabuyu, H.B., Vega, M.L.P., Mangmang, J.S., Rogers, G.S., & Menz, K.M., Sustainable vegetable production through the use of low-cost protective structures: a farmer's experience in Bontoc, southern Leyte, Philippines. XXIX International Horticultural Congress on Horticulture: Sustaining Lives, Livelihoods and Landscapes (IHC2014): International Symposium on Horticulture in Developing Countries and World Food Production, 2014, 1128:171-176.

- 2013 Lesaca, P.R.A., & Tulin, A.B., Increasing Cabbage Yield through SSNM. BAR Research and Development Digest, 2013, 15(2).
Tulin, A.B., Rallos, R.V., Rañises, M.B., & Dorahy, C., Increasing Cabbage Production Through NPK Application In Cabintan, Ormoc City, Leyte. Annals of Tropical Research, 2013, 35(1):118-130.
- 2012 Tulin, A.B., Ranises, M.B., Galambao, M.B., & Dorahy, T., Nutrient balance studies for sustainable P deficient soils. Proceedings of the 15th PSSST Annual Meeting and Scientific Conference, Siliman University, Negros Oriental, Philippines, 2012:39-40.
Rabe, K., Celaya, A.M.S., Galambao, M.B., & Tulin, A.B., Enhancement of the Growth, Yield and anti-oxidant activity of tomatato grown under protective structure and open field condition through K Biofortification. Proceedings of the 15th PSSST Annual Meeting and Scientific Conference, Siliman University, Dumaguete, Negros Oriental, Philippines, 2012:58-59.
- 2010 Lapoot, C.R., Salvani, J.B., Duna, L.V., Bicomon, R., & Tulin, A.B., Enhancing farmers knowledge on soil and crop nutrient management for vegetable production in Bukidnon, Mindanao, Philippines. Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010:158-161.
Tulin, A.B., Rallos, R., & Dorahy, C., Integrated nutrient management for increased cabbage production in volcanic soil in Cabinatan, Leyte, Philippines. Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010.
Tulin, A.B., Quiñones, C.M., Rallos, R., Mercado, A., Jr., Salvani, J., Lapoot, C., Justo, V., & Dorahy, C., Evidence-based nutrient management strategy in identifying fertility status and soil constraints for vegetable production in the Southern Philippines. Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010.
Dorahy, C., Mercado, A., Jr., Quiñones, C.M., Bicomon, R., Salvani, J., Lapoot, C., Justo, V., Oakeshott, J., Atienza, J., & Tulin, A.B., A framework for prioritising nutrient management research in vegetable production in the southern Philippines . Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010:5-8.
Mercado, A., Jr., Tulin, A., & Dorahy, C., Soil management and crop nutrition for tomato in acid soil of Claveria, Philippines. Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010:270-273.
- 2009 Tulin, A.B., Improvement of the growth, yield, and tuber quality of purple yam through macro and micronutrient fertilization. Annals of Tropical Research, 2009, 31(2):95-119.
- 2008 Tulin, A.B., Application of macro and micro nutrients increases purple yam yield. Agriculture, 2008, 12(3):56-57.
- 2007 Sueta, J.P., Asio, V.B., & Tulin, A.B., Chemical dynamics of a highly weathered soil under native tree species in Mt. Pangasugan, Leyte. Annals of Tropical Research, 2007, 29(1):73-89.
- 2004 Tulin, A.B., Asio, V.B., Campilan, D.M., & Kawai, S., Characterization of nutrient deficiency symptoms in sweet potato through farmer-scientist participatory approach. Annals of Tropical Research, 2004, 26(1):141-167.
- 2002 Tulin, A.B., Properties and constraints of red-yellow and volcanic ash soils planted to rootcrops in the Philippines. Philippine Journal of Crop Science, 2002, 27(Suppl1):47.
- 2001 Tulin, E.E., Tulin, A.B., & Eijiri, S.-I., Cell-free synthesis of tachypleisin, an antimicrobial peptide from *Tachypleus tridentatus*. Annals of Tropical Research, 2001, 23(2):18-33.
Tulin, A.B., Castanas, E.C., Asio, V.B., Pandales, J.R., & Campilan, D.M., Establishment of nutrient deficiency symptoms in sweet potato root systems. PCARRD Highlights 2000 (Philippines), 2001:127-128.

- 2000 Navarrete, I., Asio, V., Balbarino, E., & Tulin, A., The physico-chemical properties of rhizosphere soil grown to vetiver in a degraded upland. *Grassland Society of the Philippines Journal*, 2000, 4(1):29-34.
- Tulin, A.B., Surface charge characteristics of selected Philippine soils. *Annals of Tropical Research*, 2000, 22(1&2):60-77.
- 1997 Bautista-Tulin, A.T., & Inoue, K., Hydroxy-Interlayered Minerals in Japanese Soils Influenced by Eolian Deposition. *Soil Science Society of America Journal*, 1997, 61(2):631-640.
- 1996 Bautista-Tulin, A.T., Briones, A.M., & Inoue, K., Effect of P application on CEC, amounts of extractable nutrients, and corn yield in a Hydric Melanudand in the Philippines. *Soil Science and Plant Nutrition*, 1996, 42(2):383-387.
- 1993 Bautista, A.T., & Inoue, K., Significance of loess addition in relation to andic soil properties of volcanic ash soils. *Soil Science and Plant Nutrition*, 1993, 39(3):517-527.

Name Luzvisminda M. Bellotindos

Sex Female

Organizational Affiliations

Director, Center for Research in Energy Systems and Technologies and Center for Academic and Professional Engineering Services, University of San Carlos, Cebu City, Philippines

Education

Doctor of Philosophy in Chemical Engineering, University of the Philippines, Diliman, Quezon City 2010

Master of Science in Chemical Engineering, University of the Philippines, Diliman, Quezon City 1997

Master of Engineering in Engineering Education, University of the Philippines, Diliman, Quezon City 1997

Bachelor of Science in Chemical Engineering, University of San Carlos, Cebu, Philippines 1976

Fields of Specialization

Chemical Engineering

Wastewater Treatment

Water Treatment

Heterogeneous Catalysis

Environmental Engineering

Environmental Chemistry

Wastewater

Reactors

Advanced Oxidation Processes

Degradation

TOC

Sonochemistry

Employment

Research Director, Archie Eustaquio Research Laboratory, Universidad de Zamboanga, 2012 September-2015 August

Publications

2019 Lozano, L., Querikiol, E.M., Abundo, M.L.S., & Bellotindos, L.M., Techno-economic analysis of a cost-effective power generation system for off-grid island communities: A case study of Gilutongan Island, Cordova, Cebu, Philippines. *Renewable Energy*, 2019, 140:905-911.

2017 Chen, T.-T., Chen, T.-E., Lu, M.-C., & Bellotindos, L.M., Removal of COD from TFT-LCD Wastewater by Electro-Fenton Technology Using a Tubular Reactor. *Journal of Environmental Engineering*, 2017, 143(7):04017018.

- de Luna, M.D.G., Rance, D.P.M., Bellotindos, L.M., & Lu, M.-C., A statistical experimental design to remove sulfate by crystallization in a fluidized-bed reactor. *Sustainable Environment Research*, 2017, 27(3):117-124.
- de Luna, M.D.G., Rance, D.P.M., Bellotindos, L.M., & Lu, M.-C., Removal of sulfate by fluidized bed crystallization process. *Journal of Environmental Chemical Engineering*, 2017, 5(3):2431-2439.
- 2016 Garcia-Segura, S., Bellotindos, L.M., Yao-Hui, H., Brillas, E., & Lu, M.-C., Fluidized-bed Fenton process as alternative wastewater treatment technology - A review. *Journal of the Taiwan Institute of Chemical Engineers*, 2016, 67:211-225.
- Chyan, J.M., Lu, C.C., Shiu, R.F., & Bellotindos, L.M., Purification of landscape water by using an innovative application of subsurface flow constructed wetland. *Environmental Science and Pollution Research*, 2016, 23(1):535-545.
- 2015 Methatham, T., Bellotindos, L.M., Chen, T.-E., & Lu, M.-C., Factors affecting treatment of TFT-LCD wastewater by fenton and electro-fenton processes. *Environmental Progress & Sustainable Energy*, 2015, 35(2):368-373.
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- de Luna, M.D.G., Bellotindos, L.M., Asiao, R.N., & Lu, M.-C., Removal and recovery of lead in a fluidized-bed reactor by crystallization process. *Hydrometallurgy*, 2015, 155:6-12.
- 2014 Shue, M.-F., Chen, T.-C., Bellotindos, L.M., & Lu, M.-C., Tributyltin distribution and producing androgenic activity in water, sediment, and fish muscle. *Journal of Environmental Science and Health, Part B, Pesticides, Food Contaminants, and Agricultural Wastes*, 2014, 49(6):432-438.
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- Shue, M.F., Chen, W.D., Bellotindos, L.M., & Lu, M.C., Seasonal Variations of Heavy Metals Content in Muscle and Viscera of Green-Lipped Mussel *Perna viridis* From Da-Peng Bay Lagoon in Taiwan. *Journal of Toxicology and Environmental Health, Part A*, 2014, 77(20):1222-1228.
- 2013 Su, C.-C., Bellotindos, L.M., Chang, A.-T., & Lu, M.-C., Degradation of acetaminophen in an aerated Fenton reactor. *Journal of the Taiwan Institute of Chemical Engineers*, 2013, 44(2):310-316.
- 2012 Anotai, J., Chen, C.-M., Bellotindos, L.M., & Lu, M.-C., Treatment of TFT Treatment of TFT-LCD wastewater containing ethanolamine by fluidized-bed Fenton technology. *Bioresource Technology*, 2012, 113:272-275.
- Su, C.-C., Chang, A.-T., Bellotindos, L.M., & Lu, M.-C., Degradation of acetaminophen by Fenton and electro-Fenton processes in aerator reactor. *Separation and Purification Technology*, 2012, 99:8-13.
- 2011 Bellotindos, L.M., Dalida, M.L.P., Peralta, G.L., Lu, M.-C., & Mendoza, H.D., Sonoleaching: Development of a rapid determination of Pb from stabilized waste using ultrasound assisted leaching. *Sustainable Environment Research*, 2011, 21(6):375-380.

Name Corazon T. Biong

Sex Female

Organizational Affiliations

Chair, Department of Physical Education, College of Education, MSU-Iligan Institute of Technology, Iligan City, Lanao del Norte, 9200 Philippines

Education

Bachelor in Physical Education (*cum laude*), Mindanao State University, Philippines 1983

Master of Science in Physical Education, Mindanao State University, Philippines 1991

Doctor of Philosophy in Educational Management, Capitol University, Cagayan de Oro City, Philippines 2010

Fields of Specialization

Physical Education

Sport Biomechanics

Special Education

Sport Psychology

Exercise Performance

Physical Fitness

Human Performance

Disability Studies

Sport Training

Physical Activity Assessment

Association Membership

Member, DOST-National Research Council of the Philippines

Researches

Completed

Bacteria sediments in a seagrass bed in Kauswagan, Lanao del Norte, Mindanao, Philippines.

Biology for *Sargassum crassifolium* J. Agarth from Loculan shoal. Panguil Bay, Mindanao, Philippines. I. Growth rate, 1994

Hydrobioecology of Iligan Bay

Nutrient requirement of tropical marine algae with potential for mariculture.

Primary productivity of macrophytes in Iligan Bay

Primary productivity of *Sargassum* sp.: A comparison of methodology

Seaweed farming in the Philippines

Tissue nitrogen-and Phosphorus- Content of *Gracillara Coronopifolia* . Agarth from Ilidgan bay in relation to the seawater nutrient concentration

On-going

Artificial reef systems in Iligan bay: a community based costal resource Management

Papers Presented

- 2015 September 15-18 Biong, C.T. (2015 September 15-18). Role of Information and Communication Technology: Its Impact on Students' Learning and the Extent of Effects to Social, Recreational and Sports Activities, 1st ACPES' Conference 2015 (5th AUCPESS' Conference), Semarang - Central Java, Indonesia.
- 2015 September 15-18 Alcuizar, R.M., Biong, C.T., & Reyes, A. (2015 September 15-18). Higaonon Dances: Its Implication for Cultural Identity, Peace & Development, 1st ACPES' Conference 2015 (5th AUCPESS' Conference), Semarang - Central Java, Indonesia.
- 2015 September 15-18 Duyaguait, J.S., & Biong, C.T. (2015 September 15-18). Correlates of Early Sexual Encounter Among the Adolescents of Buug Zamboanga Sibugay, 1st ACPES' Conference 2015 (5th AUCPESS' Conference), Semarang - Central Java, Indonesia.
- 2013 June 4-5 Biong, C.T., & Belano, J.M. (2013 June 4-5). Sexual Promiscuity and Physical Activity Participation Among the Guest Relation Officers of Valencia City, International Conference on Social Science Research, Penang, Malaysia.

Publications

- 2016 Bocar, A.C., & Biong, C., Factors that Induce Premarital Sexual Intercourse Among Adolescents: Reasons that Lead to Teenage Pregnancy. SSRN, 2016:<https://dx.doi.org/10.2139/ssrn.2856855>.
- 2015 Bocar, A.C., & Biong, C.T., Role of Information and Communication Technology: Its Impact on Students' Learning and the Extent of Effects to Social, Recreational and Sports Activities. *American Journal of Information Science and Computer Engineering*, 2015, 1(2):59-67.
- Alcuizar, R.M., Biong, C.T., & Reyes, A., Higaonon Dances: Its Implication for Cultural Identity, Peace & Development. *Proceedings of the International Conference on Social Science Research*, 2015:19-25.
- Duyaguait, J.S., & Biong, C.T., Correlates of Early Sexual Encounter Among the Adolescents of Buug Zamboanga Sibugay. *Proceedings of the International Conference on Social Science Research*, 2015:428-435.
- 2013 Biong, C.T., The National Competency-based Teacher Standards (NCBTS) Among the Students of the College of Education. *Oral Proficiency for Visual Arts Students*, 2013, 26(1):109-127.
- Pajo, L.S.H., & Biong, C.T., Development of a Physical Activity Program for Delinquent Out-of-School-Youth: Intervention for Violence. *Mediterranean Journal of Social Sciences*, 2013, 4(9):566-572.
- Cudal, C.C., & Biong, C.T., Vegetarianism and Health Status among the Senior Citizens of Iligan City. *Mediterranean Journal of Social Sciences*, 2013, 4(9):586-594.
- Biong, C.T., & Belano, J.M., Sexual Promiscuity and Physical Activity Participation Among the Guest Relation Officers of Valencia City. *Proceedings of the International Conference on Social Science Research*, 2013:1326-1340.

Name Cecilia Ortiz Bucayong

Sex Female

Education

Master of Science Education - Physics, MSU-Iligan Institute of Technology, Tibanga, Iligan City, Philippines 2004

Fields of Specialization

Physics Education

Pedagogy

Science Education Research

Employment

Research Study Leader, Department of Physics, Central Mindanao University, 2018 August-Present

Associate Professor, Central Mindanao University, 2015 January-Present

Publications

- 2019 Tandog, V.O., & Bucayong, C.O., Graphic Organizer: A Learning Tool in Teaching Physical Science. *PEOPLE: International Journal of Social Sciences*, 2019, 5(1):379-393.
Bucayong, C.O., Mixed Method Analysis in Assessing the Effectiveness of Intentional Learning Instruments in Teaching Circuits. *PEOPLE: International Journal of Social Sciences*, 2019, 4(3):1426-1442.
- 2018 Bucayong, C.O., Koc, B.C.U., & Ong, K., Predicting Conceptual Understanding of DC Circuits Using Intentional Learning Questionnaire. *Advanced Science Letters*, 2018, 24(11):7866-7870.
- 2016 Bucayong, C., Improving Students' Conceptual Understanding of DC Electric Circuits Using Intentional Learning Instruments. College of Education, De La Salle University, 2016.
- 2004 Bucayong, C., 3-dimensional improvised apparatus for vector operations. MSU-Iligan Institute of Technology, Iligan City, Philippines, 2004.

Name Jovito V. Cariño

Sex Male

Organizational Affiliations

Department of Philosophy, University of Santo Tomas, España Blvd, Sampaloc, Manila

Fields of Specialization

Ethics

Politics

Religion

Publications

- 2018 Cariño, J.V., Pada, Roland Theuas DS., Axel Honneth's Social Philosophy of Recognition: Freedom, Normativity, and Identity. *Kritike*, 2018, 12(1):293-296.
Cariño, J.V., The Ethico-Political Theory of Thomas Aquinas and the Revival of Capital Punishment in the Philippines. *Kritike*, 2018, 12(1):233-249.
Cariño, J.V., MacIntyre, Alasdair, Ethics in the Conflicts of Modernity: An Essay on Desire, Practical Reasoning, and Narrative. *Kritike*, 2018, 12(2):157-158.
- 2017 Cariño, J.V., Aguas, Jove Jim S. Person, Action and Love: The Philosophical Thoughts of Karol Wojtyła (John Paul II). *Kritike*, 2017, 11(1):235-237.
Cariño, J.V., Eagleton, Terry, Materialism. *Kritike*, 2017, 11(2):331-335.
- 2016 Cariño, J.V., Diyos at Politika sa Pilipinas: Bakit Nga Ba Pabalik-balik Ang Multo ng Metapisika?. *Hasaan*, 2016, 3(1).
Cariño, J.V., Reason, ethics, and religion: tradition-constituted rationality and the possibility of Aquinas-Marx interface through Alasdair MacIntyre. University of Santo Tomas, Manila, Philippines, 2016.
Cariño, J.V., Re-thinking Catholic Philosophy: Alasdair MacIntyre and the Tension within Thomism. *Kritike*, 2016, 10(2):191-209.
- 2015 Cariño, J.V., Bolaños, Paolo A., On Affirmation and Becoming: A Deleuzian Introduction to Nietzsche's Ethics and Ontology. *Kritike*, 2015, 9(2):230-233.
- 2014 Cariño, J.V., Philosophy and the Academe: Origins, Contexts and Prospects. *Suri*, 2014, 4(1):15-28.
Cariño, J.V., Ang Diyalektika ng Pilosopiyang Filipino batay kay Theodor Adorno. *Hasaan*, 2014, 1(1):53-65.
Cariño, J.V., Arkitektura at Globalisasyon sa Pilipinas: Isang Pagbabaka-sakali Tungo sa Isang Kritikal na Teoryang Kultural / Architecture and Globalization in the Philippines: An Attempt at a Critical Cultural Theory. *Malay*, 2014, 26(1):1-11.
Cariño, J.V., Nicholas, Jeffery L., Reason, Tradition and the Good: MacIntyre's Tradition-Constituted Reason and Frankfurt School Critical Theory. *Kritike*, 2014, 8(1):190-193.
- 2013 Cariño, J.V., Re-thinking Filipino Philosophy with Gilles Deleuze. *Mabini Review*, Polytechnic University of the Philippines, 2013, 2(1):57-72.
- 2012 Cariño, J.V., Philosophy, Well Being and the Identity of Catholic Universities. *Kritike*, 2012, 6(1):1-16.
- 2010 Cariño, J.V., On Medical Philosophy: Nietzsche and the Hellenistic Philosophers. *Philippiniana Sacra*, 2010, 45(134):331-342.
- 2009 Cariño, J.V., Heidegger and the Danger of Modern Technology. *Philippiniana Sacra*,

2009, 44(132):491-504.

2006 Cariño, J.V., A Hymn to Hope: Celebrating the Joy of Being Human in Paul Ricoeur's Hermeneutics of Narrative Discourse. *Philippiniana Sacra*, 2006, 41(122):393-404.

Name Katherine Ann T. Castillo-Israel

Sex Female

Organizational Affiliations

Assistant Professor, Institute of Food Science and Technology, University of the Philippines Los Baños, College, Laguna, Philippines

Fields of Specialization

Food Chemistry

Food Biochemistry

Food Science

Postharvest horticulture

Molecular Biology

Structural Biology

Honors / Awards

2nd Runner Up, Outstanding Research and Publications (CHED Republica) Awards, for Agriculture and Natural Sciences Category, Commission on Higher Education (CHED) 2016 July 26

Researches

Ongoing

Food Product and Process Development from Selected Resilient, Drought Resistant and Underutilized Crops

Publications

- 2019 Alhambra, C.M., de Guzman, M.K., Dhital, S., Bonto, A.P., Dizon, E.I., Israel, K.A.C., Hurtada, W.A., Butardo, V.M., Jr., & Sreenivasulu, N., Long glucan chains reduce in vitro starch digestibility of freshly cooked and retrograded milled rice. *Journal of Cereal Science*, 2019, 86:108-116.
- Robles, M.K.T., Castillo-Israel, K.A.T., & Lizardo, R.C.M., Utilization of Cooking-Type 'Saba' Banana in the Development of Ready-to-Drink Juice with Improved Quality and Nutritional Properties. *Beverages*, 2019, 5(2):31.
- Piano, A.M.P., & Castillo-Israel, K.A.T., Physico-chemical quality and microbial safety evaluation of ready-to-eat fresh-cut watermelon and pineapple sold in Imus, Cavite, Philippines. *Food Research*, 2019, 3(6):684-692.
- 2018 Bainto, L.C., Dizon, E.I., Laurena, A.C., & Castillo-Israel, K.A.T., Isolation and quantification of hydroxycitric acid from batuan [*Garcinia binucao* (Blanco) Choisy] fruit. *International Food Research Journal*, 2018, 25(2):706-711.
- Bainto, L.C., Dizon, E.I., & Castillo-Israel, K.A.T., Effects of various processing methods on hydroxycitric acid content of "batuan" [*Garcinia binucao* (Blanco) Choisy] fruits. *International Food Research Journal*, 2018, 25(suppl.1):S13-S19.
- Tadeo, P.R.M., Castillo-Israel, K.A.T., Serrano, E.P., Gandia, J.B.L., & Absulio, W.L., Physiological responses and storage quality of fresh-cut red and white dragon fruit (*Hylocereus* spp.) treated with 1-methylcyclopropene (1-MCP). *International Food Research Journal*, 2018, 25(5):2090-2098.
- Negrillo, S.L.C., Castillo-Israel, K.A.T., Gandia, J.B.L., Absulio, W.L., & Serrano, E.P., Physiological and physical responses of packaged minimally processed Pinakbet vegetables to 1-methylcyclopropene (1-MCP) pre-cutting treatment. *International*

- Food Research Journal, 2018, 25(4):1403-1409.
- Marquez, K.L.D., Castillo-Israel, K.A.T., Serrano, E.P., Gandia, J.B.L., & Absulio, W.L., Responses of ready-to-eat salad vegetable mixes prepared with different lettuce varieties to 1-methylcyclopropene (1-MCP) post-cutting treatment. *International Food Research Journal*, 2018, 25(4):1616-1624.
- 2017 Valmorida, J.S., & Castillo-Israel, K.A.T., Application of Plackett-Burman experimental design in the development of muffin using adlay flour. *IOP Conf. Series: Earth and Environmental Science*, 2017, 102:012081.
- Lizardo, R.C.M., Castillo-Israel, K.A.T., Dizon, E.I., Mejico, M.I.F., & Jubinal, C.M.D., Development of High-value Food Products from Selected Indigenous and Underutilized Crops to Increase Food Utilization and Reduce Food Loss. *Journal of Developments in Sustainable Agriculture*, 2017, 12(1):1-12.
- 2016 Bernardino, M.A., Castillo-Israel, K.A.T., Serrano, E.P., Gandia, J.B.L., & Absulio, W.L., Efficacy of 1-methylcyclopropene (1-MCP) post-cutting treatment on the storage quality of fresh-cut 'Queen' pineapple (*Ananas comosus* (L.) Merr. cv. 'Queen'). *International Food Research Journal*, 2016, 23(2):667-674.
- San Pascual, J.C.K., Sabularse, V.C., Castillo-Israel, K.A.T., & Serrano, E.P., Efficacy of nata de coco-carboxymethyl cellulose-based composite coating on the storage quality of calamundin [*Citrofortunella microcarpa* (Bunge) Wijnands] fruits. *International Food Research Journal*, 2016, 23(5):1902-1910.
- 2015 Castillo-Israel, K.A.T., Baguio, S.F., Diasanta, M.D.B., Lizardo, R.C.M., Dizon, E.I., & Mejico, M.I.F., Extraction and characterization of pectin from Saba banana [*Musa 'saba'*(*Musa acuminata* x *Musa balbisiana*)] peel wastes: A preliminary study. *International Food Research Journal*, 2015, 22(1):202-207.
- Castillo-Israel, K.A.T., Gandia, J.B.L., Velez, A.C.G., Absulio, W.L., & Bainto, L.C., Storage quality of fresh-cut Philippine 'Carabao' mango (*Mangifera indica* L. cv. 'Carabao') fruits with 1-Methylcyclopropene (1-MCP) post-cutting treatment. *International Food Research Journal*, 2015, 22(6):2196-2202.
- Relox, P.E., Jr., Castillo-Israel, K.A.T., Serrano, E.P., Absulio, W.L., & Gandia, J.B.L., Efficacy of 1-methylcyclopropene post-cutting treatment on fresh-cut papaya (*Carica papaya* L. cv. 'Sinta') storage quality using two packaging forms. *International Food Research Journal*, 2015, 22(3):910-917.
- 2014 Castillo-Israel, K.A.T., Serrano, E.P., Esguerra, E.B., & Merca, F.E., Dual preharvest application of 1-methylcyclopropene (1-MCP) aqueous spray controls mango (*Mangifera indica* L. cv. 'Carabao') ripening. *Philippine Science Letters*, 2014, 7(2):324-330.
- Castillo-Israel, K.A.T., Serrano, E.P., Merca, F.E., & Sabularse, V.C., Ethylene Biosynthetic Responses of Mango (*Mangifera indica* L. cv. 'Carabao') Fruits to 1-methylcyclopropene (1-MCP) Preharvest Aqueous Spray Applications. *Asian Journal of Agriculture and Food Science*, 2014, 2(1):1-8.
- Limbaga, J.C., Magpantay, R., Jr., Blanca-Ocreto, M., & Castillo-Israel, K.A.T., Physico-chemical sensory evaluation of bilimbi (*Averrhoa bilimbi* L.) powder as souring ingredient. *Journal of Human Ecology*, 2014, 3(1):55-64.
- Castillo-Israel, K.A.T., Serrano, E.P., Esguerra, E.B., & Merca, F.E., 1-Methylcyclopropene (1-MCP) Preharvest Aqueous Spray Delays Ripening of Mango (*Mangifera indica* L.) cv 'Carabao'. *Asian Journal of Agriculture and Food Science*, 2014, 2(1):9-15.
- 2007 Castillo-Israel, K.A.T., & Laurena, A.C., Screening of food legumes for methionine-rich proteins using an in-vitro labelling technique involving biotin-avidin interactions. *Philippine Journal of Crop Science*, 2007, 32(2):15-24.
- 2003 Castillo-Israel, K.A., & Revilleza, M.J.R., Non-Radioactive in-vitro Labeling Technique for Detection of Methionine-Rich Proteins in Philippine Food Legumes. *Philippine*

Journal of Crop Science, 2003, 28(3):17-24.

Name Sandra G. Catane

Sex Female

Organizational Affiliations

Professor, National Institute of Geological Sciences Building, University of the Philippines, Diliman, Quezon City, 1101

Education

Doctor of Philosophy in Environmental Science, Kobe University, Kobe, Japan 1994

Fields of Specialization

Environmental Science

Volcanology

Geohazards

Caldera evolution

Deep-sea ash layers

Explosive volcanism

Flow mechanism of volcanic and non-volcanic landslides

Geomechanical properties of rock slopes and slope stability assessment

High-resolution dating of young tephra deposits

Tephra stratigraphy

Volcano hazards assessment

Water-magma interaction

Papers Presented

2011
October 30 -
November 1 Marciano, J.S., Jr., Zarco, M.A.H., Talampas, M.C.R., Catane, S.G., Hilario, C.G., Zabanal, M.A.B., Carreon, C.R.C., Mendoza, E.A., Kaimo, R.N., & Cordero, C.N. (2011 October 30 - November 1). Real-World Deployment of a Locally-Developed Tilt and Moisture Sensor for Landslide Monitoring in the Philippines, IEEE Global Humanitarian Technology Conference, Seattle, WA, USA.

2010
December
13-17 Lit, C.C., Catane, S., Teves, J., Tejada, M.G., Mandanas, A.A., Fernando, A., Mirabueno, M.T., Arpa, M.B., Bringas, C.L., Escobar, K., Sobrepena, K., Abuda, J., Abrecia, V., Solidum, R.U., & Peleo-Alampay, A. (2010 December 13-17). ~6 ka tephra from Sibuyan Sea, Philippines: Geochemical characteristics and its effects on planktonic foraminifera, American Geophysical Union, Fall Meeting, San Francisco, California, USA.

2010
December
13-17 Mandanas, A.A., Tejada, M.G., Catane, S., Teves, J., Arpa, M.B., Mirabueno, M.T., Bringas, C.L., Lit, C.C., & Solidum, R.U. (2010 December 13-17). Eastern Luzon Arc Affinity of Benham Rise Tephra from Major Element Chemistry of MD06-3047 Glasses, American Geophysical Union, Fall Meeting, San Francisco, California, USA.

2010
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13-17 Catane, S.G., Fernando, A., Peleo-Alampay, A., & Tejada, M.G. (2010 December 13-17). 6 ka anoxic condition in the Sibuyan Sea Basin, Philippines - possible link with an explosive eruption event?, American Geophysical Union, Fall Meeting, San Francisco, California, USA.

- 2010 May 2-7 Mendoza, E.P., Catane, S., Pascua, C., & Zarco, M.A. (2010 May 2-7). Geological and geotechnical characteristics of Metro Manila volcanic soils and their suitability for landfill soil liner, EGU General Assembly, Vienna, Austria.

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- 2012 Catane, S.G., Abon, C.C., Saturay, R.M., Jr., Mendoza, E.P.P., & Futralan, K.M., Landslide-amplified flash floods - The June 2008 Panay Island flooding, Philippines. *Geomorphology*, 2012, 169-170:55-63.
- 2011 Catane, S.G., Zarco, M.A.H., Cordero, C.J.N., Kaimo, R.A.N., & Saturay, R.M., Jr., Laboratory Experiments on Steady State Seepage-Induced Landslides Using Slope Models and Sensors. *Science Diliman*, 2011, 23(1):17-30.
 Marciano, J.S., Jr., Zarco, M.A.H., Talampas, M.C.R., Catane, S.G., Hilario, C.G., Zabanal, M.A.B., Carreon, C.R.C., Mendoza, E.A., Kaimo, R.N., & Cordero, C.N., Real-World Deployment of a Locally-Developed Tilt and Moisture Sensor for Landslide Monitoring in the Philippines. 2011 IEEE Global Humanitarian Technology Conference, 2011.
- 2010 Futralan, K.M., Biscaro, J.R.D., Saturay, R.M., Jr., Catane, S.G., Amora, M.S., & Villaflor, E.L., Assessment of potential slope failure sites at Mt. Can-abag, Guinsaugon, Philippines, based on stratigraphy and rock strength. *Bulletin of Engineering Geology and the Environment*, 2010, 69(4):517-521.
 Mendoza, E.P., Catane, S., Pascua, C., & Zarco, M.A., Geological and geotechnical characteristics of Metro Manila volcanic soils and their suitability for landfill soil liner. *EGU General Assembly Conference Abstracts*, 2010, 12:298.
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 Mandanas, A.A., Tejada, M.G., Catane, S., Teves, J., Arpa, M.B., Mirabueno, M.T., Bringas, C.L., Lit, C.C., & Solidum, R.U., Eastern Luzon Arc Affinity of Benham Rise Tephra from Major Element Chemistry of MD06-3047 Glasses. *American Geophysical Union Fall Meeting Abstracts*, 2010.
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- 2009 Guthrie, R.H., Evans, S.G., Catane, S.G., Zarco, M.A.H., & Saturay, R.M., Jr., The 17 February 2006 rock slide-debris avalanche at Guinsaugon Philippines: A synthesis. *Bulletin of Engineering Geology and the Environment*, 2009, 58(2):201-213.
 Pioquinto, W.P.C., Caranto, J.A., Bayrante, L.F., Zarco, M.H., & Catane, S.G., Mitigating a Deep-Seated Landslide Hazard- The Case of 105 Mahiao Slide Area, Leyte Geothermal Production Field, Philippines. *Geological Society of the Philippines*, 2009.
- 2007 Makino, M., Mandanas, A.A., & Catane, S.G., Gravity basement of the Guinsaugon landslide along the Philippine Fault Zone. *Earth, Planets and Space*, 2007, 59(10):1067-1071.
 Catane, S.G., Cabria, H.B., Tomarong, C.P., Jr., Saturay, R.M., Jr., & Zarco, M.A.H., Catastrophic rockslide-debris avalanche at St. Bernard, Southern Leyte, Philippines. *Landslides*, 2007, 4(1):85-90.
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 Wiesner, M.G., Wetzal, A., Catane, S.G., Listanco, E.L., & Mirabueno, H.T., Grain size, areal thickness distribution, and controls on sedimentation of the 1991 Mount

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- 2003 Catane, S.G., Listanco, E.L., Corpuz, E.G., Lagmay, A.M.A., Bornas, M.A., Cabria, H.B. & Panol, A.P., Active volcanoes in the Philippines - Mayon, Pinatubo and Taal. In: Field Trip Guidebook of the 2003 General Assembly of International Union of Geodesy and Geophysics (IUGG), The Volcanological Society of Japan, 2003:198pp.
- 2001 Catane, S.G., & Mirabueno, M.H.T., Characteristics and origin of pyroclastic flows and surges of the 1993 Mayon Volcano eruption. *Journal of the Geological Society of the Philippines*, 2001, 56(3-4):125-143.
- Catane, S.G., Maglambayan, V.B., & Cabria, H., The 26 July 1999 landslide of Colalo, Mankayan, Benguet Prov.: Implications to hazards due to rapid mass movement and land use in the area. In: *Towards Understanding Peoples of the Cordillera*, Cordillera Studies Center, 2001, 3:129-146.
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- 1999 Wiesner, M., Arpa, C., Bracker, E., Catane, S.G., De Leon, M.M., Duyanen, J.P., Faber, U., Gerbich, C., Hess, S., Holbourn, A., Kaminski, M., Kruger, O., Kuhnt, W., Suu, N., Paulsen, H., Peleo-Alampay, A., Rimek, R., Seemann, B., Siringan, F. P., Steen, E., Szarek, R., Son, V., Von Wersch, V., Wang, Y., & Wetzell, A., Particle fluxes and recolonization of the 1991 Mount Pinatubo tephra layer in the South China Sea. Cruise Report (SO-140B) for the Federal Ministry of Education and Research, Berlin, 1999.

Name Ralph Sherwin A. Corpuz

Sex Male

Organizational Affiliations

Assistant Professor, Director of Quality Assurance, Electronics Engineering Technology, Technological University of the Philippines, Ayala Blvd, Ermita, Manila, Philippines

Education

Doctor of Philosophy in Technology Management, Technological University of the Philippines, Ayala Blvd, Ermita, Manila 2015

Fields of Specialization

Machine Learning

Robotics

Applied Artificial Intelligence

Embedded Systems

Quality Assurance

Technology Management

Fuzzy Logic Control

ISO 9001

Employment

Consultant, Development Academy of the Philippines, 2018 May-Present

Quality Management Representative, Technological University of the Philippines, 2017 March-Present

Director of Quality Assurance, Technological University of the Philippines, 2016 July-Present

Assistant Professor 2, Technological University of the Philippines, 2010 November-Present

Association Membership

ISO 9001: 2015 Lead Auditor, International Register of Certificated Auditors (IRCA)

Honors / Awards

Citation Award for the research "Live Chat Technology Optimization Framework for Online Businesses, Technological University of the Philippines 2019 February

Winner, Team Help App, Southeast Asia Mobile Application Challenge (SEAMAC), Go Negosyo, Applied Innovation Institute and Peace and Equity Foundation 2015 March

Top 1 Agent, Alorica Philippines (Formerly: ACS Pacific Inc.) 2008 August

Dean's Lister, Technological University of the Philippines 2004-2008

Class Valedictorian, Salcedo National High School, Salcedo, Ilocos Sur 2002 March

Class Salutatorian, Pias Elementary School, Salcedo, Ilocos Sur 1998 March

Papers Presented

- 2018 November 29 - December 2 Corpuz, R.S.A., & Orquiza, J.C.R. (2018 November 29 - December 2). Utilization of Fuzzy Logic Control in a Waste Robot, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines.
- 2015 June 12-13 Corpuz, R.S.A. (2015 June 12-13). Adaptability of Information Technology-Based Media in Selected Higher Education Institutions (HEI) in the Philippines, International Conference on Management, Science, Innovation, and Technology, Suan Sunanda Rajabhat University, Bangkok, Thailand.

Publications

- 2018 Corpuz, R.S.A., & Orquiza, J.C.R., Utilization of Fuzzy Logic Control in a Waste Robot. 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, 2018:1-6.
- 2017 Corpuz, R.S.A., Technological University of the Philippines Quality Management System (QMS) Manuals. Technological University of the Philippines, Ayala Blvd, Ermita, Manila, 2017.
- 2016 Corpuz, R.S.A., Development of Interactive Student Module: Microchip in C Language (Phase 1). Asia Pacific Higher Education Research Journal, 2016, 3(1):70-90.
Corpuz, R.S.A., Live Chat Technology Optimization Framework for Online Businesses. Prism Journal, 2016, 21(2):15-33.
- 2015 Corpuz, R.S.A., Longjia, M., & Li, Z.Y., Development of Atmel Microcontroller Based Automatic Sliding Door. Asia Pacific Higher Education Research Journal, 2015, 2(1):91-100.
Corpuz, R.S.A., Adaptability of Information Technology-Based Media in Selected Higher Education Institutions (HEI) in the Philippines. Conference Proceedings from the International Conference on Management, Science, Innovation, and Technology at Suan Sunanda Rajabhat University, Bangkok, Thailand, 2015.

Name Faye Abigail T. Cruz

Sex Female

Organizational Affiliations

Laboratory Head, Manila Observatory, Ateneo de Manila University Campus
Loyola Heights, Quezon City 1108 Philippines

Fields of Specialization

Climate

Climate Modeling

Precipitation

Papers Presented

- 2014 June 16-19 Cruz, F.T., Sasaki, H., Narisma, G.T. (2014 June 16-19). Sensitivity of the NHRCM simulation of the southwest monsoon rainfall over the Philippines to model resolution, 21st Century Challenges in Regional Climate Modelling, Lund, Sweden.
- 2011 October 24-26 Dado, J.M.B., Cruz, F.A.T., & Narisma, G.T.T. (2011 October 24-26). Near-Surface Atmospheric Dynamics of Changing Crops to Forests in the Philippines, 29th Samahang Pisika ng Pilipinas (SPP) Congress: Celebrating new ideas in physics, Diliman, Quezon City, Philippines.
- 2010 May 2-7 Boisier, J.-P., de Noblet, N., Pitman, A., & Cruz, F. (2010 May 2-7). Assessing the inter-model spreading in biophysical impacts of land cover change: Results from LUCID intercomparison project, EGU General Assembly 2010, Vienna, Austria.
- 2009 April 6-7 Pitman, A., Cruz, F., & Perkins, S. (2009 April 6-7). Are climate model projections over the MDB biased by nonparameterization of the impact of increasing CO₂ on stomates?, Water and Energy Cycle of the Murray-Darling Basin, UNSW, Sydney.
- 2001 October 24-26 Cruz, F.T., & Villarín, J.T. (2001 October 24-26). An Analysis on the Precipitable Water Vapor Observed over the PIMO GPS Station, 19th Samahang Pisika ng Pilipinas (SPP) Congress: Scaling New Heights in Physics and Physics Education, Bayombong, Nueva Vizcaya, Philippines.

Publications

- 2019 Tangang, F., Santisirisomboon, J., Juneng, L., Salimun, E., Chung, J., Supari, S., Cruz, F., Ngai, S.T., Ngo-Duc, T., Singhruck, P., Narisma, G., Santisirisomboon, J., Wongsaree, W., Promjirapawat, K., Sukamongkol, Y., Srisawadwong, R., Setsirichok, D., Phan-Van, T., Aldrian, E., Gunawan, D., Nikulin, G., & Yang, H., Projected future changes in mean precipitation over Thailand based on multi-model regional climate simulations of CORDEX Southeast Asia. *International Journal of Climatology*, 2019:doi:10.1002/joc.6163.
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- 2018 Tangang, F., Supari, S., Chung, J.X., Cruz, F., Salimun, E., Ngai, S.T., Juneng, L.,

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- 2017 Cruz, F.T., Narisma, G.T., Dado, J.B., Singhruck, P., Tangang, F., Linarka, U.A., Wati, T., Juneng, L., Phan-Van, T., Ngo-Duc, T., Santisirisomboon, J., Gunawan, D., & Aldrian, E., Sensitivity of temperature to physical parameterization schemes of RegCM4 over the CORDEX-Southeast Asia region. *International Journal of Climatology*, 2017, 37(15):5139-5153.
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- 2016 Ngo-Duc, T. , Tangang, F. T., Santisirisomboon, J., Cruz, F., Trinh-Tuan, L., Nguyen-Xuan, T., Phan-Van, T., Juneng, L., Narisma, G., Singhruck, P., Gunawan, D., & Aldrian, E., Performance evaluation of RegCM4 in simulating extreme rainfall and temperature indices over the CORDEX-Southeast Asia region. *International Journal of Climatology*, 2016, 37:1634-1647.
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- 2010 Boisier, J.-P., de Noblet, N., Pitman, A., & Cruz, F., & the LUCID Team, Assessing the inter-model spreading in biophysical impacts of land cover change: Results from LUCID intercomparison project. *Geophysical Research Abstracts*, EGU General Assembly, Vienna, Austria, 2010, 12:EGU2010-15453.
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- 2006 Remedio, A.R.C., Avila, F.B., Cruz, F.A., & Anglo, E.G., Applying the MM5 bogussing scheme to Forecasts of Philippine tropical cyclone tracks. Manila Observatory, Scientific Report No. 17, 2006.
- 2005 Avila, F.B., Cruz, F.A., Remedio, A.R.C., Choy, R.N., Villarin, J.T., & Anglo, E.G., Forecasting Philippine tropical cyclone tracks and associated precipitation using MM5: A sensitivity study. Manila Observatory, Scientific Report No.15, 2005.
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Agila Beowulf Cluster. *The Loyola Schools Review*, 2005, 1.

2018

Tangang, F., Supari, S., Chung, J.X., Cruz, F., Salimun, E., Ngai, S.T., Juneng, L., Santisirisomboon, J., Ngo-Duc, T., Phan-Van, T., Narisma, G., Singhruck, P., Gunawan, D., Aldrian, E., Sopaheluwakan, A., Nikulin, G., Yang, H., Remedio, A.R.C., Sein, D., & Hein-Griggs, D., Future changes in annual precipitation extremes over Southeast Asia under global warming of 2 °C. *APN Science Bulletin*, 2018, 8(1):doi:10.30852/sb.2018.436.

Name Maria Lourdes P. Dalida

Sex Female

Organizational Affiliations

Associate Professor VII, Department of Chemical Engineering, University of the Philippines Quezon City 1101, Philippines

Education

Doctor of Philosophy in Chemical Engineering, University of the Philippines, Diliman, Quezon City, Philippines 2005

Master of Science in Environmental Engineering, University of the Philippines, Diliman, Quezon City, Philippines 1987

Bachelor of Science in Chemical Engineering, University of the Philippines, Diliman, Quezon City, Philippines 1980

Fields of Specialization

Chemical Engineering

Wastewater Treatment

Photocatalysis

Membrane Separation

Environmental Engineering

Papers Presented

- 2015 September 3-5 Devanadera, M., & Dalida, M. (2015 September 3-5). Fouling of ceramic microfiltration membrane by soluble algal organic matter (SAOM) from *Chlorella sp.* and *M. aeruginosa* and its mitigation using feed-pre-treatment, 14th International Conference on Environmental Science and Technology, Rhodes, Greece.
- 2014 August 9-14 Kan, C.-C., Reano, H., & Dalida, M. (2014 August 9-14). Industrial wastewater coagulation using ferrate and manganese oxide derived from groundwater works sludge, 248th National Meeting of the American-Chemical-Society (ACS), San Francisco, CA.
- 2013 May 21-23 Reaño, R.L., Dalida, M.L.P., Huang, Y.-H., & Lu, M.-C. (2013 May 21-23). Barium Recovery Using Fluidized-Bed Crystallization Process, International Conference on Environmental and Hazardous Substance Management (EHSM 2013), Bangkok, Thailand.
- 2010 July 29 - 31 Wan, M.W., Kan, C.C., Mariano, A.F.V., Dalida, M.L.P., & Liao, C.H. (2010 July 29 - 31). Remediation of Copper (Cu²⁺) Ions from Aqueous Solution using Chitosan Immobilized on Bentonite, 6th International Conference on Sustainable Water Environment, University of Delaware, Newark, USA.
- 2008 November 16-23 Wan, M.-W., Kan, C.-C., Rogel, B.D., & Dalida, M.L.P. (2008 November 16-23). Adsorption of Copper and Lead by Chitosan Immobilized on Sand, 14th International Conference on the Heavy Metals in the Environment, Taipei, Taiwan.
- 2008 June 30 - July 1 Mariano, A.F.V., Dalida, M.L.P., Wan, M.-W., Kan, C.-C., & Liao, C.-H. (2008 June 30 - July 1). Adsorption of Copper (Cu²⁺) Ions from Aqueous Solution by Non-Crosslinked and Crosslinked Chitosan-Coated Bentonite Beads, 2008 Asian-Pacific Regional Conference on Practical Environmental Technologies, Quezon City, Philippines.

Publications

- 2019 Perez, J.V.D., Perez, J.V.D., Rojo, R.D., Dalida, M.L.P., & Rodrigues, D.F., Exposure-Dependent Antimicrobial Activity and Oxidative Properties of Polymer-Based Graphene Oxide Nanocomposites. *Materials Science Forum*, 2019, 947:13-20.
Almajose, A.P.L., & Dalida, M.L.P., Development of A Thermodynamically-Consistent Alpha Function for the Patel-Teja-Valderrama Equation of State. *International Journal of Chemical Engineering and Applications*, 2019, 10(2):50-55.
- 2017 Dalida, M.L.P., & Ramoso, P.D., Design, Mass Transfer Studies, and Optimization of an Air-Sparged Tubular Photocatalytic Reactor for the Degradation of Methylene Blue. *International Journal of Chemical Engineering and Applications*, 2017, 8(1):5-9.
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Matira, E.M., Chen, T.-C., Lu, M.-C., & Dalida, M.L.P., Degradation of dimethyl sulfoxide through fluidized-bed Fenton process. *Journal of Hazardous Materials*, 2015, 300:218-226.
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- 2008 Mariano, A.F.V., Dalida, M.L.P., Wan, M.-W., Kan, C.-C., & Liao, C.-H., Adsorption of Copper (Cu²⁺) Ions from Aqueous Solution by Non-Crosslinked and Crosslinked Chitosan-Coated Bentonite Beads. 2008 Asian-Pacific Regional Conference on Practical Environmental Technologies, Quezon City, Philippines, 2008.
- Wan, M.-W., Kan, C.-C., Rogel, B.D., & Dalida, M.L.P., Adsorption of Copper and Lead by Chitosan Immobilized on Sand. 14th International Conference on the Heavy Metals in the Environment, Taipei, Taiwan, 2008.

Name Froilan Gubi Destreza

Sex Male

Organizational Affiliations

Head, Campus ICT Services Office, College of Engineering and Computing Sciences, Batangas State University, ARASOF-Nasugbu

Education

Doctor of Technology, Batangas State University, Batangas City, Batangas, Philippines 2018

Master of Science in Computer Engineering, Batangas State University, Batangas City, Batangas, Philippines 2012

Bachelor of Science in Computer Engineering, East Asia College - Far Eastern University, Manila, Philippines 1999

Fields of Specialization

Computer Network

IoT

Arduino

iVerilog

Employment

Associate Professor, Batangas State University ARASOF, 2011 February-Present

Network Administrator / System Administrator, WestLink (Western Batangas Telephone System-WBTS), 1999 June-2000 January

Papers Presented

2013 January 19-20 Destreza, F.G. (2013 January 19-20). Sign Language to Voice Translator, International Conference on Advances in Computing and Communication Technologies (ICACCT), Pattaya, Thailand.

2013 January 19-20 Destreza, F.G. (2013 January 19-20). Wireless Interactive Board using Infrared and Bluetooth Technology, International Conference on Advances in Computing and Communication Technologies (ICACCT), Pattaya, Thailand.

Publications

2015 Destreza, F.G., Development and Evaluation of an Interactive Pen. Asia Pacific Journal of Multidisciplinary Research, 2015, 3(4):100-106.

Vitales, J.S., Villajin, L.D., Destreza, F.G., Ricafranca, D.V., & Rodriguez, V.M.R., Portable Water Level Monitoring System via SMS. Asia Pacific Journal of Multidisciplinary Research, 2015, 3(4):46-50.

Bautista, J.R., Destreza, F.G., & Linsangan, C.B., Shadow Projection: Elicitation of Emotional Response. Research on Humanities and Social Sciences, 2015, 5(11):1-5.

2014 Destreza, F.G., Nepomuceno, A.P., III, & Drio, C.C., Jr., Development of Fingerprint Engine Starter. Computer Engineering and Intelligent Systems, 2014, 5(1):21-29.

Destreza, F.G., Hernandez, J.R., Mendoza, L.B.B., & Manalo, M.B., SMART SYSTEM for BatStateU ARASOF- NASUGBU ROTC . Asia Pacific Journal of Multidisciplinary Research, 2014, 2(1):236-239.

Destreza, F.G., Inciong, M.C.B., Mejia, C.M., & Dimaala, J.D., One Click: The CECS

Students' Assistant Tools. *Asia Pacific Journal of Multidisciplinary Research*, 2014, 2(1):228-232.

Destreza, F.G., Sollestre, F.C.V., Vasquez, M.V., & Mendoza, F.B., Wireless 3D Chocolate Printer. *Asia Pacific Journal of Multidisciplinary Research*, 2014, 2(1):223-227.

Destreza, F.G., Portable Self-Sustaining Electric Generator. *Computer Engineering and Intelligent Systems*, 2014, 5(1):38-44.

Name Lilibeth Dicuangco-Valdez

Sex Female

Fields of Specialization

Algebraic Coding Theory

Association Membership

Associate Member, National Research Council of the Philippines

Publications

- 2017 Loquias, M.J.C., Valdez, L.D., & Walo, M.L.B., Color groups of colorings of N -planar modules. *Journal of Physics: Conference Series*, 2017, 809(1):012029.
- 2016 Consorte, O.D., & Valdez, L.D., On Euclidean and Hermitian Self-Dual Cyclic Codes over F_2 . *arXiv.org*, Cornell University, 2016:arXiv:1603.03520v1.
- 2014 Dicuangco-Valdez, L., Moree, P., & Solé, P., On the Existence of Hermitian Self-Dual Extended Abelian Group Codes. *Automorphic Forms*, 2014, 115:67-84.
- 2007 Dicuangco, L., Moree, P., & Solé, P., The lengths of Hermitian self-dual extended duadic codes. *Journal of Pure and Applied Algebra*, 2007, 209(1):223-237.
- 2006 Dicuangco, L., Moree, P., & Sole, P., On the Existence of Hermitian Self-Dual Extended Abelian Group Codes. *arXiv.org*, Cornell University, 2006:arXiv:math/0604013.
- 2005 Dicuangco, L., Moree, P., & Solé, P., The lengths of Hermitian Self-Dual Extended Duadic Codes. *arXiv.org*, Cornell University, 2005:arXiv:math/0511295.

Name Ian Ken D. Dimzon

Sex Male

Education

Doctor of Philosophy in Analytical Chemistry, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, Netherlands 2015

Master of Science in Chemistry, Ateneo de Manila University, Quezon City, Philippines 2009

Bachelor of Science in Chemistry, Ateneo de Manila University, Quezon City, Philippines 2003

Fields of Specialization

Mass Spectrometry

Chemical Processes

Analytical Chemistry

Fatty Acids

Partial Least Squares

Chromatography

Chemometrics

Chemical Metrology

Employment

Lecturer and Science Researcher, Hochschule Fresenius, University of Amsterdam, 2010-Present

Research Assistant, National Chemistry Instrumentation Center, Ateneo de Manila University, 2006-2010

Laboratory Analyst, Philippine Institute of Pure and Applied Chemistry, 2004-2006

Publications

2018 Dimzon, I.K.D., Morata, A.S., Müller, J., Yanela, R.K., Lebertz, S., Weil, H., Perez, T.R., Müller, J., Dayrit, F.M., & Knepper, T.P., Trace organic chemical pollutants from the lake waters of San Pablo City, Philippines by targeted and non-targeted analysis. *Science of The Total Environment*, 2018, 639:588-595.

2017 Klein, S., Dimzon, I.K., Eubeler, J., & Knepper, T.P., Analysis, Occurrence, and Degradation of Microplastics in the Aqueous Environment. In: Wagner, M., Lambert, S. (Eds.), *Freshwater Microplastics. The Handbook of Environmental Chemistry*, Springer, Cham, 2017, 58:51-67.

Dimzon, I.K., Westerveld, J., Gremmel, C., Frömel, T., Knepper, T.P., & de Voogt, P., Sampling and simultaneous determination of volatile per- and polyfluoroalkyl substances in wastewater treatment plant air and water. *Analytical and Bioanalytical Chemistry*, 2017, 409(5):1395-1404.

2016 Dimzon, I.K.D., Frömel, T., & Knepper, T.P., Characterization of 3-Aminopropyl Oligosilsequioxane. *Analytical Chemistry*, 2016, 88(9):4894-4902.

Frömel, T., Gremmel, C., Dimzon, I.K., Weil, H., Knepper, T.P., & de Voogt, P., Investigations on the presence and behavior of precursors to perfluoroalkyl

- substances in the environment as a preparation of regulatory measures. *TEXTE*, 2016.
- 2015 Dimzon, I.K.D., & Knepper, T.P., Degree of deacetylation of chitosan by infrared spectroscopy and partial least squares. *International Journal of Biological Macromolecules*, 2015, 72:939-945.
Dimzon, I.K., Trier, X., Frömel, T., Helmus, R., Knepper, T.P., & de Voogt, P., High Resolution Mass Spectrometry of Polyfluorinated Polyether-Based Formulation. *Journal of The American Society for Mass Spectrometry*, 2015, 27(2):309-318.
- 2013 Dimzon, I.K.D., Ebert, J., & Knepper, T.P., The interaction of chitosan and olive oil: Effects of degree of deacetylation and degree of polymerization. *Carbohydrate Polymers*, 2013, 92(1):564-570.
- 2012 Dimzon, I.K.D., & Knepper, T.P., Chapter 7 - MALDI-TOF MS for Characterization of Synthetic Polymers in Aqueous Environment. *Comprehensive Analytical Chemistry*, 2012, 58:307-338.
- 2011 Dimzon, I.K.D., Valde, M.F., Santos, J.E.R., Garrovillas, M.J.M., Dejarne, H.M., Remollo, J.M.W., & Dayrit, F.M., Physico-Chemical and Microbiological Parameters in the Deterioration of Virgin Coconut Oil. *Philippine Journal of Science*, 2011, 140(1):89-103.
Dayrit, F.M., Dimzon, I.K.D., Valde, M.F., Santos, J.E.R., Garrovillas, M.J.M., & Villarino, B.J., Quality characteristics of virgin coconut oil: Comparisons with refined coconut oil. *Pure and Applied Chemistry*, 2011, 83(9):1789-1799.
- 2007 Dayrit, F.M., Buenafe, O.E.M., Chainani, E.T., de Vera, I.M.S., Dimzon, I.K.D., Gonzales, E.G., & Santos, J.E.R., Standards for Essential Composition and Quality Factors of Commercial Virgin Coconut Oil and its Differentiation from RBD Coconut Oil and Copra Oil. *Philippine Journal of Science*, 2007, 136(2):121-131.
Dayrit, F.M., Buenafe, O.E.M., Chainani, E.T., de Vera, I.M.S., Dimzon, I.K.D., Gonzales, E.G., & Santos, J.E.R., Essential quality parameters of commercial Virgin Coconut Oil. *CORD*, 2007, 23(1):71-80.

Name Jonas Feliciano C. Domingo

Sex Male

Fields of Specialization

Environmental Sciences

Phenomenological Research

Science Education

Researches

Completed

Rhizosphere microbial community dynamics and the potential impact of organic matter amendment and *Trichoderma* sp. on the control of diseases associated with soil sickness in a continuous aerobic rice monocropping system

Isolation, Characterization and Identification of Bacteriocin-producing Lactic Acid Bacteria from Indigenous Fermented Foods

Ongoing

Use of Agriwaste Compost and *Trichoderma* Microbial Inoculant (TMI) for LGU and Community-based Rehabilitation of Agricultural Lands Damaged by Mine Wastes in Mogpog, Marinduque

Papers Presented

- 2016 April 7-9 Domingo, J.F.C. (2016 April 7-9). Determination of Lead Content in Selected Rivers in Manila: Basis for an Environmental Campaign, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2016 April 7-9 Domingo, J.F.C. (2016 April 7-9). The Biosorptive Potential of Durian Rind, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2016 April 7-9 Domingo, J.F.C. (2016 April 7-9). Chemical Analysis of Air in Valenzuela City Towards an Environmental Campaign, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2016 April 7-9 Domingo, J.F.C. (2016 April 7-9). Acidity Level of Soil Samples in Three Areas in Bulacan: An Analysis, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2014 April 3-5 Orfanel, K.R., Chico, P.L., Salas, A.P., Abad, C.C., Baring, T.M., Hassan, A., & Domingo, J.F.C. (2014 April 3-5). Level of Ecological Awareness of Selected College Students of Augustinian Schools Towards an Environmental Campaign, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2014 April 3-5 Abiog, M.E.A., Anos, R.J.L., Buinviaje, K.O.L., Dinglasan, L.G., Obien, J.P.S., Salditos, A.B., & Domingo, J.F.C. (2014 April 3-5). Survey of Basic Education Students on Herbal Medicine: Basis For On-Campus Herbal Garden, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2013 April 4-6 Castillo, J.R., Castillo, R.M.E., Domingo, J.F.C., & Dalida, C.S. (2013 April 4-6). Measuring Biochemical Oxygen Demand in Water Samples, 48th BIOTA Annual

National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.

Publications

- 2016 Domingo, J.F.C., Chemical Analysis of Air in Valenzuela City Towards An Environmental Campaign. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- Domingo, J.F.C., Determination of Lead Content in Selected Rivers in Manila: Basis for an Environmental Campaign. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- Domingo, J.F.C., The Biosorptive Potential of Durian Rind. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- Domingo, J.F.C., Acidity Level of Soil Samples in Three Areas in Bulacan: An Analysis. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- 2015 Domingo, J.F.C., Utilization of Process Oriented Guided Inquiry Learning (POGIL) Toward Achievement in Tertiary Chemistry. Conference proceedings: New perspectives in science education: 4th Conference edition, Florence, Italy, 2015:422.
- 2014 Orfanel, K.R., Chico, P.L., Salas, A.P., Abad, C.C., Baring, T.M., Hassan, A., & Domingo, J.F.C., Level of Ecological Awareness of Selected College Students of Augustinian Schools Towards an Environmental Campaign. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
- Abiog, M.E.A., Anos, R.J.L., Buinviaje, K.O.L., Dinglasan, L.G., Obien, J.P.S., Salditos, A.B., & Domingo, J.F.C., Survey of Basic Education Students on Herbal Medicine: Basis For On-Campus Herbal Garden. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
- 2013 Castillo, J.R., Castillo, R.M.E., Domingo, J.F.C., & Dalida, C.S., Measuring Biochemical Oxygen Demand In Water Samples. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.

Name Jeconiah Louis Mendoza Dreisbach

Sex Male

Fields of Specialization

Social Science
 Language Contact
 Intercultural Communication
 Cultural Politics
 Intercultural Studies
 Cross-Cultural Studies
 Indigenization Theories
 International Relations
 Filipino Philosophy
 Philippine Studies
 Cultural Studies
 Multiculturalism

Publications

- 2019 Dreisbach, J.L., Performing Politics: Dissent of the Mass Movement Against Neoliberal Policies in the Philippines. *Ideology Journal*, 2019, 3(4):92-98.
- 2018 Dreisbach, J.L., Kritikal na Pagsasalin ng Isang Tulang Sosyopolitikal ni Jose Maria Sison (A Critical Translation of a Sociopolitical Poem of Jose Maria Sison). *Malay*, 2018, 30(2):1-19.
- Dreisbach, J.L., *Social Media & Blogging: The Changing Philippine Media Landscape under the Duterte Regime*. Kyoto Review of Southeast Asia, Center for Southeast Asian Studies, Kyoto University, Japan, 2018.
- Mendoza-Dreisbach, S., & Dreisbach, J.L., Female breast cancer as taboo: Cultural factors and awareness amongst patients and their families in the Philippines. *Geografia: Malaysian Journal of Society and Space*, 2018, 14(4):201-211.
- Dreisbach, J.L., MNL48 and the Idol Culture Phenomenon: An Emerging Manifestation of Japanese Soft Power in the Philippines. *EDUCATUM - Journal of Social Science*, 2018, 4(1):60-66.
- 2017 Dreisbach, J.L.M. , Beijing's National Insecurity – Ang Papel Ng Pangmadlang Midya Sa Paglaganap Ng Diskriminasyon Laban Sa Mga Pilipinong Domestic Helper Sa Hong Kong. *Social Science Research Network*, 2017:<http://dx.doi.org/10.2139/ssrn.2981041>.
- Demetrio, F.A., III, & Dreisbach, J.L., Disentangling the Rubrico and Dolalas Hypotheses on the Davao Filipino Language. *Recoletos Multidisciplinary Research Journal*, 2017, 5(2):1-15.

Name Maria Cecilia Dandan Galvez

Sex Female

Organizational Affiliations

Full Professor, Physics Department, College of Science, De La Salle University Manila

Head, Environment and Remote Sensing Research (EARTH) Laboratory, Physics Department, De La Salle University Manila

Fields of Specialization

Atmospheric physics

Lasers

Optics

Environmental Studies

Atmospheric pollution

Air Pollution Studies

Association Membership

Associate Member, National Research Council of the Philippines

Member, Optical Society of America

Member, Researchers for Clean Air (RESCueAIR)

Member, JSPS Alumni Association of the Philippines (JAAP)

Papers Presented

2017 June 20 - 22 Vallar, E., Resurreccion, N.G., Rempillo, O., Janairo, J.R., Tamayo, E.G., Ong, P.M., & Galvez, M.C. (2017 June 20 - 22). Aerosol and Cloud Characterization at De La Salle University, Manila, Philippines, De La Salle University Research Congress.

2016 March 7-9 Carnicer, K.M.R., Vallar, E.A., & Galvez, M.C.D. (2016 March 7-9). A Preliminary Study on the Precipitable Water Vapor (PWV) from the Davao Radiosonde Station for 2014, DLSU Research Congress 2016, De La Salle University, Manila, Philippines.

2014 November 12-16 Chinnaswamy, A., Naguib, R.N.G., Nguyen, Q.T., Trodd, N., Marshall, I., Yaacob, N., Santos, G.N.C., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., & Ton, T.N. (2014 November 12-16). Spatio-Temporal Analysis of the Effects of Air Pollution Hazards on Cardiovascular Health Outcomes in Bangalore, India, Palawan, Philippines.

2014 November 12-16 Chinnaswamy, A.K., Naguib, R.N.G., Nguyen, Q.T., Olayanju, L.O., Trodd, N., Marshall, I.M., Yaacob, N., Santos, G.N., Vallar, E.A., Galvez, M.C., Shaker, M.H., & Ton, T.N. (2014 November 12-16). Spatial Interpolation of Air Pollutants in Bangalore: 2010-2013, 7th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Hotel Centro, Puerto Prinsesa, Palawan, Philippines.

2014 November 12-16 Chinnaswamy, A., Naguib, R.N.G., Nguyen, Q.T., Trodd, N., Marshall, I., Yaacob, N., Santos, G.N.C., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., & Ton, T.N. (2014 November 12-16). Air Pollution in Bangalore, India: A Six-Year Trend and Health Implication Analysis, 7th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Hotel Centro, Puerto Prinsesa, Palawan, Philippines.

- 2014 November 12-16 Nguyen, Q.T., Balisane, H., Naguib, R.N.G., Santos, G.N., Vallar, E.A., Galvez, M.C., Shaker, M.H., & Ton, T.N. (2014 November 12-16). A GIS - Integrated Wireless Sensors Network Tool for Water Risk Monitoring - Case of Khanh Hoa Water Supply and Sewerage Company, Vietnam, 7th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Hotel Centro, Puerto Prinsesa, Palawan, Philippines.
- 2014 October 27-31 Castilla, R., Plando, F., Vallar, E., Galvez, M., & Morris, V. (2014 October 27-31). Characterization of columnar water vapor measurements and its comparison with model estimates and surface meteorological parameters Over Manila, Philippines (14.567° N, 120.980° E), 35th Asian Conference on Remote Sensing 2014 (ACRS 2014) Nay Pyi Taw, Myanmar.
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- 2012 November 26-30 Galvez, M.C.D., Macalalad, E.P., Peralta, T.A., Rosete, J.N., & Vallar, E. (2012 November 26-30). Simultaneous scanning lidar measurement and air sampling using a personal cascade impactor for traffic aerosol characterization, 33rd Asian Conference on Remote Sensing, Pattaya, Thailand.
- 2012 November 26-30 Moreno, F.V., Jr., Vallar, E., Galvez, M.C.D., Morris, V.R., Ziemke, J.R., Rosete, J.N., & Peralta, T.N. (2012 November 26-30). Comparison of microtops ii ozonemeter and omi satellite total ozone column measurements, 33rd Asian Conference on Remote Sensing, Pattaya, Thailand.
- 2011 October 3-7 Vallar, E., Macalalad, E., Lajara, M., & Galvez, M.C. (2011 October 3-7). Atmospheric turbidity measurements using a 355NM-532NM LIDAR and a sunphotometer in Manila, Philippines, 32nd Asian Conference on Remote Sensing 2011, Taipei, Taiwan.
- 2011 October 3-7 Galvez, M.C.D., Macalalad, E.P., & Vallar, E.A. (2011 October 3-7). Retrieval of boundary layer and cloud base heights in Manila from a two-wavelength lidar measurement, 32nd Asian Conference on Remote Sensing 2011, Taipei, Taiwan.

Publications

- 2019 Kecorious, S., Madueño, L., Löndahl, J., Vallar, E., Galvez, M.C., Idolor, L.F., Gonzaga-Cayetano, M., Müller, T., Birmili, W., & Wiedensohler, A., Respiratory tract deposition of inhaled roadside ultrafine refractory particles in a polluted megacity of South-East Asia. *Science of The Total Environment*, 2019, 663:265-274.
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Name Willy Salazar Gayo

Sex Male

Organizational Affiliations

Instructor II, Department of Mathematics and Statistics, Polytechnic University of the Philippines, Manila

Fields of Specialization

Applied Mathematics

Publications

- 2016 Gayo, W., & David, G., Modeling Philippine Stock Exchange Composite Index Using Weighted Geometric Brownian Motion Forecasts. MATEC Web of Conferences, 2016, 68:19002.
- 2015 Gayo, W.S., Urrutia, J.D., Temple, J.M.F., Sandoval, J.R.D., & Sanglay, J.E.A., Modeling Philippine Stock Exchange Composite Index Using Time Series Analysis. Journal of Physics Conference Series, 2015, 622:012022.
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Name Annalee S. Hadsall

Sex Female

Organizational Affiliations

Assistant Professor 7, Plant Biology Division, University of the Philippines Los Baños, College, Laguna 4031 Philippines

Education

Master of Science in Botany, University of the Philippines Los Baños, Laguna, Philippines 1985

Fields of Specialization

Plant Systematics

Papers Presented

2016 April 7-9 Hadsall, A.S., Alejado, M.R., Lambio, I.A.F., & Gonzalez, J.C.T. (2016 April 7-9). The EphyCenter as a Teaching and Learning Laboratory of the Museum of Natural History, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.

2016 April 7-9 Alejado, M.R., Larona, A.R., Lambio, I.A.F., & Hadsall, A.S. (2016 April 7-9). Herbarium Techniques for Selected Groups of Plants, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.

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Rayos, A.L., Jr., & Hadsall, A.S., Leaf Blade Anatomy of Philippine *Medinilla Gaudich.* Species in Relation to their Epiphytic Habit. *Asian Scientific Journals*, 2016, 7(1):47-55.

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Name Joyce Altamarino Ibana

Sex Female

Organizational Affiliations

Associate Professor 3, Institute of Biology, College of Science, University of the Philippines, Diliman, Quezon City, 1101 Philippines

Education

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Master of Science in Molecular Biology and Biotechnology, University of the Philippines, Diliman, Quezon City, Philippines

Doctor of Philosophy in Microbiology and Immunology, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA 2011

Fields of Specialization

Microbiology

Immunology

Cell Biology

Drug Discovery

Reproductive Immunology

Host-Pathogen Interactions

Employment

Visiting Faculty, School of Molecular Bioscience, Washington State University, 2017 March-2017 September

Associate Professor, Institute of Biology, University of the Philippines, 2013 June-Present

Postdoctoral Fellow, Louisiana State University Health Sciences Center, 2011 June-2013 May

Graduate Assistant, Louisiana State University Health Sciences Center, 2005 August-2011 May

Research Associate, Marine Science Institute, 1998 September-2004 June

Visiting Research Fellow, Pitie Salpetriere Hospital, Paris, France, 1997

Product Specialist, Perkin Elmer - Applied Biosystems Division, Dakila Trading Corporation, 1994 January-1997 January

Biologist, National Bureau of Investigation, 1992 January-1994 January

Association Membership

Member, American Society for Cell Biology

Member, American Society for Microbiology

Member, Philippine-American Academy of Science and Engineering

Honors / Awards

Publications

- 2018 Ibane, J.A., Sherchand, S.P., Fontanilla, F.L., Nagamatsu, T., Schust, D.J., Quayle, A.J., & Aiyar, A., *Chlamydia trachomatis*-infected cells and uninfected-bystander cells exhibit diametrically opposed responses to interferon gamma. *Scientific Reports*, 2018, 8(1):8476.
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Ibane, J.A., Schust, D.J., Sugimoto, J., Nagamatsu, T., Greene, S.J., & Quayle, A., *Chlamydia trachomatis* Immune Evasion via Downregulation of MHC Class I Surface Expression Involves Direct and Indirect Mechanisms. *Infectious Diseases Obstetrics and Gynecology*, 2011:420905.
- 2009 Ibane, J.A., Finding my niche in Science. In: Padlan, E. Saloma, C., & Concepcion G. (Eds.), *Selected Essays on Science and Technology for Securing a Better Philippines*, University of the Philippines Press, 2009.
- 2008 Ficarra, M., Ibane, J.S., Poretta, C., Ma, L., Myers, L., Taylor, S.N., Greene, S., Smith, B., Hagensee, M., Martin, D.H., & Quayle, A.J., A Distinct Cellular Profile Is Seen in the Human Endocervix During *Chlamydia trachomatis* Infection. *American Journal of Reproductive Immunology*, 2008, 60(5):415-425.
- 2007 Kawana, K., Quayle, A.J., Ficarra, M., Ibane, J.A., Shen, L., Kawana, Y., Yang, H., Marrero, L., Yavagal, S., Greene, S.J., Zhang, Y.X., Pyles, R.B., Blumberg, R.S., & Schust, D.J., CD1d Degradation in *Chlamydia trachomatis*-infected Epithelial Cells Is the Result of Both Cellular and Chlamydial Proteasomal Activity. *Journal of Biological Chemistry*, 2007, 282(10):7368-7375.
David, M.P., Asprer, J.J., Ibane, J.S., Concepcion, G.P., & Padlan, E.A., A study of the structural correlates of affinity maturation: Antibody affinity as a function of chemical interactions, structural plasticity and stability. *Molecular Immunology*, 2007, 44(6):1342-1351.
- 2006 Lazaro, J.E., Nitcheu, J., Mahmoudi, N., Ibane, J.A., Mangalindan, G.C., Black, G.P., Howard-Jones, A.G., Moore, C.G., Thomas, D.A., Mazier, D., Ireland, C.M., Concepcion, G.P., Murphy, P.J., Diquet, B., Antimalarial Activity of Crambescidin 800 and Synthetic Analogues against Liver and Blood Stage of *Plasmodium* sp.. *The Journal of Antibiotics* volume, 2006, 59(9):583-590.

Name **Arian J. Jacildo**

Sex Male

Organizational Affiliations

Professor III, MSU-Iligan Institute of Technology, Iligan City, Philippines

Assistant Professor, University of the Philippines Los Baños, College, Laguna, Philippines

Education

Bachelor of Science in Computer Science, University of the Philippines Los Baños, Laguna, Philippines 1999

Master of Science in Computer Science, Minor in Information Technology, University of the Philippines Los Baños, Laguna, Philippines 2006

Fields of Specialization

Information Systems (Business Informatics)

Parallel Computing

Bioinformatics

Algorithms

Association Membership

Member, National Research Council of the Philippines

Papers Presented

- 2012 December 14 Sarmiento, M.E.A., & Jacildo, A.J. (2012 December 14). Finding the Optimal Size of Audio Chunk to Deliver via HTTP Live Streaming, 5th UPLB CAS Student-Faculty Research Conference (SFRC), NCAS, UP Los Baños, Laguna, Philippines.
- 2012 December 14 Lagante, A.M.A., & Jacildo, A.J. (2012 December 14). SeekSP: Visualization of Search Engine Results, 5th UPLB CAS Student-Faculty Research Conference (SFRC), NCAS, UP Los Baños, Laguna, Philippines.
- 2010 March 5-6 Figueroa, R.B., Jr., Rabajante, J.F., & Jacildo, A.J. (2010 March 5-6). Simulating the Foraging Behavior of *Trigona biroi* Using Multi-Agent Systems, 10th Philippine Computing Science Congress, Davao City, Philippines.
- 2009 November 12-15 Rabajante, J.F., Jacildo, A.J., & Figueroa, R.B., Jr. (2009 November 12-15). Modeling the Area Restrict Searching Strategy of Stingless Bees (*Trigona biroi*) as a Quasi-Random Walk Process, 9th Annual National Convention of the Philippine Society for the Study of Nature, Inc., Mindanao State University - Iligan Institute of Technology, Iligan City, Philippines.
- 2009 March 2-3 Jacildo, A.J., & Albacea, E.A. (2009 March 2-3). Longest Common Subsequence (LCS) Retrieval in Linear Space and Single-Pass Quadratic Time for Some Special Cases of the Input, 9th Philippine Computing Science Congress, Silliman University, Dumaguete City, Philippines.

Publications

- 2015 Recario, R.N.C., Encinas, J.E.I., Barro, J.C.M., Villate, J.DG., Jacildo, A.J., Baladad, J.S., Fajardo, A.C., Pabico, J.D., Manila-Fajardo, A.C., & Cervancia, C.R., POLLIMAC II: A Modular Automated Pollen Image Classifier. *Journal of Nature Studies*, 2015, 14(1):22-35.

- Talubo, J.P.P., Jacildo, A.J., Espaldon, M.V.O., Acosta, L.A., Macandog, D.M., Nelson, G.L.M., Lalican, N.M., Abucay, E.R., Malenab, M.C.T., Pabico, J.P., & Dorado, M.A., Vulnerability to Rainfall-Induced Landslide of Three Communities in Infanta, Quezon, Philippines. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 2015, 23:138-166.
- 2012 Sarmiento, M.E.A., & Jacildo, A.J., Finding the Optimal Size of Audio Chunk to Deliver via HTTP Live Streaming. *Proceedings of the 5th UPLB CAS Student-Faculty Research Conference (SFRC)*, NCAS, UP Los Baños, Laguna, Philippines, 2012.
- Lagante, A.M.A., & Jacildo, A.J., SeekSP: Visualization of Search Engine Results. *Proceedings of the 5th UPLB CAS Student-Faculty Research Conference (SFRC)*, NCAS, UP Los Baños, Laguna, Philippines, 2012.
- 2010 Figueroa, R.B., Jr., Rabajante, J.F., & Jacildo, A.J., Simulating the Foraging behavior of Trigona Biroi using Multi-agent Systems. *Proceedings of the 10th Philippine Computing Science Congress*, Davao City, 2010.
- 2009 Jacildo, A.J., & Albacea, E.A., Longest Common Subsequence (LCS) Retrieval in Linear Space and Single-Pass Quadratic Time for Some Special Cases of the Input. *Philippine Computing Journal*, 2009, 4(1):36-40.
- Figueroa, R.B., Jr., Jacildo, A.J., & Rabajante, J.F., Simulation of Bee Foraging Behavior using Biroi Preference Algorithm. *Proceedings of the 15th Beekeepers' Network Philippines (BEENET) Conference and Techno-fora*, Hotel Agripino, Salagdoong, Maria, Siquijor, Philippines, 2009.
- Rabajante, J.F., Jacildo, A.J., & Figueroa, R.B., Jr., Modeling the Area Restrict Searching strategy of stingless bees, *Trigona biroi*, as a Quasi-Random Walk process. *Journal of Nature Studies*, 2009, 8(2):15-21.
- 2004 Jacildo, A.J., & Samaniego, J.M., Final Exam Scheduling Using Genetic Optimization. *Proceedings of the 2nd Symposium on Mathematical Aspects of Computer Science*, Baguio City, Philippines, 2004:43-50.

Name Dymphna Nolasco Javier

Sex Female

Education

Master of Science in Geology, University of the Philippines, 1996

Bachelor of Science in Geology, University of the Philippines, 1979

Fields of Specialization

Geoscience education

Rainfall-induced landslides

Environmental geochemistry

Climate change

Researches

Completed

Establishing a Knowledge and Training Resource Center (KTRC) on Climate Change and Disaster Risk Reduction

Soil Stabilization Through Revegetation of Natural Landslides in Atok, Benguet Province to Increase Resilience of Local Communities

Enhancing stakeholders' capability in utilizing the rainfall threshold in the landslide early warning system of Tublay, Benguet

On-going

Spatial Variation of Heavy Metal Content in Stream Sediments and Related Natural and Anthropogenic Influences in the Baloy Catchment, Agno Rivera

Papers Presented

2012 September 20-22 Javier, D.D.N., Tengonciang, A.M.P., & Apil, F.P. (2012 September 20-22). Rain-induced landslides triggered in Baguio City, Philippines by Typhoon Pepeng on October 3-9, 2009, 8th APRU Research Symposium on Multi-hazards around the Pacific Rim, Tohoku University, Sendai, Japan.

2012 February 17 Nolasco-Javier, D.D., Tengonciang, A.M.P., & Apil, F.P. (2012 February 17). Rain-induced Landslides in Baguio City: Causes and Effects triggered by Typhoon Pepeng in October 3-9, 2009, UP Baguio Golden Jubilee lectures, Baguio City, Philippines.

2010 March 4-5 Tengonciang, A.M.P., & Nolasco-Javier, D.D. (2010 March 4-5). Numerous slope failures and flooding triggered by Typhoon Pepeng in Baguio City and vicinity as consequences of prolonged heavy rainfall, 10th National Institute of Geological Sciences Research Symposium, UP Diliman, Quezon City, Philippines.

2009 November 23 Nolasco-Javier, D.D., & Tengonciang, A.M.P. (2009 November 23). Climate Change-related extreme geological events: Causes and examples from Baguio & vicinity, Regional consultations on "Enhancing Communities' Capacity to confront extreme geo-meteorological events at the core of climate change", University of the Philippines Baguio, Baguio City, Philippines.

2006 September 25-30 Nolasco-Javier, D.D., Pascua, C.S., David, C.P.C., & Sato, T. (2006 September 25-30). Assessment of Heavy Metal Content in Bed Sediments of a Mineralized Catchment of the Agno River, Benguet, Philippines, 7th International Symposium on Environmental Geochemistry, Beijing, China.

- 2004 Austria, C.M., Javier, D.D.N., Ramirez, R., & Tapang, B.P., Jr. (2004). A historical approach to the demography and geo-biology of selected sites in the Agno river basin, Forum on Current issues in Governance and Public policy in the Cordillera, University of the Philippines Baguio, Baguio City, Philippines.
- 2004 October Javier, D.D.N., & David, C.P.C. (2004 October). Preliminary results of heavy metal analysis in the Baloy catchment of the Agno River, Itogon, Benguet, Kanazawa University, Japan.
- 2003 September 10-14 Mattox, S.R., Rhodea, J., Nolasco-Javier, D.D., & de Vera-Yabes, R.N.F. (2003 September 10-14). International collaboration in geoscience education: A case study between the Philippines and the United States, GeosciedIV, the Fourth International Conference in Geoscience Education, Calgary, Canada.
- 2003 September 10-14 Nolasco-Javier, D.D., & de Vera-Yabes, R.N.F. (2003 September 10-14). Proposed General Education Courses in Geology at the University of the Philippines Baguio, GeosciedIV, the Fourth International Conference in Geoscience Education, Calgary, Canada.
- 2002 November 16 Javier, D.N. (2002 November 16). Suggested Styles of Adapting the Earth System Science Framework in Teaching, First regional conference of the Philippine Society for the Study of Nature-Cordillera Administrative Region chapter, Baguio City, Philippines.
- 2000 Nolasco-Javier, D.D., Apadchew, L., Campos, I., & Simplina, G. (2000). Preliminary investigation of the general physiography and geology of the Busol watershed reservation and recommendations for further research, Cordillera Studies Program roundtable discussion on Environment and Resources: Natural Sciences Component, UP Baguio, Baguio City, Philippines.
- 2000 November 9-11 Baoanan, Z.G., Rafanan, J.R., Balangcod, T.D., Gutierrez, R.M., Giron, O.D.L.C., Javier, D.D.N., Bornilla, L.F., Austria, C.M., & Cariño, J.K. (2000 November 9-11). Biodiversity of the Busol Watershed: Fauna Composition and Structure, First National Conference on Cordillera Studies, UP Baguio, Baguio City, Philippines.
- 2000 November 9-11 Nolasco-Javier, D.D., Aguda, N.R.R., & Foronda, J.V.M. (2000 November 9-11). Preliminary analysis of heavy metal content of sediments in the Agno river, southern Benguet and northeastern Pangasinan, First National Conference on Cordillera Studies, UP Baguio, Baguio City, Philippines.
- 2000 January 16-21 Nolasco-Javier, D.D. (2000 January 16-21). Educating Geoscience Educators: The UPCB Experience, GeosciedIII, the 3rd International Conference on Geoscience Education, Sydney, Australia.
- 1999 Nolasco-Javier, D.D. (1999). Initiatives in Outreach Geoscience Education, GEOCON '99, the 12th Annual Geological Convention, Quezon City, Philippines.
- 1999 Nolasco-Javier, D.D. (1999). An ocular inspection and some proposed assessments of slope failure in Ankileng, Sagada, Mountain Province, Conference on "Ancestral domain and natural resource management in Sagada, Mountain Province, northern Luzon", UP Baguio, Baguio City, Philippines.
- 1999 Nolasco-Javier, D.D., Aguda, N.R., & Foronda, J.V. (1999). Inventory of heavy metals in sediments of the Agno river, southern Benguet and northeastern Pangasinan, Baguio Symposium '99, Baguio City, Philippines.
- 1993 David, C.P.C., Dulce, R.G., Nolasco-Javier, D.D., Zamoras, L.R., Jumawan, F.T., & Newhall, C.G. (1993). Textures, mineralogy, and changing proportions of two pumice types from the June 15, 1991 eruption of Mount Pinatubo, GEOCON '93, the Sixth Annual Geological Convention, 1993, Quezon City, Philippines.

- 1993 Javier, D.D.N. (1993). The nickel trade: Domestic and international market performance, Presentation meeting with the Philippine Council for Industry and Energy Research Development (PCIERD) and Mining and Minerals Research Foundation, Inc. (MMRFI), Quezon City, Philippines.
- 1993 Javier, D.D.N., & Dimalanta, C.B. (1993). The platinum trade: Domestic and international market performance, Presentation meeting with the Philippine Council for Industry and Energy Research Development (PCIERD) and Mining and Minerals Research Foundation, Inc. (MMRFI), Quezon City, Philippines.
- 1993 Tamayo, R.A., Jr., Javier, D.D.N., & Yumul, G.P., Jr. (1993). The chromite trade: international and domestic trends (1978-1992), GEOCON '93, the Sixth Annual Geological Convention, 1993, Quezon City, Philippines.
- 1992 Javier, D.D.N., Tamayo, R.A., Jr., Yumul, G.P., Jr., & Austria, B.S. (1992). Nickel: facts and trends, GEOCON '92, the Fifth Annual Geological Convention, Quezon City, Philippines.
- 1992 Tamayo, R.A., Jr., Javier, D.D.N., Yumul, G.P., Jr., Austria, B.S. (1992). (Poster) Chromite: facts and trends, GEOCON '92, the Fifth Annual Geological Convention, Manila, Philippines.
- 1991 Javier, D.D.N., & Gorospe, A.G. (1991). (Poster) An application of geostatistics in grade estimation of epithermal gold veins, GEOCON '91, the Fourth Annual Geological Convention, National Institute of Geological Sciences, Quezon City, Philippines.
- 1983 Nolasco, D.D. (1983). Geostatistics as applied to narrow gold veins in Acupan, Itogon, Benguet, Second UP Geology Alumni Association Lecture Series, Baguio City, Philippines.

Publications

- 2018 Nolasco-Javier, D., & Kumar, L., Deriving the rainfall threshold for shallow landslide early warning during tropical cyclones: a case study in northern Philippines. *Natural Hazards*, 2018, 90(2):921-941.
- 2017 Tehrany, M.S., Shabani, F., Javier, D.N., & Kumar, L., Soil erosion susceptibility mapping for current and 2100 climate conditions using evidential belief function and frequency ratio. *Geomatics, Natural Hazards and Risk*, 2017, 8(2):1695-1714.
- 2015 Nolasco-Javier, D., Kumar, L., & Tengonciang, A.M.P., Rapid appraisal of rainfall threshold and selected landslides in Baguio, Philippines. *Natural Hazards*, 2015, 78(3):1587-1607.
- 2013 Javier, D.D.N., *Climate Change and Disasters. The UP Baguio Knowledge and Training Resource Center (KTRC) Modules on Climate Change and Disaster risk reduction*, 2013.
- 2012 Javier, D.D.N., *When the Earth heats up: Frequently Asked Questions on Climate Change. Communication Foundation for Asia*, 2012.
- 2006 Nolasco-Javier, D.D., Pascua, C.S., David, C.P., & Sato, T., Assessment of heavy metal contents in bed sediments of a mineralized catchment of the Agno River, Benguet, Philippines. *Chinese Journal of Geochemistry*, 2006, 25(S1):41-41.
- 2001 Nolasco-Javier, D.D., Aguda, N.R.R., & Foronda J.V.M., Preliminary analysis of heavy metal content of sediments in the Agno river, southern Benguet and northeastern Pangasinan. *Proceedings volume: "Towards understanding peoples of the Cordillera: A review of research on history, governance, resources, institutions and living traditions"*, Cordillera Studies Center, 2001:91-93.
- 1996 David, C.P.C., Dulce, R.G., Nolasco-Javier, D.D., Zamoras, L.R., Jumawan, F.T., & Newhall, C.G., Changing proportions of two pumice types from the June 15, 1991

eruption of Mount Pinatubo. In: Newhall, C.G., & Punongbayan, R.S. (Eds.) *Fire and Mud: Eruptions and lahars of Mount Pinatubo, Philippines*: Quezon City, Philippine Institute of Volcanology and Seismology, and Seattle, University of Washington Press, 1996:681-685.

1994 Nolasco-Javier, D.D., Tamayo, R.A., Jr., Dimalanta, C.B., & Yumul, G.P., Jr., The platinum market performance. *Journal of the Geological Society of the Philippines*, 1994, 49:229-239.

1993 Tamayo, R.A., Jr., Javier, D.D.N., & Yumul, G.P., Jr., The chromite trade: a study of international and domestic trends. *Proceedings of GEOCON '92, the fifth annual geological convention, Geological Society of the Philippines*, 1993:133-148.

Nolasco-Javier, D.D., Nickel: more facts and trends. *Proceedings of GEOCON '92, Fifth Annual Geological Convention, Geological Society of the Philippines*, 1993:123-132.

Name Ivy Amor Fabreag Lambio

Sex Female

Organizational Affiliations

Assistant Professor, Environmental Biology Division, Institute of Biological Sciences, University of the Philippines Los Baños, Laguna, Philippines

Education

Master of Science in Botany major in Plant Ecology and minor in Genetics, University of the Philippines Los Baños, College, Laguna, Philippines 2007

Bachelor of Science in Genetics, University of the Philippines Los Baños, College, Laguna, Philippines 1998

Fields of Specialization

Botany

Plant Ecology

Genetics

Papers Presented

- 2016 April 7-9 Lucañas, C.C., Lambio, I.A.F., & Lit, I.L., Jr. (2016 April 7-9). The Cockroach Subfamily Blattinae (Dictyoptera: Blattodea: Blattidae) of Mt. Makiling, Los Baños, Laguna, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2016 April 7-9 Alejado, M.R., Larona, A.R., Lambio, I.A.F., & Hadsall, A.S. (2016 April 7-9). Herbarium Techniques for Selected Groups of Plants, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2016 April 7-9 Hadsall, A.S., Alejado, M.R., Lambio, I.A.F., & Gonzalez, J.C.T. (2016 April 7-9). The EphyCenter as a Teaching and Learning Laboratory of the Museum of Natural History, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2014 April 3-5 Manila-Fajardo, A.C., & Lambio, I.A.F. (2014 April 3-5). Identifying Pollinators By Floral Observation, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2014 April 3-5 Lambio, I.A., Banaay, C.G., Maranan, F., & Rabena, M.A. (2014 April 3-5). Effect of Varying Light Intensities on Phenotypic Expression of Selected Plant Species, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2014 April 3-5 Lambio, I.A.F., Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Mananan, F.S., Beringuela, R.T., Campang, J.G., Rabena, M.A.F., & Encinares, J.M.A. (2014 April 3-5). Eco-Minutes to Win it Game: Integrating Ecological Concepts in a Competitive Classroom Activity, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2013 April 4-6 Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G.B., Beringuela, R.T., & Fajardo, A.M. (2013 April 4-6). Biodiversity Boardgame: A Tool for Teaching Environmental Biology, 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.

- 2013 April 4-6 Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Beringuela, R.T., Lambio, I.A.F., & Maranan, F.S. (2013 April 4-6). Innovative Ways of Teaching Environmental Biology, 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.

Publications

- 2016 Hadsall, A.S., Alejado, M.D.R., Larona, A.R., & Lambio, I.A.F., *Strongylodon juangonzalezii*, a remarkable new species of *Strongylodon* (*Fabaceae*) from Mulanay, Quezon Province, Philippines. *PhytoKeys*, 2016, 73:1-12.
- Lucañas, C.C., Lambio, I.A.F., & Lit, I.L., Jr., The Cockroach Subfamily Blattinae (Dictyoptera: Blattodea: Blattidae) of Mt. Makiling, Los Baños, Laguna. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- Alejado, M.R., Larona, A.R., Lambio, I.A.F., & Hadsall, A.S., Herbarium Techniques for Selected Groups of Plants. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- Hadsall, A.S., Alejado, M.R., Lambio, I.A.F., & Gonzalez, J.C.T., The EphyCenter as a Teaching and Learning Laboratory of the Museum of Natural History. 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- 2015 Hadsall, A., Cajano, M.A.O., Lambio, I.A.F., & Alejado, M., A new distribution record of *Hoya espadoniana* Kloppenburg, Siar & Cajano (Section *Acanthostemma: Apocynaceae*). *Asia Life Sciences*, 2015, 24(2):469-476.
- Borja, V.G.L., Magcale-Macandog, D.B., Lambio, I.A.F., Brandl, R., Hotes, S., Settele, J., & Wiemers, M., Spatial Patterns and Plant Species Associations of Coffee (*Coffea* spp.) Along the Eastern Slopes of Mount Makiling Forest Reserve, Luzon, Philippines. Pangasinan State University, Philippines, 2015.
- 2014 Lambio, I.A., Banaay, C.G., Maranan, F., & Rabena, M.A., Effect of Varying Light Intensities on Phenotypic Expression of Selected Plant Species. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
- Lambio, I.A.F., Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Mananan, F.S., Beringuela, R.T., Campang, J.G., Rabena, M.A.F., & Encinares, J.M.A., Eco-Minutes to Win it Game: Integrating Ecological Concepts in a Competitive Classroom Activity. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
- Shevock, J.R., Lambio, I.A.F., & Tan, B.C., Collection and preparation techniques of bryophyte specimens in biodiversity inventories. *The Coral Triangle*, 2014:395-405.
- 2013 Barrion-Dupo, A.L.A., Banaay, C.G.B., Lambio, I.A.F., Maranan, F.S., Rabena, M.A.F., Flores, R.J.D., Deyto, R.C., Fajardo, A.M., & Lit, I.L., Jr., Effect of population density on larval dispersion and pit construction of the antlion, *Myrmeleon angustipennis* Banks (Neuroptera: *Myrmeleontidae*). *Asian Journal of Biological Sciences*, 2013, 6(2):131-137.
- Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G.B., Beringuela, R.T., & Fajardo, A.M., Biodiversity Boardgame: A Tool for Teaching Environmental Biology. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.
- Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Beringuela, R.T., Lambio, I.A.F., & Maranan, F.S., Innovative Ways of Teaching Environmental Biology. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.
- 2012 Cuevas, V.C., & Lambio, I.A.F., A Guide To the Laboratory Exercises in Plant Ecology. Environmental Biology Division, Institute of Biological Sciences, CAS, University of the Philippines Los Baños, 2012.

- Cuevas, V.C., Cervancia, C.R., Zafaralla, M.T., Lit, I.L., Jr., Barrion-Dupo, A.L., & Lambio, I.A.F., Exploring Ecology. Environmental Biology Division, Institute of Biological Sciences, CAS, University of the Philippines Los Baños, 2012.
- 2011 Lambio, I.A.F., & Torreta, N.K., Comparative study of trichomes from selected herb species of Family *Verbenaceae* and *Lamiaceae*. *Journal of Nature Studies*, 2011, 9(2):105-108.
- Lambio, I.A.F., & Buot, I.E., Jr., Leaf Size Zonation Pattern of Woody Species Along the Northeastern Altitudinal Gradient of Mount Makiling, Luzon Island, Philippines. *Asia Life Sciences*, 2011, 20(2):369-383.
- Lit, I.L., Jr., Yap, S.A., Alviola, P.A., Labatos, B.V., de Leon, M.P., Fernando, E.S., Bantayan, N.C., Santos, E.P., & Lambio, I.A.F., Naujan Lake National Park Site Assessment and Profile Updating. Muntinlupa City. Mindoro Biodiversity Conservation Foundation, Inc., 2011.
- 2002 Bondoc, O.L., Tec, J.D.P., Lambio, I.A.F., Garcia, B.R., & Beltran, E.D., Regression Equations To Predict Mature Weight of Different Breeds of Goats (*Capra hircus*) Based on External Body Measurements. *Philippine Journal of Veterinary and Animal Sciences*, 2002, 28(1):27-36.
- Bondoc, O.L., Sarabia, A.S., Sanchez, E.O., Pedro, P.B., Vargas, G.E.R., Amanda, D.C., & Lambio, I.A.F., Local success rates and costs of multiple ovulation and embryo recovery in cattle. *Philippine Agricultural Scientist*, 2002, 85(4):372-375.

Name Rona Camille M. Lizardo

Sex Female

Education

Master of Science in Food Science, University of the Philippines Los Baños, Laguna, Philippines 2013

Fields of Specialization

Sensory Evaluation of Foods

Food Chemistry

Food Processing

Nutraceuticals and Functional Foods

Employment

PhD Research Associate, Dong-A University, Busan, Korea, 2017 September-Present

Assistant Professor 3, University of the Philippines Los Baños, 2015 August-Present

Association Membership

Member, Kapisanang Kimika ng Pilipinas (Chemistry Society of the Philippines) Southern Tagalog Chapter

Member, Korean Society of Food Preservation

Member, Korean Society of Life Science

Member, Philippine Association of Food Technologists, Inc.

Member, Pilipinong Iskolar sa Korea, Inc. (PIKO) - Busan Chapter

Honors / Awards

International Publication Awards, University of the Philippines 2015 December

Researches

Ongoing

Food Product and Process Development from Selected Resilient, Drought Resistant and Underutilized Crops

Publications

- 2019 Robles, M.K.T., Castillo-Israel, K.A.T., & Lizardo, R.C.M., Utilization of Cooking-Type 'Saba' Banana in the Development of Ready-to-Drink Juice with Improved Quality and Nutritional Properties. *Beverages*, 2019, 5(2):31.
- 2017 Lizardo, R.C.M., Castillo-Israel, K.A.T., Dizon, E.I., Mejico, M.I.F., & Jubinal, C.M.D., Development of High-value Food Products from Selected Indigenous and Underutilized Crops to Increase Food Utilization and Reduce Food Loss. *Journal of Developments in Sustainable Agriculture*, 2017, 12(1):1-12.
- Ang, E.M., Abdullah, N., Muhammad, N., & Lizardo, R.C.M., Effect of Formulation with Papaya Sauce as Fat Replacer on Butter Cake Texture. *Journal of Science and Technology*, 2017, 9(4):56-63.
- 2015 Castillo-Israel, K.A.T., Baguio, S.F., Diasanta, M.D.B., Lizardo, R.C.M., Dizon, E.I., & Mejico, M.I.F., Extraction and characterization of pectin from Saba banana [*Musa 'saba'(Musa acuminata x Musa balbisiana)*] peel wastes: A preliminary study.

International Food Research Journal, 2015, 22(1):202-207.

Lizardo, R.C.M., Mabesa, L.B., Dizon, E.I., & Aquino, N.A., Functional and antimicrobial properties of bignay [*Antidesma bunius* (L.) Spreng.] extract and its potential as natural preservative in a baked product. International Food Research Journal, 2015, 22(1):88-95.

Name Manuel Joseph Cruz Loquias

Sex Male

Organizational Affiliations

Associate Professor, Institute of Mathematics, University of the Philippines, Diliman, Quezon City, Philippines

Education

Doctor of Mathematics, Bielefeld University, Germany 2011

Master of Science in Mathematics, University of the Philippines, Diliman, Quezon City, Philippines 2005

Bachelor of Science in Mathematics (*magna cum laude*), University of the Philippines, Diliman, Quezon City, Philippines 2001

Fields of Specialization

Mathematics

Mathematical Crystallography

Combinatorics

Numeration

Discrete Geometry

Employment

Chair of Mathematics and Statistics, University of Leoben, 2015 January-2015 October

Papers Presented

2010 June 13-18 Loquias, M.J.C., & Zeiner, P. (2010 June 13-18). Colourings of lattices and coincidence site lattices, Eleventh International Conference on Quasicrystals, Sapporo, Japan.

Publications

2019 Damasco, J.R.C.G., Frettlöh, D., & Loquias, M.J.C., Fundamental Domains for Rhombic Lattices with Dihedral Symmetry of Order 8. *Electronic Journal of Combinatorics*, 2019, 26(3):P3.5.

Capco, J., Loquias, M.J.C., Manongsong, S.M.M., & Nemenzo, F.R., Inverse Kinematics of Some General 6R/P Manipulators. *arXiv.org preprint*, Cornell University, 2019:arXiv:1906.07813.

2017 Loquias, M.J.C., Valdez, L.D., & Walo, M.L.B., Color groups of colorings of N -planar modules. *Journal of Physics: Conference Series*, 2017, 809(1):012029.

Loquias, M.J.C., Mkaouar, M., Scheicher, K., & Thuswaldner, J.M., Rational digit systems over finite fields and Christol's Theorem. *Journal of Number Theory*, 2017, 171:358-390.

2015 Evidente, I.F., Felix, R.P., & Loquias, M.J.C., Symmetries and color symmetries of a family of tilings with a singular point. *Acta Crystallographica Section A: Foundations and Advances*, 2015, A71:583-591.

Corcino, R.B., Gonzales, K.J.M., Loquias, M.J.C., & Tanm E.L., Dually weighted Stirling-type sequences. *European Journal of Combinatorics*, 2015, 43:55-67.

Loquias, M.J.C., & Zeiner, P., Coincidence indices of sublattices and coincidences of colorings. *Zeitschrift für Kristallographie - Crystalline Materials*, 2015, 230(12):749-759.

- 2014 Loquias, M.J.C., & Zeiner, P., The coincidence problem for shifted lattices and crystallographic point packings. *Acta Crystallographica Section A: Foundations and Advances*, 2014, 70(6):656-669.
 Arias, J.C.H., Gabinete, E.D., & Loquias, M.J.C., Coincidences of a Shifted Hexagonal Lattice and the Hexagonal Packing. *Acta Physica Polonica A*, 2014, 126(2):516-519.
- 2013 Damasco, J.R.C.G., Frettlöh, D., & Loquias, M.J.C., Highly symmetric fundamental domains for lattices in R^2 and R^3 . *arXiv.org*, Cornell University, 2013:arXiv:1305.1798.
- 2011 Loquias, M.J.C., & Zeiner, P., Coincidences, Colourings and Similarities. *Mathematics of Quasi-Periodic Order*, edited by Shigeki Akiyama, RIMS Kôkyûoku, 2011, 1725:137-151.
 Loquias, M.J.C., & Zeiner, P., Colourings of lattices and coincidence site lattices. *Philosophical Magazine*, 2011, 91(19-21):2680-2689.
- 2010 Loquias, M.J.C., & Zeiner, P., Coincidence isometries of a shifted square lattice. *Journal of Physics: Conference Series*, 2010, 226(1):012026.
- 2008 Felix, R.P., & Loquias, M.J.C., Enumerating and identifying semiperfect colorings of symmetrical patterns. *Zeitschrift für Kristallographie - Crystalline Materials*, 2008, 223(8):483-491.
- 2004 Loquias, M.J.C., Nochefranca, L.R., Tan, E.L., & Panganiban, P.G., On finding the girth of graphs with certain properties arising from $PSL(2,q)$. *Matimyas Mat.*, 2004, 27(1-3):47-55.

Name Ernest Pagaran Macalalad

Sex Male

Organizational Affiliations

Assistant Professor, Department of Physics, 3F West Building, Mapúa University, Muralla St. Intramuros, Manila 1002 Philippines

Education

Doctor of Philosophy in Space Science, Graduate Institute of Space Science, National Central University, Jhongli City, Taiwan (R.O.C.) 2014

Master of Science in Physics, De La Salle University, Manila, Philippines 2006

Bachelor of Science in Physics with Specialization in Computer Electronics, De La Salle University, Manila, Philippines 2004

Fields of Specialization

Atmospheric Physics

GNSS Applications

Ionospheric Physics

Physics

Remote Sensing

Space Science

Employment

Assistant Professor, Mapua Institute of Technology, Manila, Philippines, 2015 October-Present

Postdoctoral Fellow, Center for Space and Remote Sensing Research, National Central University, Jhongli City, Taiwan, 2014 October-2015 July

Visiting Lecturer, De La Salle University, Manila, 2014 September 5-2014 September 25

Assistant Professor, De La Salle University-Dasmariñas, Dasmariñas City, Philippines, 2007 June-2009 March

High School Teacher, La Salle Green Hills, 2006 June-2007 March

Association Membership

Member, DOST - National Research Council of the Philippines

Founding President, Association of Filipino Scholars in Taiwan

Member, International Global Navigation Satellite Systems Society, Inc., Queensland, Australia

Member, American Geophysical Union

Member, Samahang Pisika ng Visayas at Mindanao, Mindanao State University - Iligan Institute of Technology, Iligan City, Philippines

Honors / Awards

Gold Prize for "Online Application of Taiwan Ionosphere Model for Single-Frequency GPS Positioning", Web Contest (WEBCON), Asian Conference on Remote Sensing, Taipei, Taiwan (R.O.C.) 2011 October 5

Innovative Mention for "Development of a Low-Cost Sunphotometer Tracking and Data Acquisition System", 2004 ASEAN Virtual Instrumentation Applications Contest, National Instruments - ASEAN 2004 July

Researches

Completed

Using wireless environmental monitoring sensors in assessing the impact of megacity environmental pollution and local climate on butterfly diversity in Manila, Philippines

Observation and analysis of L-Band ionospheric scintillation over the Philippines during the onset of Solar Cycle 24 (2009-2014)

Development of a real-time microcomputer based data acquisition system for a very low frequency (VLF) monitor for space weather studies

Papers Presented

- 2018
November 29 -
2 December
- Deveza, R.B., Lamod, S.M.L., Saccuan, A.J.H., Villaverde, J.F., & Macalalad, E.P. (2018 November 29 - 2 December). Development of a Microcomputer-Based Data Acquisition System for the SuperSID Monitor in the Philippines, IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Baguio City, Philippines.
- 2013 October
20-24
- Francisca, D., Vallar, E., Macalalad, E., Galvez, M.C., & Tsai, L.-C. (2013 October 20-24). Matlab-based VHF and UHF amplitude scintillation characterization using the new low-latitude ionospheric tomography network (LITN), 34th Asian Conference on Remote Sensing, Bali, Indonesia.
- 2013 January
9-12
- Rino, C.L., Tsai, L.-C., & Macalalad, E. (2013 January 9-12). Modeling and analysis of COSMIC radio occultation (RO) scintillation events, 2013 US National Committee of URSI National Radio Science Meeting, Boulder, CO, USA.
- 2012
November 26-
30
- Tsai, L.-C., Zheng, C.W., Macalalad, E.P., Chen, G.H., & Tien, M.H. (2012 November 26-30). The Improved Taiwan Ionospheric Model (TWIM) and its Applications on GPS Positioning, 33rd Asian Conference on Remote Sensing, Pattaya, Thailand.
- 2012
November 26-
30
- Galvez, M.C.D., Macalalad, E.P., Peralta, T.A., Rosete, J.N., & Vallar, E.A. (2012 November 26-30). Simultaneous Scanning Lidar Measurement and Air Sampling Using A Personal Cascade Impactor for Traffic Aerosol Characterization, 33rd Asian Conference on Remote Sensing, Pattaya, Thailand.
- 2012 April 22-
27
- Macalalad, E., Tsai, L.-C., & Wu, J. (2012 April 22-27). Global Application of TaiWan Ionospheric Model to Single-Frequency GPS Positioning, EGU General Assembly 2012, Vienna, Austria.
- 2011 October
3-7
- Macalalad, E.P., Tsai, L.-C., & Wu, J. (2011 October 3-7). Ionospheric Delay Correction Using the Taiwan Ionospheric Model (TWIM) for Single-Frequency GPS Receiver, 32nd Asian Conference on Remote Sensing, Taipei, Taiwan.
- 2011 October
3-7
- Tsai, L.C., Chen, G.H., Tian, M.H., & Macalalad, E.P. (2011 October 3-7). The Taiwan Ionospheric Model (TWIM) And Its Applications on Radio Wave

Propagation and Ionospheric GPS L1 Pseudorange Correction, 32nd Asian Conference on Remote Sensing, Taipei, Taiwan.

2011 October 3-7 Galvez, M.C.D., Macalalad, E.P., & Vallar, E.A. (2011 October 3-7). Retrieval Of Boundary Layer And Cloud Base Heights In Manila From A Two-Wavelength Lidar Measurement, 32nd Asian Conference on Remote Sensing, Taipei, Taiwan.

2011 October 3-7 Vallar, E., Macalalad, E., Lajara, M., & Galvez, M.C. (2011 October 3-7). Atmospheric Turbidity Measurements Using A 355nm-532nm Lidar And A Sunphotometer In Manila, Philippines, 32nd Asian Conference on Remote Sensing, Taipei, Taiwan.

Publications

- 2018 Saccuan, A.J.H., Deveza, R.B., Lamod, S.M.L., Villaverde, J.F., & Macalalad, E.P., Development of a real-time microcomputer-based data acquisition system for a very low frequency (VLF) monitor for space weather studies. *ARNP Journal of Engineering and Applied Sciences*, 2018, 13(24):9480-9487.
Deveza, R.B., Lamod, S.M.L., Saccuan, A.J.H., Villaverde, J.F., & Macalalad, E.P., Development of a Microcomputer-Based Data Acquisition System for the SuperSID Monitor in the Philippines. *Proceedings of the 10th IEEE International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM)*, 2018:1-5.
- 2017 Vergara, R.L., Macalalad, E.P., Bagtasa, G., Vallar, E.A., Galvez, M.C.D., & Francisco, R.V., Correlation of Aerosol Optical Properties with Surface Meteorological Parameters over Manila. *Advanced Science Letters*, 2017, 23(2):1448-1451.
- 2016 Macalalad, E.P., Tsai, L.C., & Wu, J., Performance evaluation of different ionospheric models in single-frequency code-based differential GPS positioning. *GPS Solutions*, 2016, 20(2):173-185.
- 2015 Francisca, D., Macalalad, E., Vallar, E., Galvez, M.C., Tsai, L.-C., & Hsiao, T.Y., VHF/UHF Amplitude Scintillation Observed By The Low-Latitude Ionospheric Tomography Network (LITN). *ARNP Journal of Engineering and Applied Sciences*, 2015, 10(22):10324-10327.
- 2014 Macalalad, E., Tsai, L.-C., Wu, J., & Liu, C.H., Performance of Taiwan Ionospheric Model (TWIM) in Single-Frequency Differential GPS Positioning. *Geophysical Research Abstracts*, 2014, 16:EGU2014-3565.
Tsai, L.C., Macalalad, E.P., & Liu, C.H., TaiWan Ionospheric Model (TWIM) prediction based on time series autoregressive analysis. *Radio Science*, 2014, 49:977-986.
- 2013 Rino, C.L., Tsai, L.-C., & Macalalad, E., Modeling and analysis of COSMIC radio occultation (RO) scintillation events. 2013 US National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM), 2013:1.
Macalalad, E., Tsai, L.-C., Zheng, C.W., & Wu, J., Application of TaiWan Ionospheric Model in Single-Frequency Global Positioning System. *Proceedings of the Asia-Pacific Radio Science Conference*, 2013.
Macalalad, E.P., Tsai, L.-C., Wu, J., & Liu, C.-H., Application of the TaiWan Ionospheric Model to single-frequency ionospheric delay corrections for GPS positioning. *GPS Solutions*, 2013, 17(3):337-346.
Vergara, R.L., Macalalad, E.P., Bagtasa, G., Vallar, E.A., & Galvez, M.C.D., Diurnal Characteristics of Angstrom Turbidity Parameters Over Manila, Philippines. *IOSR Journal Of Environmental Science, Toxicology And Food Technology*, 2013, 5(2):59-64.
Francisca, D., Vallar, E., Macalalad, E., Galvez, M.C., & Tsai, L.-C., Matlab-based VHF and UHF amplitude scintillation characterization using the new low-latitude

- ionospheric tomography network (LITN). Proceedings of the 34th Asian Conference on Remote Sensing, Bali, Indonesia, 2013:4466-4473.
- Tsai, L.-C., Macalalad, E.P., Tien, M.H., & Liu, C.H., The TaiWan Ionospheric Model (TWIM) and model prediction using autocorrelation method. Proceedings of the 34th Asian Conference on Remote Sensing, 2013:4480-4483.
- 2012 Macalalad, E., Tsai, L.-C., & Wu, J., Global Application of TaiWan Ionospheric Model to Single-Frequency GPS Positioning. Geophysical Research Abstracts, 2012, 14:EGU2012-1941.
- Galvez, M.C.D., Macalalad, E.P., Peralta, T.A., Rosete, J.N., & Vallar, E.A., Simultaneous Scanning Lidar Measurement and Air Sampling Using A Personal Cascade Impactor for Traffic Aerosol Characterization. Proceedings of the 33rd Asian Conference on Remote Sensing, 2012:2496-2501.
- Tsai, L.-C., Zheng, C.W., Macalalad, E.P., Chen, G.H., & Tien, M.H., The Improved Taiwan Ionospheric Model (TWIM) and its Applications on GPS Positioning. Proceedings of the 33rd Asian Conference on Remote Sensing, 2012:1541-1546.
- 2011 Tsai, L.C., Liu, C.H., Macalalad, E., & Huang, J.Y., GPS radio occultation ionospheric profile fitting and data quality examination using the empirical orthogonal function analysis. Geophysical Research Abstracts, 2011, 13:EGU2011-2929.
- Macalalad, E., Tsai, L.C., & Wu, J., Application of Taiwan Ionospheric Model (TWIM) to Single-Frequency GPS Positioning. Proceedings of the 5th FORMOSAT3/COSMIC Data Users Workshop and International Conference on GPS Radio Occultation, 2011.
- Macalalad, E.P., Tsai, L.-C., & Wu, J., Ionospheric Delay Correction Using the Taiwan Ionospheric Model (TWIM) for Single-Frequency GPS Receiver. Proceedings of the 32nd Asian Conference on Remote Sensing, 2011:1457-1461.
- Tsai, L.C., Chen, G.H., Tian, M.H., & Macalalad, E.P., The Taiwan Ionospheric Model (TWIM) And Its Applications on Radio Wave Propagation and Ionospheric GPS L1 Pseudorange Correction. Proceedings of the 32nd Asian Conference on Remote Sensing, 2011:27-34.
- Galvez, M.C.D., Macalalad, E.P., & Vallar, E.A., Retrieval of Boundary Layer and Cloud Base Heights in Manila From A Two-Wavelength Lidar Measurement. Proceedings of the 32nd Asian Conference on Remote Sensing, 2011.
- Vallar, E., Macalalad, E., Lajara, M., & Galvez, M.C., Atmospheric Turbidity Measurements Using A 355nm-532nm Lidar And a Sunphotometer In Manila, Philippines. Proceedings of the 32nd Asian Conference on Remote Sensing, 2011:2360-2362.
- 2010 Vallar, E., Esguerra, M.A., Macalalad, E., Lajara, M., & Galvez, M.C., Angstrom Turbidity Coefficient and Wavelength Exponent Derived from a 355nm-532nm Lidar and a Sunphotometer in Manila, Philippines. Proceedings of the 25th International Laser Radar Conference (ILRC), 2010.
- Galvez, M.C.D., Macalalad, E.P., & Vallar, E.A., Determination of Boudary Layer Height in Manila from Two-Wavelength Lidar measurement Using Normallized Concentration Gradient Method. Proceedings of the 25th International Laser Radar Conference (ILRC), 2010.
- 2004 Vallar, E.A., Galvez, M.C.D., Uy, J.C.Q., Macalalad, E.P., Roman, T.A., & Bangsal, E.B., Multi-instrument particulate matter characterization during the 2004 new year celebration in Manila (14°33.978' N; 120°59.523' E). Proceedings from the 22nd International Laser Radar Conference (ILRC 2004), European Space Agency, (Special Publication) ESA SP, 2004, 561:549.
- Galvez, M.C.D., Vallar, E.A., Bangsal, E.B., Macalalad, E.P., & Roman, T.A., Multi-Angle LIDAR Sensing of Traffic Aerosol in Manila. Proceedings from the 22nd International Laser Radar Conference (ILRC 2004), European Space Agency,

(Special Publication) ESA SP, 2004:545-548.

Name Ronald Cantoria Macatangay

Sex Male

Education

Doctor of Philosophy in Environmental Physics, University of Bremen, Bremen, Germany 2009

Master of Science in Physics, De La Salle University, Manila, Philippines 2004

Bachelor of Science in Physics with Specialization in Computer Applications, De La Salle University, Manila, Philippines 1999

Fields of Specialization

Environmental Physics

Environmental Impact Assessment

Spatial Analysis

Climate Change

Energy

Remote Sensing

Vegetation

Instrumentation

Spatial Statistics

Papers Presented

2018 October 9-10 Solanki, R., Macatangay, R., Surapipith, V., Sonkaew, T., Janjai, S., Buntoung, S., Bran, S.H., & Sakulsupich, V. (2018 October 9-10). Simultaneous measurements of mixing layer height and aerosol optical properties in the urbanized mountain valley of Chiang Mai, The Third International Conference, Mountains in the Changing World, Radisson Hotel, Kathmandu, Nepal.

2018 September 25-29 Sakulsupich, V., & Macatangay, R.C. (2018 September 25-29). Collective climatology and temporal analysis of air quality from measurement, observation and simulation over the Greater Bangkok area, Thailand, 14th Quadrennial Symposium iCACGP / 15th Science Conference IGAC, Sunport Takamatsu Convention Center, Takamatsu, Kagawa, Japan.

2017 November 4-5 Raman, S., Macatangay, R.C., Bran, S.H., Sakulsupich, V., & Sonkaew, T. (2017 November 4-5). Confinement of air pollutants in the mountain valley of Chiang Mai: LiDAR profile measurements, International Conference on Mountain Cities, Climate Change and Urban Sustainability, CRRID, Chandigarh, India.

2017 July 12-20 Sakurai, H., Tokanai, F., Inui, E., Hirofumi, S., Masuda, K., Mitthumsiri, W., Ruffolo, D., Macatangay, R.C., Kikuchi, S., & Kurebayashi, Y. (2017 July 12-20). Observation of cosmogenic nuclide Be-7 concentrations in the air at Bangkok and trajectory analysis of global air-mass motion, 35th International Cosmic Ray Conference, Bexco, Busan, Korea.

2016 June 8-10 Sonkaew, T., Cumwan, S., Kanta, W., & Macatangay, R.C. (2016 June 8-10). Finding the Optimum Microphysics and Convective Parameterization Schemes for the WRF Model for LPRU, Thailand, Siam Physics Congress, Ubon Ratchathani, Thailand.

- 2016 March 13-18 Macatangay, R.C., Bagtasa, G., & Sonkaew, T. (2016 March 13-18). Finding the Optimum Resolution, and Microphysics and Cumulus Parameterization Scheme Combinations for Numerical Weather Prediction Models in Northern Thailand: A First Step towards Aerosol and Chemical Weather Forecasting for Northern Thailand, International Symposium on Grids and Clouds, Academia Sinica, Taipei, Taiwan.
- 2013 October 20-24 Macatangay, R.C., Moreno, F., Galvez, M.C.D., Vallar, E., Sonkaew, T., Morris, V., Cruz, M.T., & Hendawitharana, G. (2013 October 20-24). Hand-held total ozone column concentration measurements in the Philippines, 34th Asian Conference on Remote Sensing 2013, Bali, Indonesia.

Publications

- 2018 Solanki, R., Macatangay, R., Surapipith, V., Sonkaew, T., Janjai, S., Buntoung, S., Bran, S.H., & Sakulsupich, V., Simultaneous measurements of mixing layer height and aerosol optical properties in the urbanized mountain valley of Chiang Mai. The Third International Conference, Mountains in the Changing World, Kathmandu, Nepal, 2018.
- Sakulsupich, V., & Macatangay, R.C., Collective climatology and temporal analysis of air quality from measurement, observation and simulation over the Greater Bangkok area, Thailand. 14th Quadrennial Symposium iCACGP / 15th Science Conference IGAC, Takamatsu, Kagawa, Japan, 2018.
- 2017 Macatangay, R., Bagtasa, G., & Sonkaew, T., Non-chemistry coupled PM10 modeling in Chiang Mai City, Northern Thailand: A fast operational approach for aerosol forecasts. *Journal of Physics Conference Series*, 2017, 901(1):012037.
- Mitthumsiri, W., Seripienlert, A., Tortempun, U., Mangeard, P.-S., Sáiz, A., Ruffolo, D., & Macatangay, R., Modeling polar region atmospheric ionization induced by the giant solar storm on 20 January 2005. *Journal of Geophysical Research: Space Physics*, 2017, 122:7946-7955.
- Velazco, V.A., Morino, I., Uchino, O., Deutscher, N.M., Bukosa, B., Belikov, D.A., Oishi, Y., Nakajima, T.Y., Macatangay, R.C., Nakatsuru, T., Maksyutov, S., Schwandner, F.M., & Griffith, D.W.T., Total Carbon Column Observing Network Philippines: Toward Quantifying Atmospheric Carbon in Southeast Asia. *Climate, Disaster and Development Journal*, 2017, 2(2):<https://doi.org/10.18783/cddj.v002.i02.a01>.
- 2016 Macatangay, R.C., Bagtasa, G., & Sonkaew, T., Finding the Optimum Resolution, and Microphysics and Cumulus Parameterization Scheme Combinations for Numerical Weather Prediction Models in Northern Thailand: A First Step towards Aerosol and Chemical Weather Forecasting for Northern Thailand. International Symposium on Grids and Clouds, Taipei, Taiwan, 2016.
- Sonkaew, T., Cumwan, S., Kanta, W., & Macatangay, R.C., Finding the Optimum Microphysics and Convective Parameterization Schemes for the WRF Model for LPRU, Thailand. Proceedings of the Siam Physics Congress, Ubon Ratchathani, Thailand, 2016.
- Buchholz, R.R., Paton-Walsh, C., Griffith, D.W.T., Kubistin, D., Caldow, C., Fisher, J.A., Deutscher, N.M., Kettlewell, G., Riggensbach, M., Macatangay, R., Krümmel, P.B., & Langenfelds, R.L., Source and meteorological influences on air quality (CO, CH₄ & CO₂) at a Southern Hemisphere urban site. *Atmospheric Environment*, 2016, 126:274-289.
- 2015 Sonkaew, T., & Macatangay, R., Determining relationships and mechanisms between tropospheric ozone column concentrations and tropical biomass burning in Thailand and its surrounding regions. *Environmental Research Letters*, 2015, 10(6):065009.
- Buchholz, R.R., Paton-Walsh, C., Griffith, D.W.T., Kubistin, D., Caldow, C., Fisher, J.A., Deutscher, N.M., Kettlewell, G., Riggensbach, M., Macatangay, R., Krümmel, P.B., & Langenfelds, R.L., In situ measurement of CO, CH₄, and CO₂ combined with

- selected meteorological measurements at the University of Wollongong, Australia. *PANGAEA*, 2015, 126:274-289.
- 2014 Macatangay, R., Sonkaew, T., Velazco, V., Gerbig, C., Intarat, N., Nantajai, N., & Bagtasa, G., Factors influencing surface CO₂ variations in LPRU, Thailand and IESM, Philippines. *Environmental Pollution*, 2014, 195:282-291.
- Deutscher, N.M., Sherlock, V., Mikaloff Fletcher, S.E., Griffith, D.W.T., Notholt, J., Macatangay, R., Connor, B.J., Robinson, J., Shiona, H., Velazco, V.A., Wang, Y., Wennberg, P.O., & Wunch, D., Drivers of column-average CO₂ variability at Southern Hemispheric Total Carbon Column Observing Network sites. *Atmospheric Chemistry and Physics*, 2014, 14(18):9883-9901.
- 2013 Oshchepkov, S., Bril, A., Yokota, T., Yoshida, Y., Blumenstock, T., Deutscher, N.M., Dohe, S., Macatangay, R., Morino, I., Notholt, J., Rettinger, M., Petri, C., Schneider, M., Sussman, R., Uchino, O., Velazco, V., Wunch, D., & Belikov, D., Simultaneous retrieval of atmospheric CO₂ and light path modification from space-based spectroscopic observations of greenhouse gases: Methodology and application to GOSAT measurements over TCCON sites. *Applied Optics*, 2013, 52(6):1339-1350.
- Oshchepkov, S., Bril, A., Yokota, T., Wennberg, P.O., Deutscher, N.M., Wunch, D., Toon, G.C., Yoshida, Y., O'Dell, C.W., Crisp, D., Miller, C.E., Frankenberg, C., Butz, A., Aben, I., Guerlet, S., Hasekamp, O., Boesch, H., Cogan, A., Parker, R., Griffith, D., Macatangay, R., Notholt, J., Sussmann, R., Rettinger, M., Sherlock, V., Robinson, J., Kyrö, E., Heikkinen, P., Feist, D.G., Morino, I., Kadyrov, N., Belikov, D., Maksyutov, S., Matsunaga, T., Uchino, O., & Watanabe, H., Effects of atmospheric light scattering on spectroscopic observations of greenhouse gases from space. Part 2: Algorithm intercomparison in the GOSAT data processing for CO₂ retrievals over TCCON sites. *Journal of Geophysical Research: Atmospheres*, 2013, 118:1493-1512.
- Macatangay, R.C., Moreno, F., Galvez, M.C.D., Vallar, E., Sonkaew, T., Morris, V., Cruz, M.T., & Hendawitharana, G., Hand-held total ozone column concentration measurements in the Philippines. *Proceedings of the 34th Asian Conference on Remote Sensing (ACRS 2013)*, Bali, Indonesia, 2013, 2:1738-1743.
- 2012 Kawasaki, M., Yoshioka, H., Jones, N.B., Macatangay, R., Griffith, D.W.T., Kawakami, S., Ohyama, H., Tanaka, T., Morino, I., Uchino, O., & Ibuki, T., Usability of optical spectrum analyzer in measuring atmospheric CO₂ and CH₄ column densities: Inspection with FTS and aircraft profiles in situ. *Atmospheric Measurement Techniques*, 2012, 5(11):2593-2600.
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- 2008 Schneising, O., Buchwitz, M., Burrows, J. P., Bovensmann, H., Reuter, M., Notholt, J., Macatangay, R., & Warneke, T., Three years of greenhouse gas column-averaged dry air mole fractions retrieved from satellite - Part 1: Carbon dioxide. *Atmospheric Chemistry and Physics*, 2008, 8:3827-3853.
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- 1999 Cecilia, M., Galvez, M.C.D., Macatangay, R.C., Lim, I.B.T., & Vallar, E.A., Analysis of the multiple scattering effects on clouds using Monte Carlo and depolarization lidar method. Technical Digest. CLEO/Pacific Rim '99. Pacific Rim Conference on Lasers and Electro-Optics (Cat. No.99TH8464), Seoul, South Korea, 1999:937-938.

Name Katrina Joy H. Magno-Abriol-Santos

Sex Female

Organizational Affiliations

Assistant Professor 2, Institute of Computer Science, University of the Philippines Los Baños, College, Laguna, Philippines

Education

Master of Information Technology, University of the Philippines, Diliman, Quezon City, Philippines 2013

Bachelor of Science in Computer Science, University of the Philippines, Diliman, Quezon City, Philippines 2009

Fields of Specialization

Information Technology

Web Programming

Digital Anthropometry

Digital Image Processing

Computer Science Education

Information Technology Education

Employment

Head, Computer Training and Extension Division, Institute of Computer Science, University of the Philippines Los Baños, 2013 June-Present

Instructor 1, University of the Philippines Los Baños, 2009 June-2013 July

Executive Assistant, Young Software Engineers' Society, University of the Philippines, Diliman, Quezon City, 2008 June-2009 March

Association Membership

Associate Member, National Research Council of the Philippines

Honors / Awards

Best Paper ("Development of an Online Automated Anthropometry Towards a National Database of Filipino Body Measurements", with Mr. Darwin James Abelardo, Ms. Kristine Bernadette Pelaez, and Professor Jaderick Pabico) - 12th National C, Philippine Society of Information Technology Educators 2014 October

Best Paper ("Towards Input Device Satisfaction Through Hand Anthropometry", with Professor Jaderick Pabico) - 10th National Conference on Information Technology Education, Philippine Society of Information Technology Educators 2012 October

Researches

Completed

Development of an Online Automated Anthropometry Towards a National Database of Filipino Body Measurements

Papers Presented

2014 Magno, K.J.H., Pabico, J.P., Pelaez, K.B.P., & Abelardo, D.J.A. (2014 October 23-25).
October 23- Development of an Online Automated Anthropometry Towards a National Database

- 25 of Filipino Body Measurements, First International Symposium on Computing for Education (ISCE 2014) and 12th National Conference on Information Technology Education (NCITE 2014), Crown Regency Hotel and Convention Center, Boracay Island, Malay, Aklan, Philippines.
- 2013 December 13 Magno, K.J.H., Vega, R.S.A., & Pabico, J.P. (2013 December 13). A Novel Cost-optimal Camera Array System for Automatic Monitoring of Penned Production Swine, 6th UPLB CAS Student-Faculty Research Conference (SFRC 2013), NCAS, UP Los Baños, Philippines.
- 2013 October 24-26 Magno, K.J.H., & Pabico, J.P. (2013 October 24-26). NANO DB: National Anthropometric Database Software and hardware Design and Protocol, 11th National Conference on Information Technology Education (NCITE 2013), Villa Paraiso, Mambajao, Camiguin, Philippines.
- 2013 March 7-8 Magno, K.J.H., & Pabico, J.P. (2013 March 7-8). Hand Anthropometric Data for Filipino-centric Keyboard Dimensions, 13th Philippine Computing Science Congress (PCSC 2013), Ateneo De Manila University, Manila, Philippines.
- 2012 December 14 Magno, K.J.H., & Pabico, J.P. (2012 December 14). Statistical Motivation, Mathematical Model and Computational Implementation of Automated Anthropometry, 5th UPLB CAS Student-Faculty Research Conference (SFRC 2012), NCAS Auditorium, UP Los Baños, Philippines.
- 2012 December 4-8 Magno, K.J.H., & Pabico, J.P. (2012 December 4-8). Digital Anthropometry: Model, Implementation and Application, Proceedings of the 6th National Symposium on Mathematical Aspects of Computer Science (SMACS 2012), La Carmela de Boracay Convention Center, Boracay Island, Malay, Aklan, Philippines.
- 2012 October 18-20 Magno, K.J.H., & Pabico, J.P. (2012 October 18-20). Towards Input Device Satisfaction Through Hand Anthropometry, 10th National Conference on Information Technology Education (NCITE 2012), Laoag City, Ilocos Norte, Philippines.

Publications

- 2017 Carpio, V.P.L., Abriol-Santos, K.J.M., & Hermocilla, J.A.C., SkyLab : An extensible workflow web application for HPC on the cloud . Proceedings of the 17th Philippine Computing Science Congress (PCSC 2017), University of San Carlos, Talamban Campus, Cebu, Philippines, 2017:143-148.
- 2015 Ferrer, S.J.B., Lagrimas, R.J.M., & Magno, K.J.H., FOCUS: A Free and Open-Source Application for Supervising Computer Laboratories. Philippine Information Technology Journal, 2015, 8(2):43-51.
- Cortez, K.A., & Magno, K.J., Identification of Philippine Algae Species from Images using Naive Bayes Classifier. Proceedings of the 15th Philippine Computing Science Congress (PCSC 2015), University of St. Louis, Tuguegarao City, Cagayan, Philippines, 2015.
- 2014 Abelardo, D.J.A., Pelaez, K.B.P., Magno, K.J.H., & Pabico, J., Development of an Online Automated Anthropometry Towards a National Database of Filipino Body Measurements. First International Symposium on Computing for Education (ISCE 2014) and 12th National Conference on Information Technology Education (NCITE 2014), 2014:85-101.
- Magno, K.J.H., & Pabico, J.P., Digital Anthropometry: Model, Implementation, and Application. Asia Pacific Journal of Multidisciplinary Research, 2014, 2(3):82-88.
- Abriol-Santos, J.M.C.V., & Magno, K.J.H., TRUNKLINE: Utilizing Centralized SMS Services in a State University. First International Symposium on Computing for Education (ISCE 2014) and 12th National Conference on Information Technology Education (NCITE 2014), 2014.
- Magno, K.J.H., Pabico, J.P., Pelaez, K.B.P., & Abelardo, D.J.A., National Database of

- Filipino Anthropometry. First International Symposium on Computing for Education (ISCE 2014) and 12th National Conference on Information Technology Education (NCITE 2014), 2014.
- 2013 Magno, K.J.H., & Pabico, J.P., Towards Input Device Satisfaction Through Hand Anthropometry. *Philippine Information Technology Journal*, 2013, 6(1):17-28.
 Magno, K.J.H., & Pabico, J.P., Towards a Filipino-centric Design for Digital Input Devices through Automated Hand Anthropometry. *Transactions of the National Academy of Science and Technology, Philippines*, 2013, 35(1):151.
 Magno, K.J.H., Vega, R.S.A., & Pabico, J.P., A Novel Cost-Optimal Camera Array System for Automatic Monitoring of Pinned Production Swine. *Proceedings of the 6th UPLB CAS Student-Faculty Research Conference (SFRC 2013)*, 2013:10-15.
 Magno, K.J.H., & Pabico, J.P., NANO DB: National Anthropometric Database Software and hardware Design and Protocol. *Proceedings of the 11th National Conference on Information Technology Education (NCITE 2013)*, 2013:38-46.
 Magno, K.J.H., & Pabico, J.P., Hand Anthropometric Data for Filipino-centric Keyboard Dimensions. *Proceedings of the 13th Philippine Computing Science Congress (PCSC 2013)*, Manila, Philippines, 2013:186-193.
- 2012 Robles, M.Y.B., Magno, K.J.H., Manalang, M.A.L., & Mariano, V.Y., COBRA: A Content-Based Retrieval Platform for Digital Images. *Philippine Information Technology Journal*, 2012, 4(2):3-10.
 Magno, K.J.H., & Pabico, J.P., Statistical Motivation, Mathematical Model and Computational Implementation of Automated Anthropometry. *Proceedings of the 5th UPLB CAS Student-Faculty Research Conference (SFRC 2012)*, NCAS Auditorium, University of the Philippines Los Baños, Laguna, Philippines, 2012:83-88.
 Magno, K.J.H., & Pabico, J.P., Digital Anthropometry: Model, Implementation and Application. *Proceedings of the 6th National Symposium on Mathematical Aspects of Computer Science (SMACS 2012)*, Malay, Aklan, Philippines, 2012:144-149.
- 2011 de Robles, M.Y.B., Jacildo, A.J., Magno, K.J.H., Manalang, M.A.L., & Mariano, V.Y., An Evaluation Platform for COBRA: A Content-Based Image Retrieval and Feature Extraction Algorithm. *ICCC International Digital Design Invitation Exhibition*, 2011:47-48.

Name Faith Santiago Maranan

Sex Female

Organizational Affiliations

Professor, Environmental Biology Division, Institute of Biology, University of the Philippines Los Baños, College, Laguna, Philippines

Education

Master of Science in Molecular Biology and Biotechnology, University of the Philippines Los Baños, College, Laguna, Philippines 2011

Fields of Specialization

Molecular Biology

Genetics

Bioinformatics

Ecology

Restoration Ecology

Papers Presented

- 2016 April 7-9 Manila-Fajardo, A.C., Honrade, T.L.A., Maranan, F.S., Rabena, M.A.F., & Campang, J.G. (2016 April 7-9). Survive: A Game for Biodiversity and Plant Health in Agroecosystems, 51st BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines.
- 2014 April 3-5 Lambio, I.A., Banaay, C.G., Maranan, F., & Rabena, M.A. (2014 April 3-5). Effect of Varying Light Intensities on Phenotypic Expression of Selected Plant Species, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2014 April 3-5 Lambio, I.A.F., Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Mananan, F.S., Beringuela, R.T., Campang, J.G., Rabena, M.A.F., & Encinares, J.M.A. (2014 April 3-5). Eco-Minutes to Win it Game: Integrating Ecological Concepts in a Competitive Classroom Activity, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.
- 2013 April 4-6 Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G.B., Beringuela, R.T., & Fajardo, A.M. (2013 April 4-6). Biodiversity Boardgame: A Tool for Teaching Environmental Biology, 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.
- 2013 April 4-6 Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Beringuela, R.T., Lambio, I.A.F., & Maranan, F.S. (2013 April 4-6). Innovative Ways of Teaching Environmental Biology, 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.
- 2013 April 4-6 Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G., Beringuela, R.T., & Fajardo, A.M. (2013 April 4-6). Footing the Bill: The Carbon Footprint Game, 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines.

Publications

- 2016 Manila-Fajardo, A.C., Honrade, T.L.A., Maranan, F.S., Rabena, M.A.F., & Campang, J.G., Survive: A Game for Biodiversity and Plant Health in Agroecosystems. 51st

- BIOTA Annual National Convention and Scientific Sessions, University of the Philippines Los Baños, Laguna, Philippines, 2016.
- 2014 Lambio, I.A., Banaay, C.G., Maranan, F., & Rabena, M.A., Effect of Varying Light Intensities on Phenotypic Expression of Selected Plant Species. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
Lambio, I.A.F., Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Mananan, F.S., Beringuela, R.T., Campang, J.G., Rabena, M.A.F., & Encinares, J.M.A., Eco-Minutes to Win it Game: Integrating Ecological Concepts in a Competitive Classroom Activity. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.
- 2013 Barrion-Dupo, A.L.A., Banaay, C.G.B., Lambio, I.A.F., Maranan, F.S., Rabena, M.A.F., Flores, R.J.D., Deyto, R.C., Fajardo, A.M., & Lit, I.L., Jr., Effect of Population Density on Larval Dispersion and Pit Construction of the Antlion, *Myrmeleon angustipennis* Banks (Neuroptera: *Myrmeleontidae*). *Asian Journal of Biological Sciences*, 2013, 6(2):131-137.
Maranan, F., & Diaz, M.G.Q., Molecular Diversity and DNA Barcode Identification of Selected Philippine Endemic *Hoya* Species (*Apocynaceae*). *Philippine Agricultural Scientist*, 2013, 96(1):86-92.
Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G.B., Beringuela, R.T., & Fajardo, A.M., Biodiversity Boardgame: A Tool for Teaching Environmental Biology. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.
Barrion-Dupo, A.L.A., Fajardo, A.M., Banaay, C.G.B., Beringuela, R.T., Lambio, I.A.F., & Maranan, F.S., Innovative Ways of Teaching Environmental Biology. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.
Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S., Banaay, C.G., Beringuela, R.T., & Fajardo, A.M., Footing the Bill: The Carbon Footprint Game. 48th BIOTA Annual National Convention and Scientific Sessions, Far Eastern University, Morayta, Manila, Philippines, 2013.
- 2012 Kloppenburg, R.D., Guevarra, M.L.D., Carandang, J.M., & Maranan, F.S., New species of *Hoya* R.Br. (*Apocynaceae*) from the Philippines. *Journal of Nature Studies*, 2012, 11(1&2):34-48.
- 2008 Maranan, F.S., & Mendiolo, M., Isozyme analysis of Philippine cashew (*Anacardium occidentale* L.) germplasm. *Philippine Agricultural Scientist*, 2008, 91(3):329-333.

Name **Borromeo B. Motin**

Sex Male

Organizational Affiliations

Director of Research, Romblon State University, Barangay Liwanag, Odiongan, Romblon

Education

Doctor of Philosophy in Philippine Studies, University of the Philippines, Diliman, Quezon City, Philippines 2006

Master of Arts in Philosophy, University of the Philippines, Diliman, Quezon City, Philippines 1994

Bachelor of Science in Fisheries (Marine Fisheries), Romblon College of Fisheries and Forestry, Romblon, Philippines 1989

Vocational Diploma in Fisheries Technology (Marine Fisheries), Romblon College of Fisheries and Forestry, Romblon, Philippines 1988

Fields of Specialization

Marine Fisheries

Philosophy

Philippine Studies

Biodiversity

Indigenous People's Culture

Indigenous People's Rights

Biodiversity Conservation

Biodiversity Conservation

Society and Culture

Employment

Director for Research, Romblon State University, 2012-Present

Director for Extension, Romblon State University, 2010 June-2012 April

Extension Specialist, Bataan Center for Innovative Science and Technology, Inc (BCISTI), 2004 April-2009 October

University Extension Specialist, Ugnayan ng Pahinungod, University of the Philippines, 1998 January-2003 December

Communication and Equipment Operator III, Ugnayan ng Pahinungod, University of the Philippines, 1996 January-1997 December

Social Welfare Program Volunteer, Ugnayan ng Pahinungod, University of the Philippines, 1994 February-1995 December

Association Membership

Associate Member, National Research Council of the Philippines

Honors / Awards

Outstanding Volunteer Service for Humanity Award, Kaisa-Angelo King Heritage Center 2005

Researches

Completed

Hosting of the 2015, International SANROKAN Conference on Bio-Cultural and Environmental Studies

Enhancing Community-Academe Partnership for the Establishment of an Integrated Watershed Conservation and Rehabilitation Program in Tablas Island

Enhancing the CALSANAG Watershed Forest Reserve Management System through Integrated and Converging Partnership with DENR-LGU-RSU

Establishment of an Integrated Reforestation, Conservation and Sustainable Livelihood Program for Kanawan Aytas in the Bataan National Park

Implementing GIZ-DENR-LGU-RSU ECICOP Project towards Sustainable Cooperation for Healthier Future Environment

Publications

2015 Ylagan, A., & Motin, B., Bugsay: Rowing Progress for Romblon. Romblon State University, 2015.

De Luna, A., & Motin, B., Salida Romblon: a Journey Towards MIMAROPA's Lead University. Romblon State University, 2015.

2011 Mani, M., Sespene, J., Chavez, J.R., Motin, B., & Fadallan, E., Comprehensive analysis of the poverty situation in the Philippines: Basis for a sustainable local poverty reduction program model. *Travesia: Refereed Multidisciplinary Journal*, Romblon State University, 2011, 1(1):2-14.

Motin, B., Mani, M., & Sespene, J., An integrated reforestation, conservation and sustainable livelihood program for Kanawan Aytas in Morong, Bataan: A Science-based community empowerment model. *Travesia: Refereed Multidisciplinary Journal*, Romblon State University, 2011, 1(1):15-26.

2010 Regpala, M.E., Motin, B., & Balawag, G., Philippine Indigenous Peoples & Protected Areas: Review of Policy and Implementation. FPP series on Forest Peoples and Protected Areas, Tebtebba Foundation Indigenous People's International Centre Policy Research and Education, Forest Peoples Programme, 2010.

Salonga, J., Quitain, R., & Motin, B., Nurturing the Forest. *Dunong at Batas: Documenting Indigenous Wisdom and Customary Law*, 2010.

2008 Motin, B., Salonga, J., & Cruz, L., An index to assess the impact of development intervention on the community of Kanawan Ayta. *Indicators Relevant for Indigenous Peoples: A Resource Book*, 2008:327-335.

Colchester, M., Ferrari, M.F., Nelson, J., Kidd, C., Zaninka, P., Venant, M., Regpala, L., Balawag, G.T., Motin, B., & Lasimbang, B., Conservation and indigenous peoples: assessing the progress since Durban. FPP series on Forest Peoples and Protected Areas, Forest Peoples Programme, 2008.

2006 Motin, B., Cruz, L., Gifford, F., & Kron, M., A modified socio-cultural development index for the Aytas of Kanawan, Morong, Bataan, Philippines. *Indigenous Perspectives*, 2006, 8(1):51-71.

2001 Motin, B.B., Isang pagsusuri sa kultural na salik at etikal na konsepto ng utang na loob. *Daluyan: Journal ng SWF sa Talakayang Pangwika*, 2001, 10(4):298-318.

Name June Owen O. Nacorda

Sex Male

Organizational Affiliations

Assistant Professor 2, Plant Biology Division, University of the Philippines Los Baños, College, Laguna, 4031 Philippines

Education

Master of Science in Botany, University of the Philippines Los Baños, Laguna, Philippines 2007

Fields of Specialization

Botany

Phycology

Publications

- 2018 Martinez-Goss, M.R., Arguelles, E.D.L.R., & Nacorda, J.O.O., Some *Pediastrum* species (*Chlorophyceae*) from Laguna de Bay (Philippines) and its vicinities. *The Philippine Scientist*, 2018, 53:31-51.
- 2014 Martinez-Goss, M.R., Torreta, N.K., Nacorda, J.O.O., & Mendoza, C.D.S., The Algal Culture Collection at the University of the Philippines Los Baños-Museum of Natural History. *The Philippine Scientist*, 2014, 51:66-103.
- 2013 Santiago, D.E.O., Demafelis, R.B., Martinez-Goss, M., Nacorda, J.O.O., Torreta, N.K., Bataller, B.G., Redondo, M.J.H., Jao, N.L., & Dizon, L.S.H., Design, Fabrication and Performance Evaluation of a Photobioreactor for the Cultivation of *Chlorella vulgaris* (Beijerinck). *Philippine Journal of Crop Science*, 2013, 38(2):21-29.
- 2010 Nacorda, J.O.O., Martinez-Goss, M.R., & Torreta, N.K., Bioremoval and Bioreduction of Chromium (VI) by the Green Microalga, *Chlorella vulgaris* Beij., Isolated from Laguna de Bay, Philippines. *Philippine Journal of Science*, 2010, 139(2):181-188.
- 2007 Nacorda, J.O., Martinez-Goss, M.R., Torreta, N.K., & Palacpac, N.M.Q., Metal resistance and removal by two strains of the green alga, *Chlorella vulgaris* Beijerinck, isolated from Laguna de Bay, Philippines. *Journal of Applied Phycology*, 2007, 19(6):701-710.

Name Chelo Supnet Pascua

Sex Male

Organizational Affiliations

Associate Professor, National Institute of Geological Sciences University of the Philippines, 1101 Diliman, Quezon City, Philippines

Education

Doctor of Philosophy in Environmental Minerology and Geochemistry, Kanazawa University, Japan, Japan 2006

Master of Science in Geology - Hydrogeology, University of the Philippines, Diliman, Quezon City 2001

Bachelor of Science in Geology, University of the Philippines, Diliman, Quezon City 1997

Fields of Specialization

Environmental Minerology

Geochemistry

Material Characterization

Thin Films and Nanotechnology

Clay Mineralogy

Employment

Associate Professor 6, Department of Physical Sciences, University of the Philippines Baguio, 2014 August-2017 July

Associate Professor 5, Department of Materials Science & Engineering, Mariano Marcos State University, 2011 June-2014 May

Assistant Professor VII, National Institute of Geological Sciences, University of the Philippines - Diliman, 2008 June-2011 May

Postdoctoral Researcher, Photocatalytic Materials Center, National Institute for Materials Science, 2006 April-2008 March

Post Doctoral Researcher, National Institute for Materials Science, Tsukuba, Japan, 2006 April-2008 March

Association Membership

Member, Philippine-American Academy of Science and Engineering

Honors / Awards

Balik Scientist Awardee, DOST 2008

Researches

Completed

Determining the Potential of CO₂ Capture and Storage in the CALABARZON Region, Philippines

Fullerene Nanowhisker/Nanotube - Polyaniline Nanocomposite

Mineralogical and Geochemical Evolution of the Mt. Pinatubo Volcanic Ash Deposits

Project 4. Development of fish oral vaccines coupled with a nanocomposite biomaterial as a carrier for vaccine delivery – Application of Biotechnology on Growth and Health Management of Nile Tilapia and Pacific White Shrimp

High-Grade Ceramics Development from Kaolinite Deposits of Ilocos Norte

Novel Conducting Polyaniline - Synthetic Transition Metal Clay Nanocomposites

Optically Transparent Mullite-Spinel-Based Ceramics from Natural Kaolinite Nanoparticles

Pilot Production and Field-Testing of Ceramics-Based Water Filtration System

Synthesis, Morphology and Chemical Modification of Fullerene-Based Nanomaterials for Nano-engineered Structural Materials and Optoelectronic Applications

Hazard Assessment of 2/3 of the Philippines using LiDAR: Northern Luzon – Region 1 -Project 1. Extracting Digital Elevation Models and Salient Features for Flood Modeling and Hazard Assessment

Detailed Mapping of Agricultural, Forest and Natural Resources in Northern Luzon (Region 1): Agriculture, Forest, Aquatic, Water and Renewable Energy Resources

Ongoing

Scaling problem in geothermal system, and Remove, Recovery and Resource of silica by addition of reagents

Portable Potable Water Equipment for Disasters and Emergencies (PoPWEDE Project)

Papers Presented

- 2010
October 3-7 Fujii, N., Arcilla, C.A., Yamakawa, M., Pascua, C., Namiki, K., Sato, T., Shikazono, N., & Alexander, W.R. (2010 October 3-7). Natural Analogue Studies of Bentonite Reaction Under Hyperalkaline Conditions: Overview of Ongoing Work at the Zambales Ophiolite, Philippines, ASME 2010 13th International Conference on Environmental Remediation and Radioactive Waste Management, Tsukuba, Japan.
- 2010
September 19-23 Arcilla, C.A., Pascua, C.S., & Alexander, W.R. (2010 September 19-23). Hyperalkaline springs in the Philippines: significance to natural Carbon Capture and Sequestration, 10th International Conference on Greenhouse Gas Control Technologies, Amsterdam, The Netherlands, IEA Greenhouse Gas R&D Programme, IEA, London, UK.
- 2010 May 2-7
7 Mendoza, E.P., Catane, S., Pascua, C., & Zarco, M.A. (2010 May 2-7). Geological and geotechnical characteristics of Metro Manila volcanic soils and their suitability for landfill soil liner, EGU General Assembly, Vienna, Austria.
- 2009
November 17-20 Alexander, R., Arcilla, C., Constantino, C., Fujii, N., Honrado, M., Kawamura, H., Korkeakoski, P., Namiki, K., Milodowski, T., Pascua, C., Rigas, M., Sellin, P., Tweed, C., Vargas, E., Yamakawa, M., & McKinley, I. (2009 November 17-20). 2 - Natural Analogues of Cement lechates: Preliminary Results and Future Opportunities from Projects in the Philippines and Cyprus, Workshop on cementitious materials in safety cases for geological repositories for radioactive waste: role, evolution and interaction. Brussels. Radioactive Waste Management, NEA/RWM/R(2012)3/REV, NEA/OECD, Paris, France.
- 2009
October 11-15 Vargas, E., Honrado, M.L.L., Pascua, C., Arcilla, C.A., Alexander, W.R., Yamakawa, M., Fujii, N., Namiki, K., Kawamura, H., & McKinley, I.G. (2009 October 11-15). Developments in hyperalkaline natural analogue studies around the Zambales Ophiolite, Philippines, 12th International Conference on Environmental Remediation and Radioactive Waste Management, Liverpool, United Kingdom.
- 2009 June Arcilla, C.A., Honrado, M.L.L., Vargas, E., Pascua, C.S., McKinley, I.G., Namiki, K.,

- 14-20 Fujii, N., Yamakawa, M., & Alexander, W.R. (2009 June 14-20). Bentonite Reaction in Natural Hyperalkaline Groundwaters: Examples from the Philippines, XIV International Clay Conference, Castellaneta Marina, Italy.
- 2009 May 13-14 Arcilla, C.A., Pascua, C.S., Alexander, W. R., & McKinley, I.G. (2009 May 13-14). Natural analogue studies in ophiolite systems and tertiary volcanic deposits of the Philippines, 3rd International Workshop and Conference on Earth Resources Technology, Sapporo Japan.
- 2004 May 9-13 Takada, M., Fukushi, K., Pascua, C.S., Sato, T., & Yanase, N. (2004 May 9-13). Anion exchange reactions in schwertmannite and its effects on stability, Japan Earth and Planetary Science Joint Meeting, Makuhari Messe, Japan.
- 2004 May 9-13 Pascua, C. S., Minato, M., Yokoyama, S., & Sato, T. (2004 May 9-13). Influence of precursory phases on arsenic mobility in the geothermal environment, Japan Earth and Planetary Science Joint Meeting, Makuhari Messe, Japan.
- 2004 May 9-13 Minato, M., Pascua, C. S., Yokoyama, S., & Sato, T. (2004 May 9-13). Dearsinification of geothermal brines by anion exchange reactions with inorganic materials, Japan Earth and Planetary Science Joint Meeting, Makuhari Messe, Japan.
- 2003 September 34-26 Pascua, C.S., Minato, M., Yokohama, S., Ueda, A., Kato, K., & Sato, T. (2003 September 34-26). Sleuthing arsenic accumulation in geothermal scales from Sumikawa geothermal fields, Japan, 47th Annual meeting of The Clay Science Society of Japan (Nendo Gakkai), Hiroshima University, Japan.
- 2001 September 10-14 Pascua, C.S., & Foronda, J.M. (2001 September 10-14). Land use and groundwater quality in the Upper Agno Watershed: Loo and Cayapas Valleys, Northern Benguet, 31st International Association of Hydrogeologists Congress: New Approaches to Characterizing Groundwater Flow, Munich, Germany.
- 2000 November 22-24 Pascua, C.S., & Foronda, J.M. (2000 November 22-24). Nitrate pollution of groundwater in Loo Valley, Northern Benguet, Annual NIGS Research Symposium, University of the Philippines, Diliman, Quezon City, Philippines.
- 1998 November 23-24 Pascua, C.S., Cagas, J., Gonzales, C., Jimenez, F.A., Jr., & Yumul, G.P., Jr. (1998 November 23-24). Preliminary investigations for predicting groundwater occurrence and identifying geologic hazards, Pujada Peninsula, Philippines, Annual NIGS Research Symposium, University of the Philippines, Diliman, Quezon City, Philippines.
- 1998 November 23-24 Ong, J., Foronda, J., Aguda, N., Jaraula, C., Mateo, Z., & Pascua, C.S. (1998 November 23-24). Tidal effects on groundwater fluctuations on a small oceanic island: Pag-asa Island, Philippines, 5th National Symposium in Marine Science, University of the Philippines, Diliman, Quezon City, Philippines.

Publications

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- 2017 Ringor, C.L. , Pascua, C.S., Villanueva, J.C.B., Garcia, A.K.H., Agulo, I.J.A., Matsushita, Y., & Miyazawa, K., Multiwalled Carbon Nanofibers and Nanocapsules Synthesized from Plant Oil via Atmospheric CVD Process. *Journal of Nanoscience*

- and Nanotechnology, 2017, 17(5):3543-3550.
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 Javier, G.M.N., Pascua, C.S., & Agulo, I.J.A., Synthesis of zinc oxide on ceramic substrates via electrochemical deposition. *Proceedings of the 32nd Samahang Pisika ng Pilipinas*, 2014, 32:SPP2014-3A-04.
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- 2011 Futralan, C.M., Kan, C.-C., Dalida, M.L.P., Pascua, C., Hsien, K.-J., & Wan, M.-W., Nickel removal from aqueous solution in fixed bed using chitosan-coated bentonite. *Sustainable Environment Research*, 2011, 21(6):391-401.
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- 2010 Fujii, N., Arcilla, C.A., Yamakawa, M., Pascua, C., Namiki, K., Sato, T., Shikazono, N., & Alexander, W.R., Natural Analogue Studies of Bentonite Reaction Under Hyperalkaline Conditions: Overview of Ongoing Work at the Zambales Ophiolite, Philippines. *ASME Proceedings of the 13th International Conference on Environmental Remediation and Radioactive Waste Management*, Tsukuba, Japan, 2010, 2.
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- 2009 Yamada, H., Tamura, K., Pascua, C.S., Yokohama, S., & Hatta, T., Self-Assembled Silicate Nanolayers by Geonics. Transaction of the Materials Research Society of Japan, 2009, 34(2):363-366.
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- 2008 Tamura, K., Yokohama, S., Pascua, C., & Yamada, H., New Age of Polymer Nanocomposites Containing Dispersed High-Aspect-Ratio Silicate Nanolayers. *Chemistry of Materials*, 2008, 20(6):2242-2246.
- 2007 Yamada, H., Tamura, K., Yukihiro, W., Pascua, C.S., Hatta, T., Nemoto, K., Komatsu, Y., & Yokohama, S., Micro-Grating of Pseudomorphic Amorphous Phase and Micro-Cubic Crystalline Phase Obtained by Alkali Dissolution of Isothermal Treated NH₄-Zeolite A. *Clay Science*, 2007.
- Pascua, C.S., Minato, M., Yokohama, S., & Sato, T., Uptake of dissolved arsenic during the retrieval of silica from spent geothermal brine. *Geothermics*, 2007, 36(3):230-242.
- Pascua, C.S., Tamura, K., & Yamada, H., P42 Photocatalytic activity of 3 Zn-smectites in the decomposition of methylene blue under ultraviolet light irradiation. *The Clay Science Society of Japan*, 2007(51):230-231.
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- 2006 Nolasco-Javier, D.D., Pascua, C.S., David, C.P.C., & Sato, T., Assessment of heavy metal contents in bed sediments of a mineralized catchment of the Agno River, Benguet, Philippines. *Chinese Journal of Geochemistry*, 2006, 25(S1):41-41.
- Pascua, C., Sato, T., & Golla, G., Mineralogical and geochemical constraints on arsenic mobility in a Philippine Geothermal environment. *Acta Geologica Sinica*, 2006, 80(2):330-335.
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- Symposium Conference Proceedings, 2006(50):164-165.
- 2005 Pascua, C., Charnock, J., Polya, D.A., Sato, T., Yokohama, S., & Minato, M., Arsenic-bearing smectite from the geothermal environment. *Mineralogical Magazine*, 2005, 69(5):897-906.
- Tsutsui, M., Kuroda, M., Yokohama, S., Pascua, C., Ringor, C., & Sato, T., Reactive surface area in smectite dissolution under highly alkaline condition. *Clays in Natural and Engineered Barriers for Radioactive Waste Confinement; Tours (France)*, 2005:278-279.
- Pascua, C.S., Asai, A., & Sato, T., Coprecipitation of As(III) with synthesized phyllosilicates and hydrotalcite-like phases. *Geochimica et Cosmochimica Acta*, 2005, 69(10):Suppl. 626.
- Sato, T., Kuroda, M., Yokohama, S., Tsutsui, M., Ringor, C., Pascua, C., Fukushi, K., Tanaka, T., & Nakayama, S., Dissolution kinetics of smectite under alkaline conditions. *Clays in Natural and Engineered Barriers for Radioactive Waste Confinement; Tours (France)*, International Nuclear Information System, 2005, 37(8):15-16.
- 2004 Pascua, C., Minato, M., Yokohama, S., Ueda, A., Kato, K., & Sato, T., As uptake by precursory phases: Insights from the geothermal environment. *Geochimica et Cosmochimica Acta*, 2004, 68(11):A519.
- Minato, M., Pascua, C., Yokohama, S., Ueda, A., Kato, K., & Sato, T., Dissolved As Uptake by Inorganic Solids at Geothermal Conditions. *Geochimica et Cosmochimica Acta*, 2004, 68(11):Suppl.523.
- 2003 Pascua, C., Sato, T., Ueda, A., Kato, K., Yokohama, S., & Minato, M., Sleuthing As accumulation in geothermal scales and sinters. 47th Annual meeting of The Clay Science Society of Japan, 2003.
- Lagmay, A.M.F.A., Tengonciang, A.M.P., Marcos, H.V., & Pascua, C.S., A structural model guide for geothermal exploration in Ancestral Mount Bao, Leyte, Philippines. *Journal of Volcanology and Geothermal Research*, 2003, 122(1-2):133-141.
- 2001 Pascua, C., & Foronda, J.M., Land use and groundwater quality in the Upper Agno watershed (Loo and Cayapas Valleys, Northern Benguet). *Proceedings of the XXXI International Association of Hydrogeologists Congress*, Munich, Germany, 2001, 2.
- Ong, J., Aguda, N., Jaraula, C., Mateo, Z., Pascua, C.S., & Foronda, J., Tidal effect on groundwater fluctuations on a small oceanic island: A case study on the groundwater resources of Pag-asa Island, Kalayaan Island Group. *Science Diliman*, 2001, 12:33-44.

Name Alyssa M. Peleo-Alampay

Sex Female

Organizational Affiliations

Professor, National Institute of Geological Sciences- University of the Philippines, Diliman, Quezon City

Education

Doctor of Philosophy in Earth Science, University of California

Master of Science in Geology, University of the Philippines

Bachelor of Science in Geology, University of the Philippines

Fields of Specialization

Earth Science

Geology

Honors / Awards

Balik Scientist Awardee, Department of Science and Technology 2008

Researches

Ongoing

Calcareous Nannoplankton from Surficial Sediments of the South China Sea

Coccolithophore Flux in Sediment Trap Samples from the South China sea

Papers Presented

2010 Lit, C.C., Catane, S., Teves, J., Tejada, M.G., Mandanas, A.A., Fernando, A., Mirabueno, December M.T., Arpa, M.B., Bringas, C.L., Escobar, K., Sobrepena, K., Abuda, J., Abrecia, V., 13-17 Solidum, R.U., & Peleo-Alampay, A. (2010 December 13-17). ~6 ka tephra from Sibuyan Sea, Philippines: Geochemical characteristics and its effects on planktonic foraminifera, American Geophysical Union, Fall Meeting, San Francisco, California, USA.

2010 Catane, S.G., Fernando, A., Peleo-Alampay, A., & Tejada, M.G. (2010 December 13-17). December 6 ka anoxic condition in the Sibuyan Sea Basin, Philippines - possible link with an 13-17 explosive eruption event?, American Geophysical Union, Fall Meeting, San Francisco, California, USA.

Publications

2019 Ringor, C.L., Calamba, K.M., Pascua, C.S., & Miyazawa, K., Chapter 6: Morphological Controls of Fullerene Nanowhiskers and Nanotubes. In Book: Fullerene Nanowhiskers, 2nd Edition, Eds. Kun'ichi Miyazawa, Yuichi Ochiai, Masaru Tachibana, Tokushi Kizuka, Shigeo Nakamura, Pan Stanford Publishing Pte. Ltd., 2019:93-112.

2018 Villanueva, J.C.B., Ringor, C.L., Pascua, C.S., & Miyazawa, K., Size, structure, and conductivity of plant oil-derived carbon nanospheres synthesized by atmospheric ionization CVD. *Materials Chemistry and Physics*, 2018, 225:84-90.

2017 Ringor, C.L., Pascua, C.S., Villanueva, J.C.B., Garcia, A.K.H., Agulo, I.J.A., Matsushita, Y., & Miyazawa, K., Multiwalled Carbon Nanofibers and Nanocapsules Synthesized from Plant Oil via Atmospheric CVD Process. *Journal of Nanoscience and*

- Nanotechnology, 2017, 17(5):3543-3550.
- 2015 Calamba, K., Ringor, C., Pascua, C., & Miyazawa, K., Pleated Surface Morphology of C₆₀ Fullerene Nanowhiskers Incorporated by Polyaniline in *N*-Methyl-2-Pyrrolidone. *Fullerenes, Nanotubes and Carbon Nanostructures*, 2015, 23(8):709-714.
- 2014 Vargas, E.P., Tangunan, D.N., Peleo-Alampay, A.M., ABuda, J.B., Mambuay, L.A.T., Ramos, C.R.A., Fernando, A.G.S., Dimalanta, C.B., Faustino-Eslava, D.V., & Pascua, C.S., Post-Collision Deposition of Balanga Formation in northwest Mindoro, Philippines: Calcareous Nannofossil Evidence. *Stratigraphy*, 2014, 11(3-4):235-243.
Javier, G.M.N., Pascua, C.S., & Agulo, I.J.A., Synthesis of zinc oxide on ceramic substrates via electrochemical deposition. *Proceedings of the 32nd Samahang Pisika ng Pilipinas*, 2014, 32:SPP2014-3A-04.
- 2013 Arcilla, C.A., Pascua, C.S., & Russell Alexander, W., Corrigendum to Hyperalkaline groundwaters and tectonism in the Philippines: significance to natural Carbon Capture and Sequestration [Energy Procedia Volume 4 (2011) 5093-5101]. *Energy Procedia*, 2013, 4:6391.
- 2012 Pascua, C.S., & Yamada, H., Low-Temperature Formation of Clay Minerals: Correlating Laboratory Experiments With Natural Field-Scale Processes. *Clay Science*, 2012, 16(2):25-32.
Morimoto, K., Tamura, K., Pascua, C.S., Hatta, T., Ye, J., & Yamada, H., Photodegradation of Rhodamine B in Aqueous Suspension of Synthetic Zn-Substituted Phyllosilicates. *Clay Science*, 2012, 16(2):41-47.
Arcilla, C., Alexander, W.R., Vargas, E., Honrado, M., Sato, T., Fujii, K., Yamakawa, M., Argayosa, J., Lazaro, J., Pascua, C., & McKinley, I.G., Hyperalkaline Springs, Serpentinized Ultramafics, Bentonite Reaction, Exotic Life Forms and Natural Carbon Sequestration: Preliminary Studies from the Philippines. *Geophysical Research Abstracts*, EGU General Assembly 2012, 2012, 14:EGU2012-9641.
- 2011 Futalan, C.M., Kan, C.-C., Dalida, M.L.P., Pascua, C., Hsien, K.-J., & Wan, M.-W., Nickel removal from aqueous solution in fixed bed using chitosan-coated bentonite. *Sustainable Environment Research*, 2011, 21(6):391-401.
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- 2006 Nolasco-Javier, D.D., Pascua, C.S., David, C.P.C., & Sato, T., Assessment of heavy metal contents in bed sediments of a mineralized catchment of the Agno River, Benguet, Philippines. *Chinese Journal of Geochemistry*, 2006, 25(S1):41-41.
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- 2005 Pascua, C., Charnock, J., Polyá, D.A., Sato, T., Yokohama, S., & Minato, M., Arsenic-bearing smectite from the geothermal environment. *Mineralogical Magazine*, 2005, 69(5):897-906.
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- 2004 Pascua, C., Minato, M., Yokohama, S., Ueda, A., Kato, K., & Sato, T., As uptake by precursory phases: Insights from the geothermal environment. *Geochimica et Cosmochimica Acta*, 2004, 68(11):A519.
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- 2003 Pascua, C., Sato, T., Ueda, A., Kato, K., Yokohama, S., & Minato, M., Sleuthing As accumulation in geothermal scales and sinters. *47th Annual meeting of The Clay Science Society of Japan*, 2003.
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- 2001 Pascua, C., & Foronda, J.M., Land use and groundwater quality in the Upper Agno watershed (Loo and Cayapas Valleys, Northern Benguet). *Proceedings of the XXXI International Association of Hydrogeologists Congress, Munich, Germany*, 2001, 2.
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Name Roland V. Rallos

Sex Male

Organizational Affiliations

Senior Science Research Specialist, DOST-Philippine Nuclear Research Institute,
Commonwealth Avenue, Diliman, Quezon City, 1101 Philippines

Education

Master of Science in Soil Science, Visayas State University, Pangasugan, Baybay City,
6521 Leyte 2008

Fields of Specialization

Agriculture
Soil Science
Agricultural Plant Science
Plant Fertilization
Animal and Human Nutrition
Sustainable Agriculture
Water Resources Management
Soil Fertility
Crop Production
Soil Analysis
Soil and Water Conservation
Fertilizers
Climate Change and Agriculture
Crop Management
Organic Farming
Nutrient Management
Soil Science
Irrigation
Evapotranspiration
Field Experimentation
Soil Physics
Precision Agriculture
Fertigation
Agriculture Research
Farming Systems
Crop Water Management

Employment

Visiting Scientist, Tokyo University of Agriculture and Technology, 2013 October-2018 March

Senior Science Research Specialist (Soil Science), DOST-Philippine Nuclear Research Institute, 2010 February-Present

Science Research Assistant, Australian Center for International Agricultural Research (ACIAR), 2009 June-2010 February

Soil Science Instructor, Department of Agronomy and Soil Science, Visayas State University, 2005 March-2009 April

Association Membership

Member, Philippine Society of Soil Science and Technology VSU-Graduate Students Organization

Researches

Ongoing

Smart Farming-based Efficient Nutrient Management to Increase Sugarcane Productivity Through Elemental Tracer and Related Techniques

IAEA-RAS5073 "Climate Proofing Rice Production Systems (CRiPS) Based on Nuclear Applications, Phase II"

Nutrient Dynamics Assessment of Inorganic and Organic Rice-Based Farming Systems in the Pampanga River Basin through Lysimetric and Isotopic Techniques

Application of Nuclear Analytical Techniques for Efficient Nutrient and Irrigation Management in Corn Production

Publications

- 2019 Dicen, G.P., Navarrete, I.A., Rallos, R.V., Salmo, S.G., III, & Garcia, M.C.A., The role of reactive iron in long-term carbon sequestration in mangrove sediments. *Journal of Soils and Sediments*, 2019, 19(1):501-510.
- Kabir, M.H., Sas, P., Islam, M.M., Hossain, M.B., Islam, M.M., Mamun, A.N.K., & Rallos, R.V., Effect of different doses of nitrogen on nitrogen fixation and yield of lentil using tracer technique. *GSC Biological and Pharmaceutical Sciences*, 2019, 6(3):069-075.
- Baldos, A.P., & Rallos, R.V., Indications of enhanced soil ecosystem functions in polyculture reforested grassland. *Annals of Tropical Research*, 2019, 41(1):32-44.
- Navarrete, I.A., Dicen, G.P., Perez, T.R., Mendoza, S.M., Rallos, R.V., Labides, J.L.R., Rivera, C.T., Hallare, A.V., & Claveria, R.J.R., Towards integrated management of a shallow tropical lake: assessment of water quality, sediment geochemistry, and phytoplankton diversity in Lake Palakpakin, Philippines. *Environmental Monitoring and Assessment*, 2019, 191:485.
- 2017 Rallos, R.V., Asio, V.B., & Villamayor, F.P., Soil-Landscape Relationship in the Northern Volcanic Mountain of Leyte, Philippines. *Annals of Tropical Research*, 2017, 39(1):87-104.
- 2013 Tulin, A.B., Rallos, R.V., Rañises, M.B., & Dorahy, C., Increasing Cabbage Production Through NPK Application In Cabintan, Ormoc City, Leyte. *Annals of Tropical Research*, 2013, 35(1):118-130.
- 2010 Tulin, A.B., Quiñones, C.M., Rallos, R., Mercado, A., Jr., Salvani, J., Lapoot, C., Justo, V., & Dorahy, C., Evidence-based nutrient management strategy in identifying fertility status and soil constraints for vegetable production in the Southern Philippines. *Proceedings of the 19th World Congress of Soil Science*, Brisbane,

Australia, 2010.

Tulin, A.B., Rallos, R., & Dorahy, C., Integrated nutrient management for increased cabbage production in volcanic soil in Cabinatan, Leyte, Philippines. Proceedings of the 19th World Congress of Soil Science, Brisbane, Australia, 2010.

Name Cherry L. Ringor

Sex Female

Organizational Affiliations

Associate Professor, Institute of Environmental Science and Meteorology, University of the Philippines, Diliman, Quezon City

Education

Doctor of Philosophy in Earth Science, Kanazawa University, Kakumamachi, Kanazawa, Ishikawa, Japan 2004

Master of Science in Geology, University of the Philippines, Diliman, Quezon City 2000

Bachelor of Science in Geology, University of the Philippines, Diliman, Quezon City 1995

Fields of Specialization

Earth Science

Geology

Nanomaterials

Nanomaterials synthesis

Polymerization

Nanofabrication

Nanoparticle preparation

Precipitation

Carbon Nanomaterials

Climate Science

Nanotubes

Nanofibers

Polyaniline

Fabrication

Researches

Completed

LIDAR Data Processing & Validation in Luzon: CAR and Selected Sites in Region 1

Portable Potable Water Equipment for Disasters and Emergencies (PoPWEDE Project)

Retrospective Analyses of Climate Change from Coastal Erosion Trend and Uplifted Coral Reef Assemblages

Sea Surface Temperature Variability During High Sealevel Stands Recorded By Porites Corals From Bohol, Philippines

Fullerene Nanowhisker/Nanotube - Polyaniline Nanocomposite

Coral Assemblages in Modern and Uplifted Reef Terraces from Pamilacan Island, Bohol

Reconstructing Historical Flood Events from Massive Corals

Synthesis, Morphology and Chemical Modifications of Fullerene-Based Nanomaterials for Nano-engineered Structural Materials and Optoelectronic Applications

Acquisition of Detailed Bathymetry for Coastal Erosion Management

Coastal Stability (Coral Reef Visualization and Assessment Program)

Coastal Stability (Coral Reef Visualization and Assessment Program)

Ongoing

Profiling of Persistent and Emerging Pollutants in Sites Associated with Industrial Areas in the Philippines Program – Sediment Transport Project

Papers Presented

- 2006 Miyazawa, K., Ringor, C., & Sasaki, T. (2006). W16I Room Temperature Synthesis and Structural Characterization of Fullerene Nanotubes, International Workshop on New Frontiers of Smart Materials and Structural Systems.

Publications

- 2019 Ringor, C.L., Calamba, K.M., Pascua, C.S., & Miyazawa, K., Chapter 6: Morphological Controls of Fullerene Nanowhiskers and Nanotubes. In Book: Fullerene Nanowhiskers, 2nd Edition, Eds. Kun'ichi Miyazawa, Yuichi Ochiai, Masaru Tachibana, Tokushi Kizuka, Shigeo Nakamura, Pan Stanford Publishing Pte. Ltd., 2019:93-112.
- 2018 Villanueva, J.C.B., Ringor, C.L., Pascua, C.S., & Miyazawa, K., Size, structure, and conductivity of plant oil-derived carbon nanospheres synthesized by atmospheric ionization CVD. *Materials Chemistry and Physics*, 2018, 225:84-90.
- 2017 Ringor, C.L., Pascua, C.S., Villanueva, J.C.B., Garcia, A.K.H., Agulo, I.J.A., Matsushita, Y., & Miyazawa, K., Multiwalled Carbon Nanofibers and Nanocapsules Synthesized from Plant Oil via Atmospheric CVD Process. *Journal of Nanoscience and Nanotechnology*, 2017, 17(5):3543-3550.
- 2016 Ringor, C.L., & Siringan, F.P., Net Sediment Transport in Pampanga Bay, Northwestern Manila Bay Derived from Grain Size Trends, Bathymetric Change, and Landsat Data. *Philippine Agricultural Scientist*, 2016, 99(1):68-79.
- 2015 Calamba, K., Ringor, C., Pascua, C., & Miyazawa, K., Pleated Surface Morphology of C₆₀ Fullerene Nanowhiskers Incorporated by Polyaniline in N-Methyl-2-Pyrrolidone. *Fullerenes, Nanotubes and Carbon Nanostructures*, 2015, 23(8):709-714.
- 2009 Ringor, C.L., & Miyazawa, K., Fabrication of solution grown C₆₀ fullerene nanotubes with tunable diameter. *Journal of Nanoscience and Nanotechnology*, 2009, 9(11):6560-6564.
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- 2008 Miyazawa, K., Cha, S., Ringor, C., Okuda, J., Taniguchi, A., Watanabe, M., Tachibana, M., & Minato, J., Synthesis of fullerene nanotubes and microtubes for materials storage, delivery and recovery. *NANO: Brief Reports and Reviews*, 2008, 3(5):335-339.
- Ringor, C.L., & Miyazawa, K., High yield preparation of fullerene nanowhiskers and nanotubes by the solution route. *NANO: Brief Reports and Reviews*, 2008, 3(5):329-333.
- Ringor, C.L., & Miyazawa, K., Synthesis of C₆₀ nanotubes by liquid-liquid interfacial

- precipitation method: influence of solvent ratio, growth temperature, and light illumination. *Diamond and Related Materials*, 2008, 17(4-5):529-234.
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- 2007 Ringor, C., Miyazawa, K., & Awane, T., Synthesis of C₆₀ fullerene nanotubes by the liquid-liquid interfacial precipitation method in the System of C₆₀-pyridine and Isopropyl Alcohol. *Transactions of the Materials Research Society of Japan*, 2007, 32(4):1011-1014.
- Miyazawa, K., Saito, K., Ringor, C., & Kizuka, T., Ultrasonic pulverization of fullerene nanofibers. *Transactions of the Materials Research Society of Japan*, 2007, 32(4):1007-1011.
- Miyazawa, K., Ringor, C., Nakamura, K., Tachibana, M., Mashino, T., & Nakamura, S., TEM and Raman Spectroscopy Analyses of Fullerene Nanowhiskers and Nanotubes. *NSTI - Nanotech*, 2007, 2:124-127.
- 2005 Tsutsui, M., Kuroda, M., Yokohama, S., Pascua, C., Ringor, C., & Sato, T., Reactive surface area in smectite dissolution under highly alkaline condition. *Clays in Natural and Engineered Barriers for Radioactive Waste Confinement; Tours (France), International Nuclear Information System*, 2005, 37(8):278-279.
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- 2004 Ringor, C.L., Omura, A., & Maeda, Y., Last Interglacial Sea Level Changes Deduced from Coral Reef Terraces in Southwest Bohol, Central Philippines. *The Quaternary Research*, 2004, 43(6):401-416.
- 1999 Siringan, F.P., & Ringor, C.L., Changes in water and shoreline positions and their implications to sediment dispersal and sedimentation rates in Manila Bay. *NAST 21st Annual Scientific Meeting, Manila Hotel, Manila, Philippines*, 1999:39-40.
- 1998 Siringan, F.P., & Ringor, C.L., Changes in Bathymetry and Their Implications to Sediment Dispersal and Sedimentation Rates in Manila Bay. *Science Diliman*, 1998, 10(2):12-26.
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- 1997 Siringan, F.P., & Ringor, C.L., Predominant Nearshore Sediment Dispersal Patterns in Manila Bay. *Science Diliman*, 1997, 9(1&2):29-40.
- Siringan, F.P., & Ringor, C.L., Predominant Nearshore Sediment Dispersal Patterns in Manila Bay. *Science Diliman*, 1997, 9:29-40.
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- Siringan, F.P., Queano, K.L., Francisco, E.M., & Ringor, C.L., Long-Term and Short-Term Shoreline Changes Along the Coast of Manila Bay. In: Casareo, F., & Casareo, M.N.R. (Eds.), *GEOCON '96 Proceedings, Geological Society of the Philippines*, 1997:95-103.

- 1996 Siringan, F.P., & Ringor, C.L., Changes in the Position of the Zambales Shoreline Before and After the 1991 Mt. Pinatubo Eruption: Controls of Shoreline Change. *Science Diliman*, 1996, 7&8:1-13.
- Siringan, F.P., & Ringor, C.L., Changes in the Position of the Zambales Shoreline Before and After the Mt. Pinatubo Eruption: Controls of Shoreline Change. *Science Diliman*, 1996, 7&8:1-13.
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Name Rachel C. Sotto

Sex Female

Organizational Affiliations

Associate Professor, Institute of Biological Sciences, College of Arts and Sciences, University of the Philippines Los Baños, College, Laguna, Philippines

Education

Doctor of Philosophy in Horticulture (Crop Physiology), University of the Philippines Los Baños, College, Laguna, Philippines 1996

Fields of Specialization

Seed Physiology

Botany

Plant Biodiversity Conservation

Horticulture

Association Membership

Member, Philippine Fruit Association

Member, Philippine Society for the Study of Nature

Papers Presented

2001 April 24-27 Pateña, L.F., Sotto, R.C., Altoveros, N.C., Bariring, A.L., Dioneda, M.A.A., & Barba, R.C. (2001 April 24-27). In vitro germination of freshly harvested and conserved indigenous orchid seeds, Asian Agriculture Congress, Manila, Philippines.

Publications

2018 Rabara, R.C., Ferrer, M.C., Jara-Rabara, J., & Sotto, R.C., Securing Diversity for Food Security: The Case of Conservation and Use of Rice Genetic Resources. *New Visions in Plant Science*, Özge Çelik, IntechOpen, 2018.

Sotto, R.C., Alupag (*Litchi chinensis*) subsp. philippinensis. In: Marciano, M.R., Fernando, E.S., Galang, A.P., Angara, G.M., Berroya, L.G., & Sarmiento, I.P. (Eds), *Philippine Native Trees 303: Up Close and Personal*, 2018.

2017 Valdoz, J.C., Magdalita, P.M., Absulio, W.L., & Sotto, R.C., Morpho-anatomical Characters and Ethylene Production in *Hibiscus rosa-sinensis* L. in relation to Two-Day Floral Retention. *Philippine Agricultural Scientist*, 2017, 100(2):168-177.

2016 Hari, S., Winarso, S., Macandog, D., Sotto, R., Baguinon, N., & Buot, I., Jr., Ecological Value of Soil Organic Matter (SOM) at Tropical Evergreen Aglaia-Streblus Forest of Meru Betiri National Park, East Java, Indonesia. *Journal of Tropical Soils*, 2016, 21(3):129-140.

Sulistiowati, H., Winarso, S., Macandong, D., Sotto, R., Baguinon, N., & Buot, I., Jr., Ecological Value of Soil Organic Matter at Tropical Evergreen Aglaia-Streblus Forest of Meru Betiri National Park, East Java, Indonesia. *Journal of Tropical Soils*, 2016, 21(3):129-140.

2015 Magdalita, P.M., Sotto, R.C., & Coronel, R.E., "Lovi-lovi" (*Flacourtia inermis* Roxb.), a promising fruit introduced in the Philippines. *Philippine Journal of Crop Science*, 2015, 40(2):85-90.

2013 Magdalita, P.M., De Leon, M.J.C., Sotto, R.C., & Ponce, K.S., Occurrence of Pigmented Flowers and Variation in Other Morphological Traits of Irradiated and Unirradiated

- Sampaguita (*Jasminum sambac* L. Sol.). *Journal of Nature Studies*, 2013, 12(2):45-53.
- 2012 Coronel, R.E., Sotto, R.C., & Magdalita, P.M., Araza (*Eugenia stipitata* McVaugh, Myrtaceae): A New Fruit Crop in the Philippines. *Philippine Journal of Crop Science*, 2012, 37(1):57-60.
- 2009 Coronel, R.E., Sotto, R.C., & Rabara, R.C., The Dwarf and Round-Fruited Miracle Fruit [*Synsepalum dulcificum* (Schum. & Thonne) Daniell]. *Philippine Journal of Crop Science*, 2009, 34(3):108-111.
- 2007 Swangpol, S., Volkaert, H., Sotto, R.C., & Seelanan, T., Utility of Selected Non-coding Chloroplast DNA Sequences for Lineage Assessment of *Musa* Interspecific Hybrids. *Journal of Biochemistry and Molecular Biology*, 2007, 40(4):577-587.
- 2003 Coronel, R.E., Sotto, R.C., & Rabara, R.C., 'Davao Prolific' soursop (*Annona muricata* L.). *Philippine Agricultural Scientist*, 2003, 86(2):204-206.
Sotto, R.C., Rabara, R.C., & Banasihan, I.G., Binendito, Mundo and Turangkog: three lesser known but promising cooking banana varieties of the Philippines. *Philippine Journal of Crop Science*, 2003, 28(supp1):59.
Coronel, R.E., Sotto, R.C., Rabara, R.C., & Banasihan, I.G., Morphological characterization of five *Mangifera* species in the Philippines. *Philippine Journal of Crop Science*, 2003, 28(supp1).
- 2002 Coronel, R.E., Sotto, R.C., De La Cruz, F.S., Jr., & Banasihan, I.G., Tree and fruit characteristics of 'RCF purple' and 'Parker' avocado (*Persea americana* Mill.). *Philippine Agricultural Scientist*, 2002, 85(4):402-405.
Sotto, R.C., Coronel, R.E., De La Cruz, F.S., Jr., & Banasihan, I.G., 'RCF Gold' abiu (*Pouteria caimito* [Ruiz and Pavon] Radlk.) and 'RCF Morado' starapple (*Chrysophyllum cainito* L.) developed by direct utilization of germplasm resources. *Philippine Agricultural Scientist*, 2002, 65(1):94-97.
Sotto, R.C., Lychee Production in the Philippines. In: *Lychee Production in the Asia-Pacific Region*, Bangkok, Thailand, FAO/RAP Publication 2002/04, 2002.
- 2001 Coronel, R.E., De La Cruz, F.S., Jr., Sotto, R., Rabara, R., & Banasihan, I.G., Grafting of male shoots on female trees improves fruit production in *Gnetum gnemon* L.. *Philippine Agricultural Scientist*, 2001, 84(2):155-156.
Coronel, R.E., Sotto, R.C., De La Cruz, F.S., Jr., Rabara, R.C., & Banasihan, I.G., Fruit characterization and propagation of yellow-fruited Brazil cherry (*Eugenia dombeyi* (Spreng.) Skeels, Myrtaceae). *Philippine Agricultural Scientist*, 2001, 84(1):114-115.
Pateña, L.F., Sotto, R.C., Altoveros, N.C., Bariring, A.L., Dioneda, M.A.A., & Barba, R.C., In vitro germination of freshly harvested and conserved indigenous orchid seeds. *Transactions of the National Academy of Science and Technology Philippines*, 2001, 23.
- 2000 Sotto, R.C., & Rabara, R.C., Morphological diversity of *Musa balbisiana* Colla in the Philippines. *Infomusa*, 2000, 9(2):28-30.
- 1999 Sotto, R.C., Altoveros, N.C., & Dioneda, M.A.R., Seed morphology of ten selected species of *Orchidaceae* indigenous to the Philippines. *Philippine Journal of Crop Science*, 1999, 24.
Sotto, R.C., Rabara, R.C., Banasihan, I.G., & Loquias, V., Germplasm collection of *Musa balbisiana* Colla in the Philippines. *Philippine Journal of Crop Science*, 1999, 24.
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Sotto, R.C., & Coronel, R.E., Conservation, utilization and propagation of indigenous nuts: Bago (*Gnetumgnemon*); barobo (*Diplodiscus paniculatus*), galo (*Anacolosa luzoniensis*), Kubili (*Cubilia cubili*), and pili (*Canarium ovatum*). Philippine Journal of Crop Science, 1994, 19.

Name Hero Laurenciano Tolosa

Sex Male

Organizational Affiliations

Business Intelligence Officer: Senior Assistant Manager to Senior Manager, RCBC Bankard Services Corporation, Philippines

Education

Doctor in Educational Management, Polytechnic University of the Philippines, Philippines 2019

Master in Applied Statistics, Polytechnic University of the Philippines, Philippines 2014

Bachelor in Applied Statistics, Polytechnic University of the Philippines, Philippines 2010

Fields of Specialization

Probability Theory

Statistics

Applied Mathematics

Data Analysis

Statistical Modeling

R Programming

R Statistical Package

Linear Regression

Time Series Analysis

Multivariate Statistics

Statistical Inference

Stochastic Modeling

Applied Probability

Computational Statistics

Markov Chains

Markov Processes

Normal Distribution

Poisson Distribution

Variance

Model Building

Periodicity

Binomial Distribution

Employment

Business Intelligence Officer: Senior Assistant Manager to Senior Manager, RCBC Bankard Services Corporation, 2019 January-Present

Digital Data Engineering Specialist / Data Science Specialist - Team Lead, Accenture, 2018 July-2019 January

Data Scientist, SHORE Solutions Inc., 2018 April-2018 May

Senior Analytics Consultant, Info Alchemy Corporation, 2017 October-2018 March

CPRM Consultants Inc., Data Manager, 2016 October-2017 March

Statistician / Data Manager, Endline Study for the Joint Programme on maternal and Neonatal Health, CPRM Consultants Inc., 2016 May-2016 June

Regional Associate Statistician / Statistician II, National Household Targeting System for Poverty Reduction - DSWD NCR, 2012 October-2014 November

Data Analyst, I-View Market Research Group, 2012 June-2012 October

Instructor I, Polytechnic University of the Philippines, 2012 June-2018 June

Biostatistician II, Dev-Touch Information System Inc./Medicus Research LLC, 2012 January-2012 June

Association Membership

Associate Member, National Research Council of the Philippines

Publications

- 2016 Tolosa, H.L., Survival Modelling and its Marginal Effect to Patients Having Cardiovascular Diseases. *International Journal of Applied Business and Economics Research*, 2016, 14(5):3093-3112.
- Tolosa, H., Stamaria, J.P.B., Bernardino, R., Criseno, R., & Rolan, L., Consumer Debt and the Different Predictors that Affects its Growth: A Normal Equation for Multiple Regression Analysis. *International Journal of Applied Business and Economics Research*, 2016, 14(5):3113-3135.
- 2015 Tolosa, H.L., Camano, M.S., De Lumen, C.A., Charmaine, J., Edles, T., & Marieve, E., Forecasting the Philippine Stock Exchange Index using Time Series Analysis Box-Jenkins. *European Academic Research*, 2015, 3(3):3097-3113.
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Name Nerissa K. Torreta

Sex Female

Organizational Affiliations

Division Head, Plant Biology Division; and Associate Professor 1, Plant Biology Division, University of the Philippines Los Baños, College, Laguna, 4031 Philippines

Education

Master of Science in Botany, University of the Philippines Los Baños, Laguna, Philippines 1987

Fields of Specialization

Botany

Phytoplankton Dynamics

Phycology

Plant Morpho-Anatomy

Economic Botany

Papers Presented

2014 April 3-5 Guevara, C.A., Bautista, N.S., & Torreta, N.K. (2014 April 3-5). Science Skills and Scientific Attitude Development in Internet- Supported Collaborative Life Science Courses, 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines.

Publications

2018 Martinez-Goss, M.R., Arguelles, E.D.L.R., & Nacorda, J.O.O., Some *Pediastrum* species (*Chlorophyceae*) from Laguna de Bay (Philippines) and its vicinities. *The Philippine Scientist*, 2018, 53:31-51.

2014 Martinez-Goss, M.R., Torreta, N.K., Nacorda, J.O.O., & Mendoza, C.D.S., The Algal Culture Collection at the University of the Philippines Los Baños-Museum of Natural History. *The Philippine Scientist*, 2014, 51:66-103.

Benzon, H.R.L., Mendoza, D.M., Cosico, W.C., & Torreta, N.K., The Effect of Endophytic Bacterial Inoculation on Banana, *Musa acuminata* cv. Lakatan. *Philippine Journal of Crop Science*, 2014, 39(2):12-21.

Guevara, C.A., Bautista, N.S., & Torreta, N.K., Science Skills and Scientific Attitude Development in Internet- Supported Collaborative Life Science Courses. 49th BIOTA Annual National Convention and Scientific Sessions, University of Baguio, Philippines, 2014.

2013 Santiago, D.E.O., Demafelis, R.B., Martinez-Goss, M., Nacorda, J.O.O., Torreta, N.K., Bataller, B.G., Redondo, M.J.H., Jao, N.L., & Dizon, L.S.H., Design, Fabrication and Performance Evaluation of a Photobioreactor for the Cultivation of *Chlorella vulgaris* (Beijerinck). *Philippine Journal of Crop Science*, 2013, 38(2):21-29.

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- 1986 Cardenas, L.B., Tan, B.C., & Torreta, N.K., Some over-looked taxonomic characters of the root in *Azolla*. *Philippine Agriculturist*, 1986, 69(1):43-51.

Name Edgar A. Vallar

Sex Male

Organizational Affiliations

Full Professor, Physics Department, College of Science, De La Salle University, Manila, Philippines

Education

Master of Science in Physics, University of the Philippines, Diliman, Quezon City 1995

Doctor of Philosophy in Physics, University of the Philippines, Diliman, Quezon City 1998

Fields of Specialization

Atmospheric Physics

Remote Sensing

Environment

Computing

Satellite

Particulate Matter

Clouds

Papers Presented

2017 June 20 - 22 Vallar, E., Resurreccion, N.G., Rempillo, O., Janairo, J.R., Tamayo, E.G., Ong, P.M., & Galvez, M.C. (2017 June 20 - 22). Aerosol and Cloud Characterization at De La Salle University, Manila, Philippines, De La Salle University Research Congress.

2016 March 7-9 Carnicer, K.M.R., Vallar, E.A., & Galvez, M.C.D. (2016 March 7-9). A Preliminary Study on the Precipitable Water Vapor (PWV) from the Davao Radiosonde Station for 2014, DLSU Research Congress 2016, De La Salle University, Manila, Philippines.

2014 November 12-16 Chinnaswamy, A., Naguib, R.N.G., Nguyen, Q.T., Trodd, N., Marshall, I., Yaacob, N., Santos, G.N.C., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., & Ton, T.N. (2014 November 12-16). Spatio-Temporal Analysis of the Effects of Air Pollution Hazards on Cardiovascular Health Outcomes in Bangalore, India, Palawan, Philippines.

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2014 Nguyen, Q.T., Balisane, H., Naguib, R.N.G., Santos, G.N., Vallar, E.A., Galvez, M.C.,

- November 12-16 Shaker, M.H., & Ton, T.N. (2014 November 12-16). A GIS - Integrated Wireless Sensors Network Tool for Water Risk Monitoring - Case of Khanh Hoa Water Supply and Sewerage Company, Vietnam, 7th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Hotel Centro, Puerto Prinsesa, Palawan, Philippines.
- 2014
October 27-31 Castilla, R., Plando, F., Vallar, E., Galvez, M., & Morris, V. (2014 October 27-31). Characterization of columnar water vapor measurements and its comparison with model estimates and surface meteorological parameters Over Manila, Philippines (14.567° N, 120.980° E), 35th Asian Conference on Remote Sensing 2014 (ACRS 2014) Nay Pyi Taw, Myanmar.
- 2013
October 20-24 Francisca, D., Vallar, E., Macalalad, E., Galvez, M.C., & Tsai, L.-C. (2013 October 20-24). Matlab-based VHF and UHF amplitude scintillation characterization using the new low-latitude ionospheric tomography network (LITN), 34th Asian Conference on Remote Sensing 2013, Bali, Indonesia.
- 2013
October 20-24 Macatangay, R.C., Moreno, F., Galvez, M.C.D., Vallar, E., Sonkaew, T., Morris, V., Cruz, M.T., & Hendawitharana, G. (2013 October 20-24). Hand-held total ozone column concentration measurements in the Philippines, 34th Asian Conference on Remote Sensing 2013, Bali, Indonesia.
- 2012
November 26-30 Galvez, M.C.D., Macalalad, E.P., Peralta, T.A., Rosete, J.N., & Vallar, E. (2012 November 26-30). Simultaneous scanning lidar measurement and air sampling using a personal cascade impactor for traffic aerosol characterization, 33rd Asian Conference on Remote Sensing, Pattaya, Thailand.
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- 2011
October 3-7 Vallar, E., Macalalad, E.P., Lajara, M., & Galvez, M.C.D (2011 October 3-7). Atmospheric turbidity measurements using a 355NM-532NM LIDAR and a sunphotometer in Manila, Philippines, 32nd Asian Conference on Remote Sensing, Taipei, Taiwan.
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October 3-7 Galvez, M.C.D., Macalalad, E.P., & Vallar, E.A. (2011 October 3-7). Retrieval of boundary layer and cloud base heights in Manila from a two-wavelength lidar measurement, 32nd Asian Conference on Remote Sensing 2011, Taipei, Taiwan.
- 2004 July 12-16 Del Guasta, M., Vallar, E., Riviere, O., Castagnoli, F., Venturi, V., & Morandi, M. (2004 July 12-16). Transforming a Depolarization LIDAR Into a Polarimetric LIDAR, 22nd International Laser Radar Conference (ILRC 2004), Matera, Italy.

Publications

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- Oliveros, J.M., Vallar, E.A., & Galvez, M.C.D., Investigating the Effect of Urbanization on Weather Using the Weather Research and Forecasting (WRF) Model: A Case of Metro Manila, Philippines. *Environments*, 2019, 6(2):10.
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- 2017 Vergara, R.L., Macalalad, E.P., Bagtasa, G., Vallar, E.A., Galvez, M.C.D., & Francisco, R.V., Correlation of Aerosol Optical Properties with Surface Meteorological Parameters Over Manila. *Advanced Science Letters*, 2017, 23(2):1448-1451.
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- 2016 Vallar, E.A., Castilla, R.M., Santillices, J.S., Eneria, R.B.A., & Galvez, M.C.D., American Geophysical Union, Fall Meeting 2016, abstract #A51J-0217. Variability of 550 nm MODIS-retrieved Aerosol Optical Depth over Urban and Rural Areas in the Philippines from 2005 to 2015, 2016.
- Galvez, M.C.D., Castilla, R.M., Catenza, J.L.U., Soronio, H., & Vallar, E.A., Spatio-Temporal Analysis of MODIS Retrieved Precipitable Water Vapor over Urban and Rural Areas in the Philippines. American Geophysical Union, Fall Meeting 2016, abstract #H51I-1640, 2016.
- Carnicer, K.M.R., Vallar, E.A., & Galvez, M.C.D., A Preliminary Study on the Precipitable Water Vapor (PWV) from the Davao Radiosonde Station for 2014. *Proceedings of the DLSU Research Congress, Volume 4*, 2016.
- 2015 Chinnaswamy, A.K., Balisane, H., Nguyen, Q.T., Naguib, R.N.G., Trodd, N., Marshall, I.M., Yaacob, N., Santos, G.N., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., Wickramasinghe, N., & Ton, T.N., Data quality issues in the GIS modelling of air pollution and cardiovascular mortality in Bangalore. *International Journal of Information Quality*, 2015, 4(1):64-81.
- Llorente, C.A., Ongsyng, B.S., Casas, P.G.P., Chan, M.L.C., San Pedro, G.M., Vallar, E.A., & Galvez, M.C.D., A microcontroller based LED sunphotometer with RF data acquisition. *ARPJ Journal of Engineering and Applied Sciences*, 2015, 10(22):10591-10596.
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- 2014 Chinnaswamy, A., Naguib, R.N.G., Nguyen, Q.T., Trodd, N., Marshall, I., Yaacob, N.,

Santos, G.N.C., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., & Ton, T.N., Spatio-Temporal Analysis of the Effects of Air Pollution Hazards on Cardiovascular Health Outcomes in Bangalore, India. Proceedings of the IEEE International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Philippines, 2014.

Chinnaswamy, A.K., Naguib, R.N.G., Nguyen, Q.T., Olayanju, L.O., Trodd, N., Marshall, I.M., Yaacob, N., Santos, G.N., Vallar, E.A., Galvez, M.C., Shaker, M.H., & Ton, T.N., Spatial Interpolation of Air Pollutants in Bangalore: 2010-2013. Proceedings of the IEEE International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Philippines, 2014.

Chinnaswamy, A., Naguib, R.N.G., Nguyen, Q.T., Trodd, N., Marshall, I., Yaacob, N., Santos, G.N.C., Vallar, E.A., Galvez, M.C.D., Shaker, M.H., & Ton, T.N., Air Pollution in Bangalore, India: A Six-Year Trend and Health Implication Analysis. Proceedings of the IEEE International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Philippines, 2014.

Nguyen, Q.T., Balisane, H., Naguib, R.N.G., Santos, G.N., Vallar, E.A., Galvez, M.C., Shaker, M.H., & Ton, T.N., A GIS - Integrated Wireless Sensors Network Tool for Water Risk Monitoring - Case of Khanh Hoa Water Supply and Sewerage Company, Vietnam. Proceedings of the IEEE International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management, Philippines, 2014.

Castilla, R., Plando, F., Vallar, E., Galvez, M., & Morris, V., Characterization of columnar water vapor measurements and its comparison with model estimates and surface meteorological parameters Over Manila, Philippines (14.567° N, 120.980° E). Proceedings of the 35th Asian Conference on Remote Sensing 2014, (ACRS 2014), Nay Pyi Taw, Myanmar, 2014, 1:1230-1235.

2013 Francisca, D., Vallar, E., Macalalad, E., Galvez, M.C., & Tsai, L.-C., Matlab-based VHF and UHF amplitude scintillation characterization using the new low-latitude ionospheric tomography network (LITN). Proceedings of the 34th Asian Conference on Remote Sensing, Bali, Indonesia, 2013:4466-4473.

Somekawa, T., Galvez, M.C.D., Fujita, M., Vallar, E.A., & Yamanaka, C., Noise Reduction in White Light Lidar Signal Using a One-Dim and Two-Dim Daubechies Wavelet Shrinkage Method. *Advances in Remote Sensing*, 2013, 2(1):10-15.

Vergara, R.L., Macalalad, E.P., Bagtasa, G., Vallar, E.A., & Galvez, M.C.D., Diurnal Characteristics of Angstrom Turbidity Parameters Over Manila, Philippines. *IOSR Journal of Environmental Science, Toxicology And Food Technology*, 2013, 5(2):59-64.

Macatangay, R.C., Moreno, F., Galvez, M.C.D, Vallar, E., Sonkaew, T., Morris, V., Cruz, M., & Hendawitharana, G., Hand-held total ozone column concentration measurements in the Philippines. Proceedings of the 34th Asian Conference on Remote Sensing 2013 (ACRS 2013), Bali, Indonesia, 2013, 2:1738-1743.

Galvez, M.C.D., Jayo, H.C., Vallar, E.A., & Morris, V.R., Elemental Composition of Fine Particulate Matters from the Exhaust Emission of Jeepneys Plying the Route of Taft Avenue, Manila, Philippines. *International Journal of Modern Engineering Research (IJMER)*, 2013, 3(1):406-410.

2012 Galvez, M.C., Macalalad, E.P., Peralta, T.A., Rosete, J.N., & Vallar, E.A., Simultaneous scanning lidar measurement and air sampling using a personal cascade impactor for traffic aerosol characterization. Proceedings of the 33rd Asian Conference on Remote Sensing 2012, Pattaya, Thailand, 2012, 3:2496-2501.

Somekawa, T., Yamanaka, C., Fujita, M., Vallar, E.A., & Galvez, M.C., Wavelength Dependence of Cloud Depolarization Ratio Due to Multiple Scattering Using A Two-Field-of-View White Light Lidar System. *International Journal of Scientific and*

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- 2011 Vallar, E., Macalalad, E., Lajara, M., & Galvez, M.C., Atmospheric turbidity measurements using a 355NM-532NM LIDAR and a sunphotometer in Manila, Philippines. Proceedings of the 32nd Asian Conference on Remote Sensing 2011, (ACRS 2011), Taipei, Taiwan, 2011, 4:2360-2362.
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- 2004 Galvez, M.C.D., Vallar, E.A., Bangsal, E.B., Macalalad, E.P., & Roman, T.A., Multi-Angle LIDAR Sensing of Traffic Aerosol in Manila. 22nd Internation Laser Radar Conference (ILRC 2004), Proceedings of the Conference held 12-16 July, 2004 in Matera, Italy. Edited by Gelsomina Pappalardo and Aldo Amodeo. ESA SP-561. Paris: European Space Agency, 2004, 2004:545-548.
- Vallar, E., Galvez, M.C.D., Uy, J.C.Q., Macalalad, E.P., Roman, T., & Bangsal, E.B., Multi-Instrument Particulate Matter Characterization during the 2004 New Year Celebration in Manila (14°33.978' n; 120°59.523' E). 22nd Internation Laser Radar Conference (ILRC 2004), Proceedings of the Conference held 12-16 July, 2004 in Matera, Italy. Edited by Gelsomina Pappalardo and Aldo Amodeo. ESA SP-561. Paris: European Space Agency, 2004, 2004:549-552.
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Name Ross D. Vasquez

Sex Male

Organizational Affiliations

Associate Professor, University of Santo Tomas, Manila

Education

Doctor of Philosophy in Biological and Biomedical Sciences (*cum laude*), University of Santo Tomas, Manila, Philippines 2012

Master of Science, University of Santo Tomas, Manila, Philippines 2005

Bachelor of Science in Botany, University of Santo Tomas, Manila, Philippines 1996

Fields of Specialization

Pharmaceutical Botany

Immunology

Biological Sciences

Health

Association Membership

Member, National Research Council of the Philippines

Researches

Ongoing

Sargassum siliquosum as potential source of bioactive compounds for pharmaceutical and nutraceutical preparations

Evaluation of aqueous extracts from *Codium* species for cytotoxic and Matrix metalloproteinase-1 (MMP-1) inhibitory potential

Papers Presented

2018 August Vasquez, R.D., Constantino, F.R., De Alva, M.A., Decena, M.P.D., Enriquez, F.M.S., Pillejera, R.V., Pinpin, M.R.F., & Cadiang, R.K.G. (2018 August). Neuroprotective Effects of Aqueous Extract from *Sargassum siliquosum* J.G. Agardh on Scopolamine-Induced Dementia in Rats, 7th National Convention of Philippine Psychological Society Inc..

Publications

2019 Vasquez, R.D., Callanta, R.B., Apostol, J.G., De Asis Fernandez, J.C., Javier, D.P., & Lirio, S., Cytotoxic and Protective Effects of Sulfated Polysaccharide from *Codium edule* P. C. Silva against UVB-Induced Matrix Metalloproteinase-1 (MMP-1) Production and Skin Damage. *International Journal of Pharmacognosy and Phytochemical Research*, 2019, 11(2):60-69.

2018 Calangian, M.T.F., Idefonzo, A.B., Manzano, V.K.S., Agcaoili, G.J.T., Ganado, R.J.J., Yago, A.C.C., Magdaluyo, E.R., Jr., Vasquez, R.D., & Franco, F.C., Jr., Facile Synthesis of Biologically Derived Fluorescent Carbon Nanoparticles (Fcnp) from an Abundant Marine Alga and its Biological Activities. *Oriental Journal of Chemistry*, 2018, 34(2):1-9.

Vasquez, R.D., & Lirio, S., Content Analysis, Cytotoxic, and Anti-metastasis Potential of Bioactive Polysaccharides from Green Alga *Codium intricatum* Okamura. *Current Bioactive Compounds*, 2018, 14(1):<https://doi.org/10.2174/157340721466618101912>.

- 2017 Flores, J.A.S., Calaguas, M.J., Fineza, A.M.B., Vasquez, R.D., & Flores, A.R.F., Matrix Metalloproteinase-1 Levels as a Predictive Marker of Oral Mucositis Severity Among Head and Neck Carcinoma Patients Undergoing Radiation Therapy. *International Journal of Radiation Oncology*, 2017, 99(2):E590-E591.
- 2016 Vasquez, R.D., Apostol, J.G., de Leon, J.D., Mariano, J.D., Mirhan, C.M.C., Pangan, S.S., Reyes, A.G.M., & Zamora, E.T., Polysaccharide-mediated green synthesis of silver nanoparticles from *Sargassum siliquosum* J.G. Agardh: Assessment of toxicity and hepatoprotective activity. *OpenNano*, 2016, 1:16-24.
- 2014 Vasquez, R.D., Garcia-Meim, R.SP., ^ Ramos, J.D.A., Polysaccharide Extracts from *Sargassum siliquosum* J.G. Agardh Modulates Production of Pro-Inflammatory Cytokines in LPS-Induced PBMC and Delays Coagulation Time in-vitro . *Journal of Harmonized Research in Pharmacy*, 2014, 3(3):101-112.
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- 2012 Vasquez, R.D., Ramos, J.D.A., & Bernal, S.D., Chemopreventive properties of sulfated polysaccharide extracts from *Sargassum siliquosum* J.G. Agardh (Sargassaceae). *International Journal of Pharma and Bio Sciences*, 2012, 3(3):333-345.
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- 2011 Vasquez, R., Apostol, J., Ramos, J.D., Morales, M., Padiernos, K., Pangilinan, C., Payuran, C., & Princesa, J., Hepatoprotective effects of aqueous sulfated polysaccharide extract from *Sargassum siliquosum* J.G. Agardh on Paracetamol-induced oxidative liver toxicity and antioxidant properties. *International Journal of Pharmaceutical Frontier Research*, 2011, 2(1):15-27.

Name Michael C. Velarde

Sex Male

Education

Doctor of Philosophy in Physiology and Biophysics, University of Arkansas for Medical Sciences, Little Rock, AR, USA 2007

Bachelor of Science in Biochemistry, University of the Philippines - Manila, Padre Faura, Ermita, Manila, Philippines 2001

Fields of Specialization

Physiology

Biophysics

Reproductive Endocrinology

Biochemistry

Employment

Postdoctoral Fellow, Campisi Laboratory, Buck Institute for Research Aging, Novato, CA, 2009-Present

Postdoctoral Fellow, Department of OB/GYN and Reproductive Sciences, University of California, San Francisco, CA, 2007-2009

Laboratory Instructor II, Department of Physical Sciences and Mathematics, University of the Philippines, Manila, 2001-2002

Association Membership

Member, Philippine-American Academy of Science and Engineering (PAASE)

Member, American Aging Association

Member, International Society for Stem Cell Research

Member, The Endocrine Society

Member, SSR

Honors / Awards

Balik Scientist Program Awardee, Department of Science and Technology, hosted by the Institute of Biology, University of the Philippines, Diliman, Quezon City 2015 February 25 - March 26

Papers Presented

2018 April 14-18 Alimirah, F., Valdovinos, A., Chang, E., Alptekin, S., Pulido, T., Jones, E., Limbad, C., Velarde, M., Demaria, M., Davalos, A., & Campisi, J. (2018 April 14-18). Abstract 466: Cellular senescence drives skin carcinogenesis, AACR Annual Meeting, Chicago, IL, USA.

Publications

2019 Ragasa, L.R.P., Dinglasan, J.L.N., Felipe, I.R.E., Basiao, Z.U., & Velarde, M.C., Exposure to *Aeromonas hydrophila* induces inflammation and increases expression of the gene encoding for a putative dual CTLD-containing lectin in milkfish liver. Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology, 2019, 230:37-47.

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- 2018 Alimirah, F., Valdovinos, A., Chang, E., Alptekin, S., Pulido, T., Jones, E., Limbad, C., Velarde, M., Demaria, M., Davalos, A., & Campisi, J., Abstract 466: Cellular senescence drives skin carcinogenesis. *Cancer Research*, 2018, 78(13):466.
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- 2017 Velarde, M.C., Epidermal Barrier Protects Against Age-Associated Systemic Inflammation. *Journal of Investigative Dermatology*, 2017, 137(6):1206-1208.
Marquez, C.M.D., Ibane, J.A., Velarde, M.C., The female reproduction and senescence nexus. *American Journal of Reproductive Immunology*, 2017, 77(5):e12646.
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Velarde, M.C., & Demaria, M., Targeting Senescent Cells: Possible Implications for Delaying Skin Aging: A Mini-Review. *Gerontology*, 2016, 62(5):513-518.
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- 2015 Velarde, M.C., Demaria, M., Melov, S., & Campisi, J., Pleiotropic age-dependent effects of mitochondrial dysfunction on epidermal stem cells. *Proceedings of the National Academy of Sciences of the United States of America*, 2015, 112(33):10407-10412.
Heard, M.E., Velarde, M.C., Giudice, L.C., Simmen, F.A., & Simmen, R.C., Krüppel-Like Factor 13 Deficiency in Uterine Endometrial Cells Contributes to Defective Steroid Hormone Receptor Signaling but Not Lesion Establishment in a Mouse Model of Endometriosis. *Biology of Reproduction*, 2015, 92(6):140.
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- Dave, B., Eason, R.R., Till, S.R., Geng, Y., Velarde, M.C., Badger, T.M., & Simmen, R.C.M., The tumor suppressor PTEN mediates the pro-apoptotic activity of dietary genistein on mammary epithelial cells: implications for mammary cancer protection. *Cancer Research*, 2005, 46(9):627.
- 2004 Eason, R., Velarde, M., Chatman, L., Till, R., Ferguson, M., Badger, T., & Simmen, R., Dietary exposure to soy and whey-based proteins alters rat mammary gland gene expression during development [abstract]. *The FASEB Journal*, 2004, 18(4):356.10.

Name Lilian Pagaduan Villamor

Sex Female

Organizational Affiliations

Senior Science Research Specialist, and Head, Cryobank Unit, Philippine Carabao Center, National Headquarters and Gene Pool, Science City of Muñoz, Nueva Ecija, Philippines

Education

Master of Science in Marine Science (Marine Biotechnology), University of the Philippines, Diliman, Quezon City, Philippines 2013

Bachelor of Science in Biology (Pre-professional), Brigham Young University - Hawaii, Laie, HI, USA 2002

Fields of Specialization

Marine Science

Marine Biotechnology

Animal Genetic Diversity

Phylogenetic and DNA Barcoding

Employment

Senior Science Research Specialist, Philippine Carabao Center, 2014-Present

Publications

- 2018 Paraguas, A.M., Cailipan, T.P.C., Flores, E.B., & Villamor, L.P., Morphology and Phylogeny of Swamp Buffaloes (*Bubalus bubalis*) in Calayan Island, Cagayan. Philippine Journal of Veterinary and Animal Science, 2018, 44(1):59-67.
- 2011 Delfin, F., Salvador, J.M., Calacal, G.C., Perdigon, H.B., Tabbada, K.A., Villamor, L.P., Halos, S.C., Gunnarsdóttir, E., Myles, S., Hughes, D.A., Xu, S., Jin, L., Lao, O., Kayser, M., Hurles, M.E., Stoneking, M., & De Ungria, M.C.A., The Y-chromosome landscape of the Philippines: Extensive heterogeneity and varying genetic affinities of Negrito and non-Negrito groups. European Journal of Human Genetics, 2011, 19(2):224-230.
- 2009 Abdulla, M.A., Ahmed, I., Assawamakin, A., Bhak, J., Brahmachari, S.K., Calacal, G.C., Chaurasia, A., Chen, C.-H., Chen, J., Chen, Y.-T., Chu, J., Cutiongco-de La Paz, E.M.C., De Ungria, M.C.A., Delfin, F.C., Edo, J., Fuchareon, S., Ghang, H., Gojobori, T., Han, J., Ho, S.-F., Hoh, B.P., Huang, W., Inoko, H., Jha, P., Jinam, T.A., Jin, L., Jung, J., Kangwanpong, D., Kampuansai, J., Kennedy, G.C., Khurana, P., Kim, H.-L., Kim, K., Kim, S., Kim, W.-Y., Kimm, K., Kimura, R., Koike, T., Kulawonganunchai, S., Kumar, V., Lai, P.S., Lee, J.-Y., Lee, S., Liu, E.T., Majumder, P.P., Mandapati, K.K., Marzuki, S., Mitchell, W., Mukerji, M., Naritomi, K., Ngamphiw, C., Niikawa, N., Nishida, N., Oh, B., Oh, S., Ohashi, J., Oka, A., Ong, R., Padilla, C.D., Palittapongarnpim, P., Perdigon, H.B., Phipps, M.E., Png, E., Sakaki, Y., Salvador, J.M., Sandraling, Y., Scaria, V., Seielstad, M., Sidek, M.R., Sinha, A., Srikummool, M., Sudoyo, H., Sugano, S., Suryadi, H., Suzuki, Y., Tabbada, K.A., Tan, A., Tokunaga, K., Tongshima, S., Villamor, L.P., Wang, E., Wang, Y., Wang, H., Wu, J.-Y., Xiao, H., Xu, S., Yang, J.O., Shugart, Y.Y., Yoo, H.-S., Yuan, W., Zhao, G., & Zilfalil, B.A., Mapping human genetic diversity in Asia. Science, 2009, 326(5959):1541-1545.
- 2008 De Ungria, M.C.A., Calacal, G.C., Delfin, F.C., Tabbada, K.A., Salvador, J.M., Sagum, M.S., Dalet, M.R.M., Franco, S.A.E.L., Maiquilla, S.M.B., Perdigon, H.B., Villamor, L.P., & Halos, S.C., Overview of forensic services by the UP-NSRI DNA laboratory: a

4-year report. *Acta Medica Philippina*, 2008, 42(2):34-38.

2007 Salvador, J.M., Calacal, G.C., Villamor, L.P., & De Ungria, M.C.A., Allele frequencies for two pentanucleotide STR loci Penta D and Penta E in a Philippine population. *Legal Medicine*, 2007, 9(5):282-283.

Name Casiana Blanca Jucar Villarino

Sex Female

Organizational Affiliations

Associate Professor, Department of Food Science and Nutrition, College of Home Economics, University of the Philippines, Diliman, Quezon City

Education

Doctor of Philosophy (PhD), Public Health under Food Science, Curtin University of Technology, Bentley, Western Australia 2014

Master of Statistics, University of the Philippines, 2017

Fields of Specialization

Food Science

Sensory Evaluation

Food Processing

Employment

Associate Professor, University of the Philippines, 2004 May-Present

Publications

- 2017 Johnson, S., Clements, J., Villarino, C., & Coorey, R., Lupins: Their Unique Nutritional and Health-Promoting Attributes. In: *Gluten-Free Ancient Grains: Cereals, Pseudocereals, and Legumes: Sustainable, Nutritious, and Health-Promoting Foods for the 21st Century*, 2017:179-221.
- 2015 Villarino, C.B.J., Jayasena, V., Coorey, R., Chakrabarti-Bell, S., & Johnson, S., Optimization of formulation and process of Australian sweet lupin (ASL)-wheat bread. *LWT - Food Science and Technology*, 2015, 61(2):359-367.
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- Villarino, C.B.J., Jayasena, V., Coorey, R., Chakrabarti-Bell, S., Foley, R., Fanning, K., & Johnson, S.K., The effects of lupin (*Lupinus angustifolius*) addition to wheat bread on its nutritional, phytochemical and bioactive composition and protein quality. *Food Research International*, 2015, 76:58-65.
- 2014 Villarino, C.B., Jayasena, V., Coorey, R., Chakrabarti-Bell, S., & Johnson, S., The effects of bread-making process factors on Australian sweet lupin-wheat bread quality characteristics. *International Journal of Food Science & Technology*, 2014, 49(11):2373-2381.
- Villarino, C.B.J., Maximising the nutritional and sensory quality of Lupin bread made using Western Australian bakers flour. (Unpublished PhD Thesis) School of Public Health, 2014.
- 2012 Borazon, E.Q., Villarino, B.J., Magbuhay, R.M.T., & Sabandal, M.L., Relationship of PROP (6-n-propylthiouracil) taster status with body mass index, food preferences, and consumption of Filipino adolescents. *Food Research International*, 2012, 47(2):229-235.

- 2011 Santos, J.E.R., Villarino, B.J., Zosa, A.R., & Dayrit, F.M., Analysis of Volatile Organic Compounds in Virgin Coconut Oil and their Sensory Attributes. *Philippine Journal of Science*, 2011, 140(2):161-171.
- Magbuhat, R.M., Borazon, E.Q., & Villarino, B.J., Food preferences and dietary intakes of Filipino adolescents in Metro Manila, The Philippines. *Malaysian Journal of Nutrition*, 2011, 17(1):31-41.
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- 2009 Villarino, B.J., Social, economic and cultural dimensions of sensory evaluation and its possible applications to the various disciplines of home economics in the Philippines. *Journal of Sensory Studies*, 2009, 24(4):601-620.
- Villarino, B.J., Fernandez, C.P., Alday, J.C., & Cubelo, C.G.R., Relationship of PROP (6-N-propylthiouracil) taster status with the body mass index and food preference of Filipino adults. *Journal of Sensory Studies*, 2009, 24(3):354-371.
- 2007 Villarino, B.J., Dy, L.M., & Lizada, M.C.C., Descriptive sensory evaluation of virgin coconut oil and refined, bleached and deodorized coconut oil. *LWT - Food Science and Technology*, 2007, 40(2):193-199.
- 2003 Galvez, F.C.F., Francisco, M.L.D.L., Villarino, B.J., Lustre, A.O., & Ressureccion, A.V.A., Manual Sorting To Eliminate Aflatoxin from Peanuts. *Journal of Food Protection*, 2003, 66(10):1879-1884.

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Sex Female

Organizational Affiliations

Graduate Student Research Assistant, info-Powered Energy System Research Center (i-PERC), The University of Electro-Communications, Tokyo, Japan

Education

Bachelor of Science in Electronics and Communications Engineering, University of Santo Tomas, España Blvd, Sampaloc, Manila 2011

Master of Engineering in Electrical Engineering and Information Systems, The University of Tokyo, Bunkyo City, Tokyo, Japan 2017

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Engineering
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 UV disinfection
 Off-the-grid Power
 Laser Beam Induced Current Mapping
 Solar Cell Evaluation
 Solar Cell Modeling
 Atomic Force Microscopy
 Photoluminescence
 Absorbance
 Solar Cell Synthesis
 Photoluminescence Spectroscopy
 Absorption Spectroscopy
 Microbial Inactivation
 Membrane Filtering for Water Sampling

Papers Presented

- 2019 March 7-9 Yu Jeco, B.M.F., Hosoi, Y., & Oguma, K. (2019 March 7-9). Solar-powered ultraviolet light-emitting diodes (UV-LED) for inactivation of Escherichia coli in water, 53rd Annual Conference of Japan Society on Water Environment, Yamanashi University Kofu Campus, Japan.
- 2018 June 10-15 Jehl, Z., Suchet, D., Miyashita, N., Behagel, B., Giteau, M., Delamarre, A., Yu Jeco, B.M.F., Guillemoles, J.-F., & Okada, Y. (2018 June 10-15). Hot Carrier Extraction Using Energy Selective Contacts and Feedback On The Remaining Distribution, 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion (WCPEC) (A Joint Conference of 4^{5th} IEEE PVSC, 28th PVSEC & 34th EU PVSEC), Waikoloa Village, HI, USA.
- 2017 Yu Jeco, B.M.F., Yoshida, K., Tamaki, R., Ahsan, N., & Okada, Y. (2017 September 25-

- September 25-29) 29). Analysis of current generation in InGaP/GaAs/Ge triple junction solar cells with optically non-uniform luminescence coupling effect, 33rd European Photovoltaic Solar Energy Conference and Exhibition, RAI Convention and Exhibition Centre, Amsterdam, Netherlands.
- 2016 November 22-25 Yu Jeco, B.M., Doma, R.V., Morales, M.A., Tarroza, E.G., Villaflores, M.F., dela Cruz, A., Guevara, E., Vicerra, R.R., & Asilo, M.L. (2016 November 22-25). Acquisition and Analysis of Electrocardiogram Waveforms with Diagnosis Transmission through Short Message Service Communication System, 2016 IEEE Region 10 Conference (TENCON), Singapore, Singapore.
- 2016 June 5-10 Yu Jeco, B.M., Sogabe, T., Ogura, A., Miyashita, N., Tamaki, R., & Okada, Y. (2016 June 5-10). Laser beam induced current (LBIC) mapping of InGaP/GaAs/Ge triple junction solar cells with luminescence coupling, 2016 IEEE 43rd Photovoltaic Specialists Conference (PVSC), Portland, OR, USA.

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- 2019 Yu Jeco, B.M.F., Veinberg-Vidal, E., Vauche, L., Yoshida, K., Tamaki, R., Ahsan, N., & Okada, Y., Luminescent coupling effect in wafer-bonded III-V on silicon multijunction solar cells. *Journal of Photonics for Energy*, 2019, 9(1):015504.
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- 2018 Jehl, Z., Suchet, D., Miyashita, N., Behagel, B., Giteau, M., Delamarre, A., Yu Jeco, B.M.F., Guillemoles, J.-F., & Okada, Y., Hot Carrier Extraction Using Energy Selective Contacts and Feedback On The Remaining Distribution. 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion (WCPEC) (A Joint Conference of 45th IEEE PVSC, 28th PVSEC & 34th EU PVSEC), Waikoloa Village, HI, USA, 2018:1814-1816.
- Xu, H., Delamarre, A., Jia, J., Yu Jeco, B.M.F., Watanabe, K., Okada, Y., Guillemoles, J.-F., Nakano, Y., & Sugiyama, M., Transport efficiency imaging in multi-junction solar cells by luminescence analysis. 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion (WCPEC) (A Joint Conference of 45th IEEE PVSC, 28th PVSEC & 34th EU PVSEC), Waikoloa Village, HI, USA, 2018.
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- Amboy, J.M., Yu Jeco, B.M.F., Wang, H., Kubo, T., Kinoshita, T., Li-Kao, Z.J., Shoji, Y., Ahsan, N., Segawa, H., Okada, Y., & Balbin, J.J.R., Cesium lead halide perovskite quantum dot deposition on GaAs substrates by dip coating. 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion (WCPEC) (A Joint Conference of 45th IEEE PVSC, 28th PVSEC & 34th EU PVSEC), Waikoloa Village, HI, USA, 2018:0467-0471.
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- 2017 Yu Jeco, B.M.F., Yoshida, K., Tamaki, R., Ahsan, N., & Okada, Y., Analysis of current

generation in InGaP/GaAs/Ge triple junction solar cells with optically non-uniform luminescence coupling effect. Proceedings of the 33rd European Photovoltaic Solar Energy Conference and Exhibition, Amsterdam, Netherlands, 2017:1236-1240.

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AUTHOR INDEX

Ancog, Rico C.

Environmental Pollution
Environmental Science
Waste Management
Water Quality Analysis

Arcilla, Carlo A.

Geochemistry
Geology
Petrology

Bautista-Tulin, Anabella Tilano

Soil Chemistry
Soil Science

Bellotindos, Luzvisminda M.

Advanced Oxidation Processes
Chemical Engineering
Degradation
Environmental Chemistry
Environmental Engineering
Heterogeneous Catalysis
Reactors
Sonochemistry
TOC
Wastewater
Wastewater Treatment
Water Treatment

Biong, Corazon T.

Disability Studies
Exercise Performance
Human Performance
Physical Activity Assessment
Physical Education
Physical Fitness
Special Education
Sport Biomechanics

Sport Psychology
Sport Training

Bucayong, Cecilia Ortiz

Pedagogy
Physics Education
Science Education Research

Cariño, Jovito V.

Ethics
Politics
Religion

Castillo-Israel, Katherine Ann T.

Food Biochemistry
Food Chemistry
Food Science
Molecular Biology
Postharvest horticulture
Structural Biology

Catane, Sandra G.

Caldera evolution
Deep-sea ash layers
Environmental Science
Explosive volcanism
Flow mechanism of volcanic and non-volcanic landslides
Geohazards
Geomechanical properties of rock slopes and slope stability assessment
High-resolution dating of young tephra deposits
Tephra stratigraphy
Volcano hazards assessment
Volcanology
Water-magma interaction

Corpuz, Ralph Sherwin A.

Applied Artificial Intelligence
Embedded Systems
Fuzzy Logic Control
ISO 9001
Machine Learning
Quality Assurance
Robotics
Technology Management

Cruz, Faye Abigail T.

Climate
Climate Modelling
Precipitation

Dalida, Maria Lourdes P.

Chemical Engineering
Environmental Engineering
Membrane Separation
Photocatalysis
Wastewater Treatment

Destreza, Froilan Gubi

Arduino
Computer Network
IoT
iVerilog

Dicuangco-Valdez, Lilibeth

Algebraic Coding Theory

Dimzon, Ian Ken D.

Analytical Chemistry
Chemical Metrology
Chemical Processes
Chemometrics
Chromatography
Fatty Acids
Mass Spectrometry
Partial Least Squares

Domingo, Jonas Feliciano C.

Environmental Sciences
Phenomenological Research
Science Education

Dreisbach, Jeconiah Louis Mendoza

Cross-Cultural Studies
Cultural Politics
Cultural Studies
Filipino Philosophy
Indigenization Theories
Intercultural Communication
Intercultural Studies
International Relations
Language Contact
Multiculturalism
Philippine Studies
Social Science

Galvez, Maria Cecilia Dandan

Air Pollution Studies
Atmospheric physics
Atmospheric pollution
Environmental Studies
Lasers
Optics

Gayo, Willy Salazar

Applied Mathematics

Hadsall, Annalee S.

Plant Systematics

Ibana, Joyce Altamarino

Cell Biology
Drug Discovery
Host-Pathogen Interactions
Immunology
Microbiology
Reproductive Immunology

Jacildo, Arian J.

Algorithms
Bioinformatics
Information Systems (Business Informatics)
Parallel Computing

Javier, Dymphna Nolasco

Climate change
Environmental geochemistry
Geoscience education
Rainfall-induced landslides

Lambio, Ivy Amor Fabreag

Plant Ecology
Botany
Genetics

Lizardo, Rona Camille M.

Food Chemistry
Food Processing
Nutraceuticals and Functional Foods
Sensory Evaluation of Foods

Loquias, Manuel Joseph Cruz

Combinatorics
Discrete Geometry
Mathematical Crystallography
Mathematics
Numeration

Macalalad, Ernest Pagan

Atmospheric Physics
GNSS Applications
Ionospheric Physics
Physics
Remote Sensing
Space Science

Macatangay, Ronald Cantoria

Climate Change
Energy
Environmental Impact Assessment
Environmental Physics
Instrumentation
Remote Sensing
Spatial Analysis
Spatial Statistics
Vegetation

Magno-Abriol-Santos, Katrina Joy H.

Computer Science Education
Digital Anthropometry
Digital Image Processing
Information Technology
Information Technology Education
Web Programming

Maranan, Faith Santiago

Bioinformatics
Ecology
Genetics
Molecular Biology
Restoration Ecology

Motin, Borromeo B.

Biodiversity
Biodiversity Conservation
Biodiversity Conservation
Indigenous People's Culture
Indigenous People's Rights
Marine Fisheries
Philippine Studies
Philosophy
Society and Culture

Nacorda, June Owen O.

Botany
Phycology

Pascua, Chelo Supnet

Clay Mineralogy
Environmental Mineralogy
Geochemistry
Material Characterization
Thin Films and Nanotechnology

Peleo-Alampay, Alyssa M.

Biostratigraphy
Earth Science
Geology
Paleoceanography

Rallos, Roland V.

Agricultural Plant Science
Agriculture
Agriculture Research
Animal and Human Nutrition
Climate Change and Agriculture
Crop Management
Crop Production
Crop Water Management
Evapotranspiration
Farming Systems
Fertigation
Fertilizers
Field Experimentation
Irrigation
Nutrient Management
Organic Farming
Plant Fertilization
Precision Agriculture
Soil Analysis
Soil and Water Conservation
Soil Fertility
Soil Physics
Soil Science
Soil Science
Sustainable Agriculture
Water Resources Management

Ringor, Cherry L.

Carbon Nanomaterials
Climate Science
Earth Science
Fabrication
Geology
Nanofabrication
Nanofibers
Nanomaterials
Nanomaterials synthesis
Nanoparticle preparation
Nanotubes
Polyaniline
Polymerization
Precipitation

Sotto, Rachel C.

Botany
Horticulture
Plant Biodiversity Conservation
Seed Physiology

Tolosa, Hero Laurenciano

Applied Mathematics
Applied Probability
Binomial Distribution
Computational Statistics
Data Analysis
Linear Regression
Markov Chains
Markov Processes
Model Building
Multivariate Statistics
Normal Distribution
Periodicity
Poisson Distribution
Probability Theory
R Programming
R Statistical Package
Statistical Inference
Statistical Modeling
Statistics
Stochastic Modeling

Time Series Analysis
Variance

Torreta, Nerissa K.

Botany
Economic Botany
Phycology
Phytoplankton Dynamics
Plant Morpho-Anatomy

Vallar, Edgar A.

Environment
Atmospheric Physics
Clouds
Computing
Particulate Matter
Remote Sensing
Satellite

Vasquez, Ross D.

Biological Sciences
Health
Immunology
Pharmaceutical Botany

Velarde, Michael C.

Biochemistry
Biophysics
Physiology
Reproductive Endocrinology

Villamor, Lilian Pagaduan

Animal Genetic Diversity
Marine Biotechnology
Marine Science
Phylogenetic and DNA Barcoding

Villarino, Casiana Blanca Jucar

Food Processing
Food Science
Sensory Evaluation

Yu Jeco, Bernice Mae Fetalvero

Absorbance
Absorption Spectroscopy
Atomic Force Microscopy
Engineering
Laser Beam Induced Current Mapping
Membrane Filtering for Water Sampling
Microbial Inactivation
Multijunction Solar Cell
Off-the-grid Power
Perovskite Quantum Dot
Photoluminescence
Photoluminescence Spectroscopy
Solar Cell Evaluation
Solar Cell Modeling
Solar Cell Synthesis
UV disinfection

SPECIALIZATION INDEX

Environment

Vallar, Edgar A.

Plant Ecology

Lambio, Ivy Amor Fabreag

Absorbance

Yu Jeco, Bernice Mae Fetalvero

Absorption Spectroscopy

Yu Jeco, Bernice Mae Fetalvero

Advanced Oxidation Processes

Bellotindos, Luzvisminda M.

Agricultural Plant Science

Rallos, Roland V.

Agriculture

Rallos, Roland V.

Agriculture Research

Rallos, Roland V.

Air Pollution Studies

Galvez, Maria Cecilia Dandan

Algebraic Coding Theory

Dicuangco-Valdez, Lilibeth

Algorithms

Jacildo, Arian J.

Analytical Chemistry

Dimzon, Ian Ken D.

Animal and Human Nutrition

Rallos, Roland V.

Animal Genetic Diversity

Villamor, Lilian Pagaduan

Applied Artificial Intelligence

Corpuz, Ralph Sherwin A.

Applied Mathematics

Gayo, Willy Salazar

Tolosa, Hero Laurenciano

Applied Probability

Tolosa, Hero Laurenciano

Arduino

Destreza, Froilan Gubi

Atmospheric Physics

Vallar, Edgar A.

Macalalad, Ernest Pagaran

Atmospheric physics

Galvez, Maria Cecilia Dandan

Atmospheric pollution

Galvez, Maria Cecilia Dandan

Atomic Force Microscopy

Yu Jeco, Bernice Mae Fetalvero

Binomial Distribution

Tolosa, Hero Laurenciano

Biochemistry

Velarde, Michael C.

Biodiversity

Motin, Borromeo B.

Biodiversity Conservation

Motin, Borromeo B.

Motin, Borromeo B.

Bioinformatics
Jacildo, Arian J.
Maranan, Faith Santiago

Biological Sciences
Vasquez, Ross D.

Biophysics
Velarde, Michael C.

Biostratigraphy
Peleo-Alampay, Alyssa M.

Botany
Sotto, Rachel C.
Lambio, Ivy Amor Fabreag
Torreta, Nerissa K.
Nacorda, June Owen O.

Caldera evolution
Catane, Sandra G.

Carbon Nanomaterials
Ringor, Cherry L.

Cell Biology
Ibana, Joyce Altamarino

Chemical Engineering
Dalida, Maria Lourdes P.
Bellotindos, Luzvisminda M.

Chemical Metrology
Dimzon, Ian Ken D.

Chemical Processes
Dimzon, Ian Ken D.

Chemometrics
Dimzon, Ian Ken D.

Chromatography
Dimzon, Ian Ken D.

Clay Mineralogy
Pascua, Chelo Supnet

Climate
Cruz, Faye Abigail T.

Climate Change
Macatangay, Ronald Cantoria

Climate change
Javier, Dymphna Nolasco

Climate Change and Agriculture
Rallos, Roland V.

Climate Modelling
Cruz, Faye Abigail T.

Climate Science
Ringor, Cherry L.

Clouds
Vallar, Edgar A.

Combinatorics
Loquias, Manuel Joseph Cruz

Computational Statistics
Tolosa, Hero Laurenciano

Computer Network
Destreza, Froilan Gubi

Computer Science Education
Magno-Abriol-Santos, Katrina Joy H.

Computing
Vallar, Edgar A.

Crop Management
Rallos, Roland V.

Crop Production
Rallos, Roland V.

Crop Water Management
Rallos, Roland V.

Cross-Cultural Studies Dreisbach, Jeconiah Louis Mendoza	Energy Macatangay, Ronald Cantoria
Cultural Politics Dreisbach, Jeconiah Louis Mendoza	Engineering Yu Jeco, Bernice Mae Fetalvero
Cultural Studies Dreisbach, Jeconiah Louis Mendoza	Environmental Chemistry Bellotindos, Luzvisminda M.
Data Analysis Tolosa, Hero Laurenciano	Environmental Engineering Dalida, Maria Lourdes P. Bellotindos, Luzvisminda M.
Deep-sea ash layers Catane, Sandra G.	Environmental geochemistry Javier, Dymphna Nolasco
Degradation Bellotindos, Luzvisminda M.	Environmental Impact Assessment Macatangay, Ronald Cantoria
Digital Anthropometry Magno-Abriol-Santos, Katrina Joy H.	Environmental Minerology Pascua, Chelo Supnet
Digital Image Processing Magno-Abriol-Santos, Katrina Joy H.	Environmental Physics Macatangay, Ronald Cantoria
Disability Studies Biong, Corazon T.	Environmental Pollution Ancog, Rico C.
Discrete Geometry Loquias, Manuel Joseph Cruz	Environmental Science Ancog, Rico C. Catane, Sandra G.
Drug Discovery Ibana, Joyce Altamarino	Environmental Sciences Domingo, Jonas Feliciano C.
Earth Science Peleo-Alampay, Alyssa M. Ringor, Cherry L.	Environmental Studies Galvez, Maria Cecilia Dandan
Ecology Maranan, Faith Santiago	Ethics Cariño, Jovito V.
Economic Botany Torreta, Nerissa K.	Evapotranspiration Rallos, Roland V.
Embedded Systems Corpuz, Ralph Sherwin A.	Exercise Performance Biong, Corazon T.

Explosive volcanism
Catane, Sandra G.

Fabrication
Ringor, Cherry L.

Farming Systems
Rallos, Roland V.

Fatty Acids
Dimzon, Ian Ken D.

Fertigation
Rallos, Roland V.

Fertilizers
Rallos, Roland V.

Field Experimentation
Rallos, Roland V.

Filipino Philosophy
Dreisbach, Jeconiah Louis Mendoza

Flow mechanism of volcanic and non-
volcanic landslides
Catane, Sandra G.

Food Biochemistry
Castillo-Israel, Katherine Ann T.

Food Chemistry
Castillo-Israel, Katherine Ann T.
Lizardo, Rona Camille M.

Food Processing
Villarino, Casiana Blanca Jucar
Lizardo, Rona Camille M.

Food Science
Castillo-Israel, Katherine Ann T.
Villarino, Casiana Blanca Jucar

Fuzzy Logic Control
Corpuz, Ralph Sherwin A.

Genetics
Lambio, Ivy Amor Fabreag
Maranan, Faith Santiago

Geochemistry
Arcilla, Carlo A.
Pascua, Chelo Supnet

Geohazards
Catane, Sandra G.

Geology
Peleo-Alampay, Alyssa M.
Ringor, Cherry L.
Arcilla, Carlo A.

Geomechanical properties of rock slopes
and slope stability assessment
Catane, Sandra G.

Geoscience education
Javier, Dymphna Nolasco

GNSS Applications
Macalalad, Ernest Pagaran

Health
Vasquez, Ross D.

Heterogeneous Catalysis
Bellotindos, Luzvisminda M.

High-resolution dating of young tephra
deposits
Catane, Sandra G.

Horticulture
Sotto, Rachel C.

Host-Pathogen Interactions
Ibana, Joyce Altamarino

Human Performance
Biong, Corazon T.

Immunology
Ibana, Joyce Altamarino
Vasquez, Ross D.

Indigenization Theories
Dreisbach, Jeconiah Louis Mendoza

Indigenous People's Culture
Motin, Borromeo B.

Indigenous People's Rights
Motin, Borromeo B.

Information Systems (Business Informatics)
Jacildo, Arian J.

Information Technology
Magno-Abriol-Santos, Katrina Joy H.

Information Technology Education
Magno-Abriol-Santos, Katrina Joy H.

Instrumentation
Macatangay, Ronald Cantoria

Intercultural Communication
Dreisbach, Jeconiah Louis Mendoza

Intercultural Studies
Dreisbach, Jeconiah Louis Mendoza

International Relations
Dreisbach, Jeconiah Louis Mendoza

Ionospheric Physics
Macalalad, Ernest Pagaran

IoT
Destreza, Froilan Gubi

Irrigation
Rallos, Roland V.

ISO 9001
Corpuz, Ralph Sherwin A.

iVerilog
Destreza, Froilan Gubi

Language Contact
Dreisbach, Jeconiah Louis Mendoza

Laser Beam Induced Current Mapping
Yu Jeco, Bernice Mae Fetalvero

Lasers
Galvez, Maria Cecilia Dandan

Linear Regression
Tolosa, Hero Laurenciano

Machine Learning
Corpuz, Ralph Sherwin A.

Marine Biotechnology
Villamor, Lilian Pagaduan

Marine Fisheries
Motin, Borromeo B.

Marine Science
Villamor, Lilian Pagaduan

Markov Chains
Tolosa, Hero Laurenciano

Markov Processes
Tolosa, Hero Laurenciano

Mass Spectrometry
Dimzon, Ian Ken D.

Material Characterization
Pascua, Chelo Supnet

Mathematical Crystallography
Loquias, Manuel Joseph Cruz

Mathematics
Loquias, Manuel Joseph Cruz

Membrane Filtering for Water Sampling
Yu Jeco, Bernice Mae Fetalvero

Membrane Separation
Dalida, Maria Lourdes P.

Microbial Inactivation
Yu Jeco, Bernice Mae Fetalvero

Microbiology
Ibana, Joyce Altamarino

Model Building
Tolosa, Hero Laurenciano

Molecular Biology
Castillo-Israel, Katherine Ann T.
Maranan, Faith Santiago

Multiculturalism
Dreisbach, Jeconiah Louis Mendoza

Multijunction Solar Cell
Yu Jeco, Bernice Mae Fetalvero

Multivariate Statistics
Tolosa, Hero Laurenciano

Nanofabrication
Ringor, Cherry L.

Nanofibers
Ringor, Cherry L.

Nanomaterials
Ringor, Cherry L.

Nanomaterials synthesis
Ringor, Cherry L.

Nanoparticle preparation
Ringor, Cherry L.

Nanotubes
Ringor, Cherry L.

Normal Distribution
Tolosa, Hero Laurenciano

Numeration
Loquias, Manuel Joseph Cruz

Nutraceuticals and Functional Foods
Lizardo, Rona Camille M.

Nutrient Management
Rallos, Roland V.

Off-the-grid Power
Yu Jeco, Bernice Mae Fetalvero

Optics
Galvez, Maria Cecilia Dandan

Organic Farming
Rallos, Roland V.

Paleoceanography
Peleo-Alampay, Alyssa M.

Parallel Computing
Jacildo, Arian J.

Partial Least Squares
Dimzon, Ian Ken D.

Particulate Matter
Vallar, Edgar A.

Pedagogy
Bucayong, Cecilia Ortiz

Periodicity
Tolosa, Hero Laurenciano

Perovskite Quantum Dot
Yu Jeco, Bernice Mae Fetalvero

Petrology
Arcilla, Carlo A.

Pharmaceutical Botany
Vasquez, Ross D.

Phenomenological Research
Domingo, Jonas Feliciano C.

Philippine Studies
Motin, Borromeo B.
Dreisbach, Jeconiah Louis Mendoza

Philosophy
Motin, Borromeo B.

Photocatalysis
Dalida, Maria Lourdes P.

Photoluminescence
Yu Jeco, Bernice Mae Fetalvero

Photoluminescence Spectroscopy
Yu Jeco, Bernice Mae Fetalvero

Phycology
Nacorda, June Owen O.
Torreta, Nerissa K.

Phylogenetic and DNA Barcoding
Villamor, Lilian Pagaduan

Physical Activity Assessment
Biong, Corazon T.

Physical Education
Biong, Corazon T.

Physical Fitness
Biong, Corazon T.

Physics
Macalalad, Ernest Pagaran

Physics Education
Bucayong, Cecilia Ortiz

Physiology
Velarde, Michael C.

Phytoplankton Dynamics
Torreta, Nerissa K.

Plant Biodiversity Conservation
Sotto, Rachel C.

Plant Fertilization
Rallos, Roland V.

Plant Morpho-Anatomy
Torreta, Nerissa K.

Plant Systematics
Hadsall, Annalee S.

Poisson Distribution
Tolosa, Hero Laurenciano

Politics
Cariño, Jovito V.

Polyaniline
Ringor, Cherry L.

Polymerization
Ringor, Cherry L.

Postharvest horticulture
Castillo-Israel, Katherine Ann T.

Precipitation
Cruz, Faye Abigail T.
Ringor, Cherry L.

Precision Agriculture
Rallos, Roland V.

Probability Theory
Tolosa, Hero Laurenciano

Quality Assurance
Corpuz, Ralph Sherwin A.

R Programming
Tolosa, Hero Laurenciano

R Statistical Package Tolosa, Hero Laurenciano	Social Science Dreisbach, Jeconiah Louis Mendoza
Rainfall-induced landslides Javier, Dymphna Nolasco	Society and Culture Motin, Borromeo B.
Reactors Bellotindos, Luzvisminda M.	Soil Analysis Rallos, Roland V.
Religion Cariño, Jovito V.	Soil and Water Conservation Rallos, Roland V.
Remote Sensing Macatangay, Ronald Cantoria Macalalad, Ernest Pagaran Vallar, Edgar A.	Soil Chemistry Bautista-Tulin, Anabella Tilano
Reproductive Endocrinology Velarde, Michael C.	Soil Fertility Rallos, Roland V.
Reproductive Immunology Ibana, Joyce Altamarino	Soil Physics Rallos, Roland V.
Restoration Ecology Maranan, Faith Santiago	Soil Science Rallos, Roland V. Rallos, Roland V. Bautista-Tulin, Anabella Tilano
Robotics Corpuz, Ralph Sherwin A.	Solar Cell Evaluation Yu Jeco, Bernice Mae Fetalvero
Satellite Vallar, Edgar A.	Solar Cell Modeling Yu Jeco, Bernice Mae Fetalvero
Science Education Domingo, Jonas Feliciano C.	Solar Cell Synthesis Yu Jeco, Bernice Mae Fetalvero
Science Education Research Bucayong, Cecilia Ortiz	Sonochemistry Bellotindos, Luzvisminda M.
Seed Physiology Sotto, Rachel C.	Space Science Macalalad, Ernest Pagaran
Sensory Evaluation Villarino, Casiana Blanca Jucar	Spatial Analysis Macatangay, Ronald Cantoria
Sensory Evaluation of Foods Lizardo, Rona Camille M.	Spatial Statistics Macatangay, Ronald Cantoria

Special Education Biong, Corazon T.	UV disinfection Yu Jeco, Bernice Mae Fetalvero
Sport Biomechanics Biong, Corazon T.	Variance Tolosa, Hero Laurenciano
Sport Psychology Biong, Corazon T.	Vegetation Macatangay, Ronald Cantoria
Sport Training Biong, Corazon T.	Volcano hazards assessment Catane, Sandra G.
Statistical Inference Tolosa, Hero Laurenciano	Volcanology Catane, Sandra G.
Statistical Modeling Tolosa, Hero Laurenciano	Waste Management Ancog, Rico C.
Statistics Tolosa, Hero Laurenciano	Wastewater Bellotindos, Luzvisminda M.
Stochastic Modeling Tolosa, Hero Laurenciano	Wastewater Treatment Dalida, Maria Lourdes P. Bellotindos, Luzvisminda M.
Structural Biology Castillo-Israel, Katherine Ann T.	Water Quality Analysis Ancog, Rico C.
Sustainable Agriculture Rallos, Roland V.	Water Resources Management Rallos, Roland V.
Technology Management Corpuz, Ralph Sherwin A.	Water Treatment Bellotindos, Luzvisminda M.
Tephra stratigraphy Catane, Sandra G.	Water-magma interaction Catane, Sandra G.
Thin Films and Nanotechnology Pascua, Chelo Supnet	Web Programming Magno-Abriol-Santos, Katrina Joy H.
Time Series Analysis Tolosa, Hero Laurenciano	
TOC Bellotindos, Luzvisminda M.	