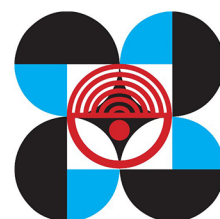


Specialized Philippine Enterprise Reference of Experts and Scientists (SPHERES)

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)

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

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Name Neil Angelo Seniel Abreo

Sex Male

Education

Master of Science in Marine Biodiversity, Davao del Norte State College, Panabo, Philippines 2017

Bachelor of Science in Biology, University of the Philippines Mindanao, Davao, Philippines 2007

Fields of Specialization

Marine ecology

Marine pollution

Marine biology

Marine fisheries

Marine biodiversity

Employment

Research Assistant, Regional ICRM Center XI, Davao Oriental State College of Science and Technology, 2016 April-Present

Instructor, College of Dentistry, Davao Medical School Foundation, 2012 October-2016 April

Research Assistant, Department of Biological Sciences and Environmental Studies, University of the Philippines Mindanao, 2007 March-2011 June

Papers Presented

2011 February 15-17 Gamboa, R.U., Aurelio, R.M., Ganad, D.A., Concepcion, L.B., & Abreo, N.A.S. (2011 February 15-17). Small-scale hatcheries and simple technologies for sandfish (*Holothuria scabra*) production, Asia-Pacific Tropical Sea Cucumber Aquaculture, Noumea, New Caledonia.

Publications

2019 Abreo, N.A.S., Thompson, K.F., Arabejo, G.F.P., & Superio, M.D.A., Social media as a novel source of data on the impact of marine litter on megafauna: The Philippines as a case study. *Marine Pollution Bulletin*, 2019, 140:51-59.

Abreo, N.A.S., Blatchley, D., & Superio, M.D., Stranded whale shark (*Rhincodon typus*) reveals vulnerability of filter-feeding elasmobranchs to marine litter in the Philippines. *Marine Pollution Bulletin*, 2019, 141:79-83.

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2018 Abreo, N.A.S., Marine plastics in the Philippines: a call for research. *Philippine Science Letters*, 2018, 11(1):20-21.

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2017 Macusi, E.D., Abreo, N.A.S., & Babaran, R.P., Local ecological knowledge (LEK) on fish behavior around anchored FADs: the case of tuna purse seine and ringnet fishers from Southern Philippines. *Frontiers in Marine Science*, 2017, 4:188.

2016 Abreo, N.A.S., Macusi, E.D., Blatchley, D.D., & Cuenca, G.C., Ingestion of Marine

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- 2015 Abreo, N.A.S., Macusi, E.D., & Cuenca, G.C., Nutrient enrichment, sedimentation, heavy metals and plastic pollution in the marine environment and its implications on Philippine marine biodiversity: A Review. *IAMURE International Journal of Ecology and Conservation*, 2015, 15:111-168.
- Macusi, E.D., Abreo, N.A.S., Cuenca, G.C., Ranara, C.T.B., Cardona, L.T., Andam, M.B., Guanzon, G.C., Katikiro, R.E., & Ashoka Deepananda, K.H.M., The potential impacts of climate change on freshwater fish, fish culture and fishing communities. *Journal of Nature Studies*, 2015, 14(2):14-31.
- Cuenca, G.C., Macusi, E.D., Abreo, N.A.S., Ranara, C.T., Andam, M.B., Cardona, L.C., & Conserva, G.G., Mangrove ecosystems and associated fauna with special reference to mangrove crabs in the Philippines: A Review. *IAMURE International Journal of Ecology and Conservation*, 2015, 15:60-110.
- 2011 Gamboa, R.U., Aurelio, R.M., Ganad, D.A., Concepcion, L.B., & Abreo, N.A.S., Small-scale hatcheries and simple technologies for sandfish (*Holothuria scabra*) production. *Asia-Pacific Tropical Sea Cucumber Aquaculture*. Australian Centre for International Agricultural Research (ACIAR) Proceedings Series, Noumea, New Caledonia, 2011, 136:63-74.

Name Adonis P. Adornado

Sex Male

Education

Bachelor of Science in Chemical Engineering, Mapua Institute of Technology, Manila, Philippines 2013

Fields of Specialization

Carbon dioxide Capture Process Simulation

Chemical Engineering

Carbon Dioxide Capture

Process Simulation

Absorption

Biosorption

Employment

Instructor, School of Chemical Engineering and Chemistry, Mapua Institute of Technology, 2016 January-2016 April

Jr. Fuel Quality Analyst, Cebu Pacific Air, 2015 March-2015 October

Facilities Engineer 1 - Environmental Section, Amkor Technology, 2014 January-2014 July

Student Trainee, JGC Philippines, Inc., 2012 April-2012 June

Laboratory Student Assistant, Institutionalized Laboratory management Office, Mapua Institute of Technology, 2010 January-2010 October

Association Membership

Member, Philippine Institute of Chemical Engineers

Associate Member, National Research Council of the Philippines

Papers Presented

2019 July 2-5 Lomeda-De Mesa, R.A.P., Soriano, A.N., Marquez, A.R.D., & Adornado, A.P. (2019 July 2-5). Physical and Chemical Properties of Philippine Coal Blended with Torrefied Biomass from Rice (*Oryza sativa*) Straw, 2nd International Conference on Green Energy and Environment Engineering (CGEEE 2019), Okinawa, Japan.

2017 Cabiguen, M.L., Jr., Soriano, A.N., & Adornado, A.P. (2017 September 21-22). Reduction of water hardness by electrocoagulation using iron and aluminum electrodes with sodium chloride as supporting electrolyte, AASSA-NAST PHL International Symposium: Realizing the full cycle of research and development, Tagaytay City, Philippines.

2017 Soriano, A.N., Adamos, K.G., Bonifacio, P.B., Adornado, A.P., & Bungay, V.C. (2017 September 21-22). Determination of diffusion coefficients of various livestock antibiotics in water at infinite dilution using conductimetric method, AASSA-NAST PHL International Symposium: Realizing the full cycle of research and development, Tagaytay City, Philippines.

Publications

- 2019 Topacio, K.L.D.L., Tayo, L.L., Magpantay, A.E.A., & Adornado, A.P., Molecular Docking of Mycosporine-Like Amino Acid Analogs in Neuroreceptors - GABAA, GABAB, DRD1, 5-HT3, and nAChR as Potential Drug Candidate for Neuropharmacology. *International Journal of Pharma Medicine and Biological Sciences*, 2019, 8(2):58-64.
- Manguiam, V.L.R., Cruz, N.A., & Adornado, A.P., K-Carrageenan and Aluminum Oxide as a Potential Replacement for Industry-Standard Materials in Proton Exchange Membrane Fuel Cell (PEMFC) Fabrication. *IOP Conference Series Earth and Environmental Science*, 2019, 219:012027.
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- 2018 Soriano, A.N., Dollente, K.G.R., Tabaquero, R.J.D., & Adornado, A.P., Estimation of diffusion coefficients of ascorbate-based ions at infinite dilution through electrolytic conductivity measurements. *IOP Conference Series Earth and Environmental Science*, 2018, 191:012028.
- Gurylev, V., Soriano, A.N., Caparanga, A.R., Li, M.-H., & Adornado, A.P., Viscosities of diethylene glycol (DEG) + 2-amino-2-methyl-1-propanol (AMP) + water. *IOP Conference Series Earth and Environmental Science*, 2018, 191:012088.
- Soriano, A.N., Novhanda, M., Cruz, J.E.B.D., & Adornado, A.P., Simulated concentration profiling of liquid-phase products in the quaternary solvent system of (carbon dioxide + monoeth-anolamine / diethanolamine + triethanolamine + water). *IOP Conference Series Earth and Environmental Science*, 2018, 191:012087.
- Cabiguen, M.L., Jr., Soriano, A.N., & Adornado, A.P., Reduction of water hardness from groundwater in Puerto Princesa City, Palawan, Philippines using electrocoagulation. *IOP Conference Series Earth and Environmental Science*, 2018, 191:012029.
- Soriano, A.N., Bonifacio, P.B., Adamos, K.G., & Adornado, A.P., Prediction of self-diffusion coefficients of ions from various livestock antibiotics in water at infinite dilution. *IOP Conference Series Earth and Environmental Science*, 2018, 191:012092.
- Esguerra, M.J.S., Manguiam, V.L.R., Cabanban, S.K.V., Gala, M.J.A.L., Limos, M.J.N.A., Tella-in, J.M.J., & Adornado, A.P., Biosorption of lead and chromium in surface water using Philippine mud crab (*Scylla serrata*) and tahong (*Perna viridis*) shells. *IOP Conference Series Earth and Environmental Science*, 2018, 191:012104.
- 2017 Soriano, A.N., Adamos, K.G., Bonifacio, P.B., Adornado, A.P., Bungay, V.C., & Vairavan, R., Erratum to: Determination of diffusion coefficients of various livestock antibiotics in water at infinite dilution. *The European Physical Journal Conferences*, 2017, 162:01089.
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- Cabiguen, M.L., Jr., Soriano, A.N., & Adornado, A.P., Reduction of water hardness by electrocoagulation using iron and aluminum electrodes with sodium chloride as supporting electrolyte. *AASSA-NAST PHL International Symposium: Realizing the full cycle of research and development*, 2017, 50(14).
- 2016 Soriano, A.N., Ornedo-Ramos, K.F., Muriel, C.A.M., Adornado, A.P., Bungay, V.C., & Li, M.-H., Prediction of refractive index of binary solutions consisting of ionic liquids and alcohols (methanol or ethanol or 1-propanol) using artificial neural network.

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- Nieva, A.D., De Vera, F.C., Adornado, A.P., Gallarte, B.P., & Doma, B.T., Jr., Simulation of biosorption of lead and copper with *Pinus insularis* using Aspen Adsorption. PICHE Journal, 2016, 16(1).
- 2015 Ornedo-Ramos, K.F.P., Soriano, A.N., Muriel, C.A.M., Adornado, A.P., & Bungay, V.C., Prediction of density of binary mixtures of ionic liquids with alcohols (methanol/ethanol/1-propanol) using artificial neural network. ASEAN Journal of Chemical Engineering, 2015, 15(2):33-50.
- Soriano, A.N., Adornado, A.P., Pajinag, A.A., Acosta, D.J.F., Averion, N.M., Leron, G.M., & Bungay, V.C., Multicriterial Analysis of Simulated Process of Post-Combustion Capture of Pure H₂S and Mixtures of H₂S and CO₂ Using Single and Blended Aqueous Alkanolamines. ASEAN Journal of Chemical Engineering, 2015, 15(1):72-92.
- 2014 Leron, G.M., Adornado, A.P., Zalvidea, D.G., Gutierrez, L.P., Suarez, S.W.B., Soriano, A.N., & Li, M.-H., Selection of single and blended aqueous alkanolamine for post-combustion carbon dioxide capture using rate-based non-equilibrium process simulation. PICHE Journal, 2014, 15(1):85-104.

Name Teodoro Astorga Amatoso, Jr.

Sex Male

Education

Doctor of Engineering, University of San Carlos, Talamban Campus, Cebu City, Philippines

Fields of Specialization

Environmental Technology

Manufacturing

Civil Engineering

Construction Engineering

Building Materials

Reinforced Concrete

Bamboo

Construction Materials

Employment

Public Relation Officer, Philippine Institute of Civil Engineers, 2014-2016

Business Manager - PAASA, Inc. Region 8, Philippine Association of Administrators of Student Affairs, 2014 November-2016 July

Adviser - University Student Organizations, Northwest Samar State University - Calbayog City, 2013 June-2016 June

Board of Regent, Northwest Samar State University - Calbayog City, 2013 May-2015 May

Federation President, NwSSU Alumni Association, 2013 May-2015 May

Board of Director - Academe, Philippine Institute of Civil Engineers, 2012-2014

Board of Director - Private, Philippine Institute of Civil Engineers, 2010-2012

Volunteer, Gawad Kalinga Community Development Foundation, 2010 July-Present

Civil Engineer, Northwest Samar State University - Calbayog City, 2009 July-Present

Association Membership

Chairman, Rotary Club of Greater Calbayog

Member, Philippine Association of Administrators of Student Affairs

Proponent and Organizer, Civil Engineering Students Technical Conference

Member, Philippine Institute of Civil Engineers

Honors / Awards

Best Presenter, EQC 2017 International Conference Committee, Kaoshiung, Taiwan 2017 April

Publications

2019 Bastasa, J.D., Roxas, A.J.B., Sagayap, K.D., Salurio, R.R.L., Sampayan, J.O., Taniñas,

- H.L., Sobreviga, M.D., Olitan, D.F.T., & Amatoso, T.A., Jr., Swell Classification Analysis for Re-engineering Expansive Soil using Agricultural Waste Materials. *International Journal of Applied Engineering Research*, 2019, 14(10):2399-2404.
- Amatoso, T., Loretero, M.E., Yen, Y.-W., & Laksono, A.D., Investigating Pyrolysis Characteristics of *Dendrocalamus Asper* Bamboo. *International Journal of Mechanical Engineering and Technology*, 2019, 10(3):1079-1087.
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- 2018 Wang, C., Chang, J., Amatoso, T.A., Jr., Guo, Y., Lin, F., & Yen, Y., Carbon Nanotubes Grown Using Solid Polymer Chemical Vapor Deposition in a Fluidized Bed Reactor with Iron(III) Nitrate, Iron(III) Chloride and Nickel(II) Chloride Catalysts. *Inventions*, 2018, 3(18):1-8.
- 2016 Amatoso, T.A., Jr., & Loretero, M.E., Analytical Behaviour in Mechanical Properties of *Dendrocalamus Asper* Bamboo as Construction Building Materials in the Philippines. *Global Journal of Engineering and Technology Review*, 2016, 1(1):114-121.
- Amatoso, T.A., Jr., & Loretero, M.E., Axial Tensile Strength Analysis of Naturally Treated Bamboo As Possible Replacement of Steel Reinforcement in the Concrete Beam. Papua New Guinea University of Technology, Global Virtual Conference in Civil Engineering (GVCCE) 2016, 2016.

Name Arthur Mapalad Amora

Sex Male

Organizational Affiliations

Project Officer IV, Geo-SAFER Agusan, Caraga State University, Butuan, Philippines

Fields of Specialization

Geodetic Engineering

Environmental Impact Assessment

Hydrological Modeling

Geographic Information System

Hydrology

Rainfall Runoff Modelling

Hydraulic Modelling

Flood Modelling

Geodesy and Surveying

Papers Presented

- 2019 March 12-14 Santillan, J.R., Amora, A.M., Makinano-Santillan, M., Gingo, A.L., & Marqueso, J.T. (2019 March 12-14). Analyzing the Impacts of Land Cover Change to the Hydrologic and Hydraulic Behaviors of the Philippines' Third Largest River Basin, 10 Joint Workshop "Multidisciplinary Remote Sensing for Environmental Monitoring", Kyoto, Japan.
- 2019 March 12-14 Makinano-Santillan, M., Serviano, J., Rubillos, C.K., Amora, A., Santillan, J.R., Morales, E.M., Marqueso, J.T., & Gingo, A.L. (2019 March 12-14). Near-Real Time Hazard Monitoring and Information Dissemination Through Integration of Remote Sensing, GIS, Numerical Modelling, Web Applications and Social Media, 10 Joint Workshop "Multidisciplinary Remote Sensing for Environmental Monitoring", Kyoto, Japan.
- 2016 October 17-21 Amora, A.M., Santillan, J.R., Makinano-Santillan, M., Marqueso, J.T., & Gingo, A.L. (2016 October 17-21). Characterizing Flood Hazards in an Alluvial Fan During Extreme Rainfall Events Using LIDAR and Numerical Modeling, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.
- 2016 July 12-19 Makinano-Santillan, M., Santillan, J.R., Morales, E.M.O., Asube, L.C.S., Amora, A.M., Cutamora, L.C., & Makinano, R.M. (2016 July 12-19). Academe-local Government Partnership Towards Effective Application of Geospatial Technologies for Smarter Flood Disaster Management at the Local Level: an Example From Mindanao, Philippines, 2016 XXIII ISPRS Congress, Prague, Czech Republic.

Publications

- 2019 Santillan, J.R., Amora, A.M., Makinano-Santillan, M., Gingo, A.L., & Marqueso, J.T., Analyzing the Impacts of Land Cover Change to the Hydrologic and Hydraulic Behaviours of the Philippines' Third Largest River Basin. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 2019, IV-3/W1:41-48.
- Makinano-Santillan, M., Serviano, J., Rubillos, C.K., Amora, A., Santillan, J.R., Morales, E.M., Marqueso, J.T., & Gingo, A.L., Near-Real Time Hazard Monitoring and

Information Dissemination Through Integration of Remote Sensing, GIS, Numerical Modelling, Web Applications and Social Media. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 2019, IV-3/W1.

- 2016 Amora, A.M., Santillan, J.R., Makinano-Santillan, M., Marqueso, J.T., & Gingo, A.L., Characterizing Flood Hazards in an Alluvial Fan During Extreme Rainfall Events Using LIDAR and Numerical Modeling. *Proceedings of the 37th Asian Conference on Remote Sensing*, Colombo, Sri Lanka, 2016.
- Santillan, J.R., Makinano-Santillan, M., Amora, A.M., Morales, E.M.O., Cutamora, L.C., & Asube, L.C.S., Near-real Time Simulation and Geo-visualization of Flooding in the Philippines' Deepest Lake. *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2016.
- Makinano-Santillan, M., Santillan, J.R., Morales, E.M.O., Asube, L.C.S., Amora, A.M., Cutamora, L.C., & Makinano, R.M., Academe-local Government Partnership Towards Effective Application of Geospatial Technologies for Smarter Flood Disaster Management at the Local Level: an Example From Mindanao, Philippines. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 2016, XLI-B8:109-115.
- Santillan, J.R., Amora, A.M., Makinano-Santillan, M., Marqueso, J.T., Cutamora, L.C., Serviano, J.L., & Makinano, R.M., Assessing the Impacts of Flooding Caused by Extreme Rainfall Events Through a Combined Geospatial and Numerical Modeling Approach. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 2016 XXIII ISPRS Congress, Prague, Czech Republic, 2016, XLI-B8.
- 2015 Makinano-Santillan, M., Santillan, J.R., Amora, A.M., Marqueso, J.T., Cutamora, L.C., Serviano, J.L., Makinano, R.M., & Asube, L.C.A., Assessing the Impacts of Flooding in Tago River Basin, Mindanao, Philippines Through Integration of High Resolution Elevation Datasets, Landsat Image Analysis, and Numerical Modelling. *36th Asian Conference on Remote Sensing 2015 (ACRS 2015)*, Quezon City, Philippines, 2015, 3:1606-1617.

Name Jovito Cagape Anito, Jr.

Sex Male

Organizational Affiliations

Assistant Professor Lecturer, Department of Science Education, De La Salle University, Manila, Philippines

Fields of Specialization

Teaching and Learning

Pedagogy and Education

Educational Evaluation

Assessment

Grounded Theory

Attitude

Science Education

Papers Presented

2019 October 16-18 Anito, J., Jr., & Morales, M.P. (2019 October 16-18). The Role of Qualitative Research in Education 4.0: Reflections from a State-Funded Model-Building Qualitative Research, 4th World Conference on Qualitative Research, Lusófona University of Porto, Portugal.

Publications

2019 Morales, M.P.E., Anito, J.C., Avilla, R.A., Abulon, E.L.R., & Palisoc, C.P., Proficiency Indicators for Philippine STEAM (Science, Technology, Engineering, Agri/fisheries, Mathematics) Educators. *Philippine Journal of Science*, 2019, 148(2):265-281.

Morales, M.P.E., Anito, J.C., Jr., Avilla, R.A., Sarmiento, C.P., Palisoc, C.P., Elipane, L.E., Ayuste, T.O., Butron, B.R., & Palomar, B.C., The Philippine STEAM Education Model. Philippine Normal University Publication Office, Manila, Philippines, 2019.

Morales, M.P.E., Anito, J.C., Jr., Sarmiento, C.P., Avilla, R.A., Palisoc, C.P., Elipane, L.E., Ayuste, T.O.D., Butron, B.R., & Palomar, B.C., Chapter 1. Philippine STEAM Proficiency. In: Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., Elipane, L.E., & Casilla, N.A. (Eds.), *TPACK in Philippine STEAM Education: STEAM Classroom Observation Protocol*, Philippine Normal University, Manila, Ph, 2019:1-19.

Morales, M.P.E., Anito, J.C., Jr., & Palisoc, C.P., Chapter 2. The Pedagogical Model. In: Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., Elipane, L.E., & Casilla, N.A. (Eds.), *TPACK in Philippine STEAM Education: STEAM Classroom Observation Protocol*, Philippine Normal University, Manila, Ph, 2019:20-39.

Morales, M.P.E., Anito, J.C., Jr., Sarmiento, C.P., Avilla, R.A., Palisoc, C.P., Elipane, L.E., Ayuste, T.O., Butron, B.R., & Palomar, B.C., Chapter 5. The Philippine STEAM Education. In: Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., Elipane, L.E., & Casilla, N.A. (Eds.), *TPACK in Philippine STEAM Education: STEAM Classroom Observation Protocol*, Philippine Normal University, Manila, Ph, 2019:74-122.

Morales, M.P.E., Anito, J.C., Jr., Sarmiento, C.P., Avilla, R.A., Palisoc, C.P., Elipane, L.E., Ayuste, T.O.D., Butron, B.R., Palomar, B.C., Alcantara, E.C., Bernarte, R.P., Bornales, J.B., Mercado, F.M., Nepomuceno, C.T., Padama, A.A.B., Pagkatipunan, P.M.N., Prudente, M.S., Sagun, R.D., Viray, K.R., & Roxas-Villanueva, R.M.L.,

- Chapter 6. STEAM Educators Professional Development. In: Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., Elipane, L.E., & Casilla, N.A. (Eds.), *TPACK in Philippine STEAM Education: STEAM Classroom Observation Protocol*, Philippine Normal University, Manila, Ph, 2019:123-138.
- Anito, J., Jr., & Morales, M.P., *The Role of Qualitative Research in Education 4.0: Reflections from a State-Funded Model-Building Qualitative Research*. Abstracts Book of the 4th World Conference on Qualitative Research, 2019:337-339.
- 2018 De Gracia, V., Prudente, M.S., Aguja, S.E., & Anito, J.C., Jr., *Describing Paradigm Shifts Among Teachers of Guimaras Province, Philippines*. *Journal of Computational and Theoretical Nanoscience*, 2018, 24(7):4828-4831.
- Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., Elipane, L.E., & Casilla, N.A., *TPACK in Philippine STEAM Education: STEAM Classroom Observation Protocol*. Philippine Normal University, Manila, Philippines, 2018.
- Morales, M.P.E., Abulon, E.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., & Casilla, N.A., *TPACK in Philippine STEAM Education: STEAM Educators Proficiency Indicators*. Philippine Normal University, Manila, Philippines, 2018.
- Morales, M.P.E., Abulon, E.L.R., Anito, J.C., Jr., Avilla, R.A., Palisoc, C.P., & Casilla, N.A., *TPACK in Philippine STEAM Education: Graduate Mentoring Handbook*. Philippine Normal University, Manila, Philippines, 2018.
- 2017 Limjap, A.A., Santos, G.N.C., & Lapinid, M.R.C., *Gearing K to 12 Philippine Science for National Development and ASEAN Competitiveness*. *Advanced Science Letters*, 2017, 23(2):1068-1072.
- Lapinid, M.R., Gustilo, L., Magno, C., Barrot, J., Gabinete, M.K., & Anito, J.C., Jr., *For the Nth Time, Does Educational Technology Really Make a Difference? - A Large-Scale Investigation of the Effects of Educational TV on Academic Achievement*. *Advanced Science Letters*, 2017, 23(2):759-763.
- Anito, J.C., Jr., Prudente, M.S., Limjap, A.A., Aguja, S.E., & Rubi, P.S., *Solving Physics Problems by Playing with Equations*. *Advanced Science Letters*, 2017, 23(2):1025-1029.
- 2015 Prudente, M.S., Aguja, S.E., & Anito, J., *Exploring Climate Change Conceptions and Attitudes: Drawing Implications for a Framework on Environmental Literacy*. *Advanced Science Letters*, 2015, 21(7):2413-2418.
- Anito, J.C., Jr., Prudente, M.S., Aguja, S.E., & Rubi, P.S., *Tracking Conceptual Saturation in Classical Grounded Theory Using Lead and Link Technique*. *Advanced Science Letters*, 2015, 21(7):2479-2482.

Name Nilo M. Arago

Sex Male

Organizational Affiliations

Instructor, Electronics Engineering Department, Technological University of the Philippines, NCR, Philippines

Fields of Specialization

Electrical Engineering

Telecommunications Engineering

Communication Engineering

Sensor Technology

Machine Learning

Neural Networks and Artificial Intelligence

Signal Processing

Computational Intelligence

Applied Artificial Intelligence

Employment

Instructor, Technological University of the Philippines, 2005 June-Present

Papers Presented

2018 Lorda, R.L., Coballes, J.R.A., Enriquez, L.A.C., Millan, M.L.S., Mora, A.J., Teodoro, November 29 - M.N.G., Arago, N.M., Thio-ac, A.C., & Tolentino, L.K.S. (2018 November 29 - December 2) Comparative Evaluation of NFC Tags for the NFC-Controlled Door Lock with Automated Circuit Breaker, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines.

2018 Padilla, M.V.C., Arago, N.M.M., Damgo, J.C.M., Junio, G.D., Mamaril, J.J.R., Matienzo, November 29 - R.N., & Natabio, G.S. (2018 November 29 - December 2). Rice Spikelet Yield December 2 Determination Using Image Processing, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines.

2018 Alasco, R., Domdoma, E.A., Doria, K.A., Ricafranca, K.M., Saito, Y.E., Arago, N., November 29 - Reyes, R., & Galido, E. (2018 November 29 - December 2). SoilMATTic: Arduino-Based December 2 Automated Soil Nutrient and pH Level Analyzer using Digital Image Processing and Artificial Neural Network, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines.

2018 Dimaya, B.V., Kasilag, K.J.U., Ong, F.I.D., Ramirez, B.P.B., Pascion, C.G., Arago, N.M., November 29 - & Padilla, N.V. (2018 November 29 - December 2). Mobile Soil Robot Collector via December 2 Smartphone with Global Positioning System for Navigation, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines.

- 2018 November 29 - December 2 Dimaya, B.V., Kasilag, K.J.U., Ong, F.I.D., Ramirez, B.P.B., Ramirez, K.E.V., Rascion, C.G., Arago, N.M., & Padilla, M.V. (2018 November 29 - December 2). Mobile Soil Robot Collector via Smartphone with Global Positioning System for Navigation, 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines.
- 2018 October 28 - 31 Arago, N.M., Garcia, T.P., & Amado, T.M. (2018 October 28 - 31). Automated Chicken Manure Toxicity Level Reducer System Using Optimized Effective Microorganism (EM) Solution, TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South).
- 2018 October 28 - 31 Fernandez, E.O., Arago, N.M., Aquino, J.O., Bravo, J.M.P., Francisco, J.-A.S., Gaddi, C.V.B., & Simbran, C.A. (2018 October 28 - 31). Microcontroller-Based Automated Microscope for Image Recognition of Four Urine Constituents, TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South).
- 2018 October 28 - 31 Valenzuela, I.C., Arago, N.M., Abulon, E.L.R., & Morales, M.P.E. (2018 October 28 - 31). Design of a Life-Saving School Desk for Kindergarten Pupils During Seismic Activity, TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South).
- 2014 November 12-16 Arago, N.M., Amado, T.M., & Orillo, J.W.F. (2014 November 12-16). Utilization of cassegrain feed parabolic antenna design in increasing the efficiency of photovoltaic module, 2014 International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Palawan, Philippines.

Publications

- 2019 Morales, M.P.E., Valenzuela, I.C., Abulon, E.L.R., Arago, N.M., & Mancao, M.C.T., Coupling School Risk Reduction Strategies with LAMESA (Life-Saving Automated "Mesa" to Endure Seismic Activity) for Kindergarten. *Philippine Journal of Science*, 2019, 148(1):137-149.
- Jorda, R., Jr., Alcabasa, C., Buhay, A., Dela Cruz, E.C., Mendoza, J.P., Tolentino, A., Tolentino, L.K., Fernandez, E., Thio-ac, A., Velasco, J., & Arago, N., Automated Smart Wick System-Based Microfarm Using Internet of Things. *arXiv.org*, Cornell University, 2019:arXiv:1911.01279.
- Thio-ac, A., Domingo, E.J., Reyes, R.M., Arago, N., Jorda, R., Jr., & Velasco, J., Development of a Secure and Private Electronic Procurement System based on Blockchain Implementation. *arXiv.org*, Cornell University, 2019, 8(5):2626-2631.
- Arago, N.M., Orillo, J.W.F., Haban, J.J., Juan, J., Puno, J.C., Quijano, J.F., & Tuazon, G.M., SoilMATE: Soil Macronutrients and pH Level Assessment for Rice Plant through Digital Image Processing Using Artificial Neural Network. *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*, 2019, 9(2-5):145-149.
- Galido, E., Tolentino, L.K., Fortaleza, B.N., Corvera, R.J., De Guzman, A., Española, V.J., Gambota, C., Gungon, A., Lapuz, K.T., Arago, N., Velasco, J., & Jorda, Jr., Development of a Solar-powered Smart Aquaponics System through Internet of Things (IoT). *Center for Engineering Design, Fabrication, and Innovation, College of Engineering, Technological University of the Philippines*, 2019:31-39.
- 2018 Lorda, R.L., Coballes, J.R.A., Enriquez, L.A.C., Millan, M.L.S., Mora, A.J., Teodoro, M.N.G., Arago, N.M., Thio-ac, A.C., & Tolentino, L.K.S., Comparative Evaluation of NFC Tags for the NFC-Controlled Door Lock with Automated Circuit Breaker. 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines, 2018:doi:10.1109/HNICEM.2018.8666375.
- Padilla, M.V.C., Arago, N.M.M., Damgo, J.C.M., Junio, G.D., Mamaril, J.J.R.,

- Matienzo, R.N., & Natabio, G.S., Rice Spikelet Yield Determination Using Image Processing. 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines, 2018.
- Alasco, R., Domdoma, E.A., Doria, K.A., Ricafranca, K.M., Saito, Y.E., Arago, N., Reyes, R., & Galido, E., SoilMATTic: Arduino-Based Automated Soil Nutrient and pH Level Analyzer using Digital Image Processing and Artificial Neural Network. 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Baguio City, Philippines, Philippines, 2018.
- Arago, N.M., Garcia, T.P., & Amado, T.M., Automated Chicken Manure Toxicity Level Reducer System Using Optimized Effective Microorganism (EM) Solution. TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South), 2018.
- Fernandez, E.O., Arago, N.M., Aquino, J.O., Bravo, J.M.P., Francisco, J.-A.S., Gaddi, C.V.B., & Simbran, C.A., Microcontroller-Based Automated Microscope for Image Recognition of Four Urine Constituents. TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South), 2018.
- Valenzuela, I.C., Arago, N.M., Abulon, E.L.R., & Morales, M.P.E., Design of a Life-Saving School Desk for Kindergarten Pupils During Seismic Activity. TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, Korea (South), 2018.
- Dimaya, B.V., Kasilag, K.J.U., Ong, F.I.D., Ramirez, B.P.B., Ramirez, K.E.V., Rascion, C.G., Arago, N.M., & Padilla, M.V., Mobile Soil Robot Collector via Smartphone with Global Positioning System for Navigation. 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), 2018:doi: 10.1109/HNICEM.2018.8666240.
- 2016 Orillo, J.W., Amado, T.M., Arago, N.M., & Fernandez, E., Rice Plant Disease Identification and Detection Technology Through Classification of Microorganisms Using Fuzzy Neural Network. UTM Jurnal Teknologi, 2016, 78(5-8):25-31.
- 2014 Arago, N.M., Amado, T.M., & Orillo, J.W.F., Utilization of cassegrain feed parabolic antenna design in increasing the efficiency of photovoltaic module. 2014 International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Palawan, Philippines, 2014.

Name John Y. Baluyut

Sex Male

Education

Doctor of Philosophy in Chemistry, Iowa State University, Ames, IA, USA 2015

Master of Science in Physical Chemistry, Iowa State University, Ames, IA, USA 2012

Master of Science in Organic Chemistry, University of Connecticut, Storrs, CT, USA 1997

Bachelor of Science in Chemistry, University of the Philippines Los Baños, Laguna, Philippines 1991

Fields of Specialization

Chemistry Education

Computational Chemistry

Theoretical Chemistry

Cheminformatics

Density Functional Theory

Quantum Chemistry

Conceptual Density Functional Theory

Physical Organic Chemistry

Employment

Assistant Professor, University of Providence, 2015 August-Present

Teaching Assistant Orientation Facilitator, Iowa State University, 2011 August-2013 August

Graduate Assistant, Iowa State University, 2009 August-2015 July

Assistant Professor, Mapua Institute of Technology, 2000 June-2009 June

Association Membership

Member, American Chemistry Society

Researches

Completed

A Multi-Scale Approach to the Simulation of Lignocellulosic Biomass

Papers Presented

2011 October Baluyut, J., Bungay, V., Salvacion, J.L., & Dugos, N. (2011 October). Effect of 2-amino-2-hydroxymethylpropane-1,3-diol on the modification of molecular interactions on the isobaric-vapor-liquid equilibria of ethanol-water system, 18th Regional Symposium on Chemical Engineering, Ho Chi Minh City, Vietnam.

Publications

2019 Baluyut, J.Y., & Holme, T.A., Eye tracking student strategies for solving stoichiometry problems involving particulate nature of matter diagrams. *Chemistry Teacher International*, 2019, 1(1):2569-3263.

- 2015 Luxford, C.J., Linenberger, K.J., Raker, J.R., Baluyut, J.Y., Reed, J.J., De Silva, C., & Holme, T.A., Building a Database for the Historical Analysis of the General Chemistry Curriculum Using ACS General Chemistry Exams as Artifacts. *Journal of Chemical Education*, 2015, 92(2):230-236.
Baluyut, J.Y., Unpacking students' atomistic understanding of stoichiometry. *Graduate Theses and Dissertations*, 2015:14753.
- 2013 Devarajan, A., Markutsya, S., Lamm, M.H., Cheng, X., Smith, J.C., Baluyut, J.Y., Kholod, Y., Gordon, M.S., & Windus, T.L., Ab Initio Study of Molecular Interactions in Cellulose I α . *Journal of Physical Chemistry B*, 2013, 117(36):10430-10443.
Markutsya, S., Devarajan, A., Baluyut, J.Y., Windus, T.L., Gordon, M.S., & Lamm, M.H., Evaluation of coarse-grained mapping schemes for polysaccharide chains in cellulose. *Journal of Chemical Physics*, 2013, 138(21):214108.
- 2012 Baluyut, J.Y., Cellulose and cellobiose: adventures of a wandering organic chemist in theoretical chemistry. Graduate College, Iowa State University, USA, 2012.
- 2011 Baluyut, J., Bungay, V., Salvacion, J.L., & Dugos, N., Effect of 2-amino-2-hydroxymethylpropane-1,3-diol on the modification of molecular interactions on the isobaric-vapor-liquid equilibria of ethanol-water system. *Proceedings of the 18th Regional Symposium on Chemical Engineering*, Vietnam, 2011.

Name Mariche Bandibas-Natividad

Sex Female

Education

Master of Science in Natural Resources Conservation major in Coastal Resource Management, University of the Philippines, 2012

Bachelor of Science in Environmental Science, Mindanao State University - Naawan, Naawan, Misamis Oriental 2009

Fields of Specialization

Biodiversity

Conservation Biology

Conservation

Coastal Ecology

Benthic Ecology

Mangrove Ecology

Mangroves

Employment

Science Research Specialist, Ecosystems Research and Development Bureau, Los Baños, Laguna, Philippines, 2012 January-Present

Papers Presented

2017 September Bandibas, M. (2017 September). Variation of Crab Assemblages in Protected and Reforested Mangrove Ecosystem, 2nd ASEAN Congress on Mangrove Research and Development: Managing Sustainable Mangroves in the Face of Climate Change, Conrad Hotel, Manila, Philippines.

2017 April Mackenzie, R., Sharma, S., Blate, G., Resanong, A., Tulyasuwan, N., Tieng, T., Wachirapunyanont, R., Nam, V.N., Sasmito, S.D., Murdiyarso, D., Purbopuspito, J., Castillo, J.A.A., Ranés, L., Salvatierra, B., & Bandibas, M. (2017 April). Mitigation of climate change through more effective rehabilitation of degraded and deforested mangroves, International Conference on Sustainable Mangrove Ecosystems, Bali, Indonesia.

2014 December Taguam, C., Ranés, L.C., Bandibas, M., Quiambao, C.B., Panizales, Y.J., & Bрева, L. (2014 December). Rapid Assessment of Migratory Birds in Mangrove Forests, Anda, Pangasinan, Philippines, R and D Congress on Wetlands and Migratory Waterbirds within the East Asian-Australasian Flyway (EAAF) Congress, Shangri-la, Mactan, Cebu City, Philippines.

Publications

2017 Bandibas, M., Variation of Crab Assemblages in Protected and Reforested Mangrove Ecosystem. 2nd ASEAN Congress on Mangrove Research and Development: Managing Sustainable Mangroves in the Face of Climate Change, Manila, Philippines, 2017.

Padin, J.I.M., & Bandibas, M., & Antong, A.G., The 'living crab fossil' in Snake Island. Canopy International, Ecosystems Research and Development Bureau, Department of Environment and Natural Resources, 2017, 43(1):8-9, 14.

Mackenzie, R., Sharma, S., Blate, G., Resanong, A., Tulyasuwan, N., Tieng, T.,

Wachirapunyanont, R., Nam, V.N., Sasmito, S.D., Murdiyarso, D., Purbopuspito, J., Castillo, J.A.A., Ranes, L., Salvatierra, B., & Bandibas, M., Mitigation of climate change through more effective rehabilitation of degraded and deforested mangroves. Proceedings of the International Conference on Sustainable Mangrove Ecosystems, Bali, Indonesia, 2017.

Bandibas, M.B., & Roxas, P.G., Antimicrobial test of five ethnomedicinal plants in an ancestral forest area. *Global Journal of Environmental Science and Management*, 2017, 3(3):10.

2015 Bandibas, M.B., & Hilomen, V.V., Crab biodiversity under different management schemes of mangrove ecosystems. *Global Journal of Environmental Science and Management*, 2015, 2(1):19-30.

2014 Taguam, C., Ranes, L.C., Bandibas, M., Quiambao, C.B., Panizales, Y.J., & Brevia, L., Rapid Assessment of Migratory Birds in Mangrove Forests, Anda, Pangasinan, Philippines. Proceedings of the R and D Congress on Wetlands and Migratory Waterbirds within the East Asian-Australasian Flyway (EAAF) Congress, Cebu City, Philippines, 2014.

Name Marites L. Bonachita-Sanguila

Sex Female

Fields of Specialization

Amphibians

Systematics

Conservation

Honors / Awards

3rd Best Paper (A Two-Stage Sequential Point Estimation of Functions of the Exponential Scale Parameter; 2. Molecular Phylogeography, Species Boundaries, and Conservation Status of Mindanao River Toads, by Pingal, A.C.P., Bonachita-Sanguila, MSU-IIT Department of Research 2011 June

Publications

- 2017 Brown, R.M., Prue, A., Onn, C.K., Gaulke, M., Sanguila, M.B., & Siler, C.D., Taxonomic Reappraisal of the Northeast Mindanao Stream Frog, *Sanguirana albotuberculata* (Inger 1954), Validation of *Rana mearnsi*, Stejneger 1905, and Description of a New Species from the Central Philippines. *Herpetological Monographs*, 2017, 31(1):182-203.
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Geheber, A.D., Davis, D.R., Watters, J.L., Penrod, M.L., Feller, K.D., Davey, C.S., Ellsworth, E.D., Flanagan, R.L., Heitz, B.B., Moore, T., Nguyen, M.D.C., Roberts, A., Sutton, J., Sanguila, M.B., Linkem, C.W., Brown, R.M., & Siler, C.D., Additions to Philippine Slender Skinks of the *Brachymeles bonitae* Complex (Reptilia: Squamata: Scincidae) I: a new species from Lubang Island. *Zootaxa*, 2016, 4132(1):001-014.
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Sex Male

Organizational Affiliations

Associate Professor, De La Salle University, Gokongwei College of Engineering, Malate, Manila

Education

Doctor of Philosophy in Chemical Engineering, Kunsan National University, Gunsan, South Korea 2014

Master of Science in Chemistry, Mapua Institute of Technology, Intramuros, Manila, Philippines 2009

Master of Science in Chemical Engineering, De La Salle University, Manila, Philippines 2008

Bachelor of Science in Chemistry, Mapua Institute of Technology, Intramuros, Manila, Philippines 2000

Bachelor of Science in Chemical Engineering, Mapua Institute of Technology, Intramuros, Manila, Philippines 1999

Fields of Specialization

Gasification

Reactor Modeling

Solution Thermodynamics

Chemical Reaction Engineering

Reaction Kinetics

Separation Technology

Kinetic Modeling

Process Modeling

Employment

Associate Professor, De La Salle University, 2014 September-Present

Papers Presented

2015 September Bungay, V. (2015 September). Applicability of Gas-Solid Reaction Models on the Gasification of Inner Mongolian Lignite with CO₂ and Steam, 22nd Regional Symposium on Chemical Engineering: RSCE 2015, Bangkok, Thailand.

2011 October Baluyut, J., Bungay, V., Salvacion, J.L., & Dugos, N. (2011 October). Effect of 2-amino-2-hydroxymethylpropane-1,3-diol on the modification of molecular interactions on the isobaric-vapor-liquid equilibria of ethanol-water system, 18th Regional Symposium on Chemical Engineering, Ho Chi Minh City, Vietnam.

Publications

2017 Soriano, A.N., Adamos, K.G., Bonifacio, P.B., Adornado, A.P., Bungay, V.C., & Vairavan, R., Erratum to: Determination of diffusion coefficients of various livestock antibiotics in water at infinite dilution. The European Physical Journal Conferences, 2017, 162:01089.

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Name Leni Diamante Camacho

Sex Female

Organizational Affiliations

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Fields of Specialization

Agricultural Economics

Environmental Economics

Forestry

Socioeconomics

Rural Development Planning

Papers Presented

2016 August 8-11 Gevaña, D., Camacho, L.D., Camacho, S.C., & Im, S. (2016 August 8-11). How Planting Distance Influences the Survival and Blue Carbon Production of Monoculture Mangrove Plantations in Banacon Island, Philippines?, Sustainable Forest Development in View of Climate Change (SFDCC2016), Putrajaya, Malaysia.

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Name Sofronio C. Camacho

Sex Male

Organizational Affiliations

Scientist, Forestry Development Center, College of Forestry and Natural Resources,
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Fields of Specialization

Remote Sensing

GIS

Forest Resource Management

Land Use

Papers Presented

2016 August 8-11 Gevaña, D., Camacho, L.D., Camacho, S.C., & Im, S. (2016 August 8-11). How Planting Distance Influences the Survival and Blue Carbon Production of Monoculture Mangrove Plantations in Banacon Island, Philippines?, Sustainable Forest Development in View of Climate Change (SFDCC2016), Putrajaya, Malaysia.

2015 November 2-4 Gevaña, D., Camacho, L.D., Carandang, A.P., Camacho, S.C., & Im, S. (2015 November 2-4). Managing stand density of monospecific mangrove plantation for better carbon stock, International Conference on Estuaries and Coasts (ICEC 2015), Muscat, Oman.

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2013 October 21-23 Carandang, A.P., Pulhin, J.M., Camacho, L.D., Camacho, S.C., Paras, F.D., Del Rosario, P.J.B., & Tesoro, F.O. (2013 October 21-23). Transition to Sustainable Forest Management and Rehabilitation in the Philippines, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

2013 October 21-23 Carandang, M.G., Carandang, A.P., Camacho, L.D., & Camacho, S.C. (2013 October 21-23). Enhancing Profitability of Smallholder Privateland Tree Plantations through Value Chain Analysis, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

2013 October 21-23 Camacho, S.C., Camacho, L.D., Carandang, A.P., Paras, F.D., & Del Rosario, P.J.B. (2013 October 21-23). Sustainable Agroforestry Development of DENR-LGU Co-Management Scheme in Agusan Del Norte, Philippines, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

2007 September Razal, R., Dolom, P., Villanueva, M.M.B., Camacho, S.C., & Peralta, E.O. (2007 September). Charting the Direction of Non-Timber Forest Products (NTFP) Research and Development in the Philippines: The Role of Forest Policies and Regulations, Non-Timber Forest Products (NTFP) Policy Forum entitled 'When "Non" Means Everything', University of the Philippines Hotel, Diliman, Quezon City, Philippines.

Publications

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- Carandang, A.P., Camacho, L.D., Gevaña, D.T., Dizon, J.T., Camacho, S.C., de Luna, C.C., Pulhin, F.B., Combalicer, E.A., Paras, F.D., Peras, R.J.J., & Rebugio, L.L., Economic valuation for sustainable mangrove ecosystems management in Bohol and Palawan, Philippines. *Forest Science and Technology*, 2013, 9(3):118-125.
- 2012 Camacho, L.D., Combalicer, M.S., Yeo-Chang, Y., Combalicer, E.A., Carandang, A.P., Camacho, S.C., de Luna, C.C., & Rebugio, L.L., Traditional forest conservation knowledge/technologies in the Cordillera, Northern Philippines. *Forest Policy and Economics*, 2012, 22:3-8.
- Razal, R.A., Dolom, P.C., Palacpac, A.B., Villanueva, M.M.B., Camacho, S.C., Alipon, M.B., Bantayan, R.B., & Malab, S.C., Mainstreaming Engineered-Bamboo Products for Construction and Furniture. DOST-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, and UP Los Baños Forestry Development Center, Philippines, 2012.
- 2011 Camacho, L.D., Gevaña, D.T., Carandang, A.P., Camacho, S.C., Combalicer, E.A., Rebugio, L.L., & Yeo-Chang, Y., Tree biomass and carbon stock of a community-managed mangrove forest in Bohol, Philippines. *Forest Science and Technology*, 2011, 7(4):161-167.
- Camacho, L.D., Carandang, A.P., Combalicer, M.S., Camacho, S.C., Gevaña, D.T., & Yeo-Chang, Y., Economic Implications of Different Management Opportunities in Makiling Forest Reserve (MFR), Philippines. *Korean Forest Economics Society*, 2011, 18(1):1-13.
- 2009 Diamante-Camacho, L., Camacho, S.C., & Yeo-Chang, Y., Values of forest products in the Makiling Forest Reserve (MFR), Philippines. *Forest Science and Technology*, 2009, 5(2):35-44.
- Carandang, M.G., Camacho, L.D., Carandang, A.P., Camacho, S.C., Gevaña, D.T.,

- Rebugio, L.L., & Yeo-Chang, Y., Sustainable thatching materials production from nipa (*nypa fruticans*) in Bohol, Philippines. *Forest Science and Technology*, 2009, 5(1):17-22.
- Camacho, L.D., Camacho, S.C., & Yeo-Chang, Y., Carbon sequestration benefits of the makiling forest reserve, Philippines. *Forest Science and Technology*, 2009, 5(1):23-30.
- Camacho, L.D., Combalicer, E.A., Yeo-Chang, Y., Combalicer, M.S., De Luna, C.C., & Camacho, S.C., Traditional forest conservation knowledge/technologies: The Case of the Ifugaos, Philippines. *Korean Forest Society*, 2009, 2(12):599-601.
- 2007 Camacho, L.D., Tolentino, E.L., Jr., Rebugio, L.L., & Camacho, S.C., Economics of using water use efficient forest landscape restoration tree species. *Forest Science and Technology*, 2007, 3(2):101-107.
- Camacho, L.D., Rebugio, L.L., Camacho, S.C., Carandang, A.P., & Paras, F.D., Economic aspects of community-based forest management program as a strategy for forest landscape restoration in the Philippines. *Forest Science and Technology*, 2007, 3(2):108-16.
- 2006 Camacho, L.D., & Camacho, S.C., Economic implications of reforestation as a forest restoration strategy under the community-based forest management program in Quirino province, Philippines. *Forest Science and Technology*, 2006, 2(1):27-35.

Name Antonio P. Carandang

Sex Male

Organizational Affiliations

Associate Professor and University Researcher III, College of Forestry and Natural Resources, University of the Philippines Los Baños, Laguna, Philippines

Field of Specialization

Natural Resources Economics and Policy

Researches

Completed

Portfolio Investment Approach for the Philippine National Greening Program

Private Sector Portfolio Forest Plantation Investment Approach for the Philippine National Greening Program

Papers Presented

2015 November 2-4 Gevaña, D., Camacho, L.D., Carandang, A.P., Camacho, S.C., & Im, S. (2015 November 2-4). Managing stand density of monospecific mangrove plantation for better carbon stock, International Conference on Estuaries and Coasts (ICEC 2015), Muscat, Oman.

2013 October 21-23 Carandang, A.P., Pulhin, J.M., Camacho, L.D., Camacho, S.C., Paras, F.D., Del Rosario, P.J.B., & Tesoro, F.O. (2013 October 21-23). Transition to Sustainable Forest Management and Rehabilitation in the Philippines, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

2013 October 21-23 Carandang, M.G., Carandang, A.P., Camacho, L.D., & Camacho, S.C. (2013 October 21-23). Enhancing Profitability of Smallholder Privateland Tree Plantations through Value Chain Analysis, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

2013 October 21-23 Camacho, S.C., Camacho, L.D., Carandang, A.P., Paras, F.D., & Del Rosario, P.J.B. (2013 October 21-23). Sustainable Agroforestry Development of DENR-LGU Co-Management Scheme in Agusan Del Norte, Philippines, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

Publications

2016 Camacho, L.D., Gevaña, D.T., Carandang, A.P., & Camacho, S.C., Indigenous knowledge and practices for the sustainable management of Ifugao forests in Cordillera, Philippines. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 2016, 12(1-2):5-13.

2015 Camacho, S.C., Carandang, A.P., Camacho, L.D., Gevaña, D.T., Carandang, M.G., Lorida, R.E., & Bandian, M.N.P., Economic Potential of Citronella (*Cymbopogon winterianus*) production in the Philippines. *Philippine Journal of Crop Science*, 2015, 40(3):73-81.

Carandang, A.P., Carandang, M.G., Camacho, L.D., Camacho, S.C., Aguilon, B.C., & Gevaña, D.T., Profitability of Smallholder Private Tree Plantations in Talacogon, Agusan Del Sur, Philippines. *Ecosystems & Development Journal*, 2015, 5(3):3-11.

Gevaña, D., Camacho, L., Carandang, A., Camacho, S., & Im, S., Land use characterization and change detection of a small mangrove area in Banacon Island, Bohol, Philippines using a maximum likelihood classification method. *Forest Science*

- and Technology, 2015, 11(4):197-205.
- 2013 Camacho, L.D., Carandang, A.P., Gevaña, D.T., Pulhin, F.B., Camacho, S.C., Dizon, J.T., Combalicer, E.A., Paras, F.D., & Rebugio, L.L., Financial Analysis of Carbon Sequestration of Man-Made Mangrove Forests in Bohol, Philippines. *Ecosystems & Development Journal*, 2013, 4(1):14-22.
Carandang, A.P., Camacho, L.D., Gevaña, D.T., Dizon, J.T., Camacho, S.C., de Luna, C.C., Pulhin, F.B., Combalicer, E.A., Paras, F.D., Peras, R.J.J., & Rebugio, L.L., Economic valuation for sustainable mangrove ecosystems management in Bohol and Palawan, Philippines. *Forest Science and Technology*, 2013, 9(3):118-125.
- 2012 Camacho, L.D., Combalicer, M.S., Yeo-Chang, Y., Combalicer, E.A., Carandang, A.P., Camacho, S.C., de Luna, C.C., & Rebugio, L.L., Traditional forest conservation knowledge/technologies in the Cordillera, Northern Philippines. *Forest Policy and Economics*, 2012, 22:3-8.
- 2011 Camacho, L.D., Gevaña, D.T., Carandang, A.P., Camacho, S.C., Combalicer, E.A., Rebugio, L.L., & Yeo-Chang, Y., Tree biomass and carbon stock of a community-managed mangrove forest in Bohol, Philippines. *Forest Science and Technology*, 2011, 7(4):161-167.
Camacho, L.D., Carandang, A.P., Combalicer, M.S., Camacho, S.C., Gevaña, D.T., & Yeo-Chang, Y., Economic Implications of Different Management Opportunities in Makiling Forest Reserve (MFR), Philippines. *Korean Forest Economics Society*, 2011, 18(1):1-13.
- 2010 Rebugio, L.L., Carandang, A.P., Dizon, J.T., Pulhin, J.M., Camacho, L.D., Lee, D.K., & Peralta, E.O., Promoting sustainable forest management through community forestry in the Philippines. *IUFRO World Series*, 2010, 25:355-368.
- 2009 Carandang, M.G., Camacho, L.D., Carandang, A.P., Camacho, S.C., Gevaña, D.T., Rebugio, L.L., & Yeo-Chang, Y., Sustainable thatching materials production from nipa (*nypa fruticans*) in Bohol, Philippines. *Forest Science and Technology*, 2009, 5(1):17-22.
- 2007 Camacho, L.D., Rebugio, L.L., Camacho, S.C., Carandang, A.P., & Paras, F.D., Economic aspects of community-based forest management program as a strategy for forest landscape restoration in the Philippines. *Forest Science and Technology*, 2007, 3(2):108-116.
Rebugio, L.L., Pulhin, J.M., Carandang, A.P., Peralta, E.O., Camacho, L.D., & Bantayan, N.C., Forest Restoration and Rehabilitation in the Philippines. In: Lee, D.K., (Ed.), *Keep Asia Green Volume I "Southeast Asia"*, 2007:125-169.
- 2006 Chokkalingam, U., Pulhin, J.M., Carandang, A.P., Peras, R.J., Lasco, R.D., & Natividad, M.Q., Outcomes and sustainability: lessons from the ground. In: Chokkalingam, U., Carandang, A.P., JM Pulhin, J.M., Lasso, R.D., Peras, R.J.J., & Torna, T. (Eds.), *One century of forest rehabilitation in the Philippines*, Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2006.

Name Myrna G. Carandang

Sex Female

Education

Post-Graduate Diploma in Forest Survey, (With Distinction), International Institute of Aerospace Survey and Earth Sciences (ITC), The Netherlands 1991

Doctor of Philosophy, Major in Forest Resources Management and Minor in Operations Research/Statistics, University of the Philippines Los Baños, Laguna, Philippines 1990

Master of Science in Forestry, Major in Forest Biometry and Minor in Timber Management, University of the Philippines Los Baños, Laguna, Philippines 1982

Bachelor of Science in Applied Mathematics, University of the Philippines Los Baños, Laguna, Philippines 1975

Fields of Specialization

Natural Resources Assessment

Biometry

Operations Research

Forestry Statistics

Honors / Awards

UPLB Centennial Professorial Chair Award, University of the Philippines Los Baños 2013-2014

UP International Publication Award, University of the Philippines 2007, 2008, 2009, 2012

UPLB Centennial Professorial Chair Award, University of the Philippines Los Baños 2011-2012

Metro Manila Commission Professorial Chair Award, University of the Philippines Los Baños 2006

Papers Presented

2013 October 21-23 Carandang, M.G., Carandang, A.P., Camacho, L.D., & Camacho, S.C. (2013 October 21-23). Enhancing Profitability of Smallholder Privateland Tree Plantations through Value Chain Analysis, Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.

Publications

2015 Camacho, S.C., Carandang, A.P., Camacho, L.D., Gevaña, D.T., Carandang, M.G., Lorida, R.E., & Bandian, M.N.P., Economic Potential of Citronella (*Cymbopogon winterianus*) production in the Philippines. *Philippine Journal of Crop Science*, 2015, 40(3):73-81.

Carandang, A.P., Carandang, M.G., Camacho, L.D., Camacho, S.C., Aguilon, B.C., & Gevaña, D.T., Profitability of Smallholder Private Tree Plantations in Talacogon, Agusan Del Sur, Philippines. *Ecosystems & Development Journal*, 2015, 5(3):3-11.

2014 Latifah, S., Villanueva, T.R., Carandang, M.G., Bantayan, N.C., & Florece, L.M., The most important factors affecting yield of the Eucalyptus species. *Journal of Agriculture, Forestry and Fisheries*, 2014, 3(4):217-223.

- Latifah, S., Villanueva, T.R., Carandang, M.G., Bantayan, N.C., & Florece, L.M., Predicting growth and yield models for Eucalyptus species in Aek Nauli, North Sumatera, Indonesia. *Journal of Agriculture, Forestry and Fisheries*, 2014, 3(4):209-216.
- 2012 Codilan, A.L., Carandang, M.G., & Calderon, M.M., Allometric Equations for Three Mangrove Species in Real, Quezon, Philippines. *Ecosystems and Development: A Journal on Tropical Forests and Natural Resources*, 2012, 3(1):24-27.
- 2009 Carandang, M.G., Camacho, L.D., Carandang, A.P., Camacho, S.C., Gevaña, D.T., Rebugio, L.L., & Yeo-Chang, Y., Sustainable thatching materials production from nipa (*nypa fruticans*) in Bohol, Philippines. *Forest Science and Technology*, 2009, 5(1):17-22.
- 2008 Carandang, M.G., Calderon, M.M., Camacho, L.D., & Dizon, J.T., Parametric and Non-parametric Models to Estimate Households' Willingness to Pay for Improved Management of Watershed. *Journal of Environmental Science and Management*, 2008, 11(2):68-78.
- 2006 Dizon, J.T., Calderon, M.M., Camacho, L.D., Carandang, M.G., Rebugio, L.L., & Tolentino, N.M., Institutionalization of a water user fee for watershed management. *Forest Science and Technology*, 2006, 2(1):51-56.
- Calderon, M.M., Camacho, L.D., Carandang, M.G., Dizon, J.T., Rebugio, L.L., & Tolentino, N.L., Willingness to pay for improved watershed management: Evidence from Metro Manila, Philippines. *Forest Science and Technology*, 2006, 2(1):42-50.
- 2004 Calderon, M.M., Camacho, L.D., Carandang, M.G., Dizon, J.T., Rebugio, L.L., & Tolentino, N.L., A Water User Fee for Households in Metro Manila, Philippines. *Economy and Environment Program for Southeast Asia (EEPSEA)*, Singapore, 2004:1-69.

Name Armin Santos Coronado

Sex Male

Education

Doctor of Philosophy in Botany, major in Phycology (cognates in Zoology and Environmental Science), University of the Philippines Los Baños, Laguna, Philippines 2017

Master of Science in Biology, Ateneo de Manila University, Manila, Philippines 2009

Bachelor of Science in Biology, major in Zoology, Central Luzon State University, Nueva Ecija, Philippines

Fields of Specialization

Biology

Biodiversity

Ecology

Biotechnology

Aquatic Science

Community Structure

Algae Culture

Algal Diversity

Zooplankton

Algal Biotechnology

Phycology

Copepoda

Association Membership

Board Member, Philippine Phycological Society, Inc.

Papers Presented

2015 June 26-27 Coronado, A.S., Baquiran, J.I.P., Masacupan, D.J.M., & Dionisio-Sese, M.L. (2015 June 26-27). Anti-proliferative Activity of Crude Sulfated Polysaccharide Extracted from *Hormophysa cuneiformis* (J.F. Gmelin) P.C. Silva Using In-vitro Fertilized Sea Urchin Embryos, 6th National Symposium and Scientific Meeting on "Enhancing Regional Capability for Algal Research and Commercialization" of Philippine Phycological Society, Inc., Mariano Marcos State University, City of Batac, Ilocos Norte, Philippines.

2015 June 26-27 Coronado, A.S., & Dionisio-Sese, M.L. (2015 June 26-27). Antioxidant Activity of Crude Sulfated Polysaccharide Extracted from *Sargassum crassifolium* J .G. Agardh, 6th National Symposium and Scientific Meeting on "Enhancing Regional Capability for Algal Research and Commercialization" of Philippine Phycological Society, Inc., Mariano Marcos State University, City of Batac, Ilocos Norte, Philippines.

2014 October 1-2 Coronado, A.S., Begnotea, K.D.A., & Taruc, R.J.B. (2014 October 1-2). Population Growth and Size Class Distribution of *Moina macrocopa* (Strauss) Reared in Different Culture Conditions, BFAR-NFRDI 6th Scientific Conference held at Ciudad Christina, San Mateo, Rizal, Philippines.

- 2013 April 16 Coronado, A.S., Kenneth, J., Manaloto, A., & Reyes, T.M. (2013 April 16). Taxonomic Survey of Brown Algae (Division *Phaeophyta*) in Polillo Island, Quezon Province, Philippines, 5th National Phycological Symposium and Scientific Meeting on "Exploring Algae Diversity for Health, Environment and Industry", Southeast Asian Fisheries Development Center, Tigbaun, Iloilo, Philippines.
- 2011 May 16-18 Coronado, A.S., Regala, C.J.O., & Casayuran, M.O. (2011 May 16-18). Leaf Shape Variation between *Halophila ovalis* (R. Br.) Hook F. and *Halophila minor* (Zoll.) den Hartog (Family Hydrocharitaceae), Association of Systematic Biologist of the Philippines (ASBP) Annual Conference, University of Santo Tomas, España, Manila.
- 2011 May 16-18 Coronado, A.S., Mallari, J.G.S., & Balana, S.J.M. (2011 May 16-18). Community Structure of Zooplankton in Sampaloc Lake, San Pablo City, Laguna, Philippines, Association of Systematic Biologist of the Philippines (ASBP) Annual Conference, University of Santo Tomas, España, Manila.
- 2010 November 5 Coronado, A.S., Camacho, M.V., Lontoc, B., & Ocampo, P.P. (2010 November 5). Population Growth and Size-Class Distribution of *Moina micrura* Krunz Reared in Six Culture Methods, 14th Southern Luzon Zonal Research and Development Symposium and Planning Workshop, Western Philippines University - Puerto Princesa Campus, Puerto Princesa, Palawan, Philippines.
- 2010 April Coronado, A.S., Martinez-Goss, M.R., & Camacho, M.V. (2010 April). Phytoplankton and Zooplankton Community Structure in Bunot Lake, San Pablo City, Laguna, Philippines, 4th National Symposium and Scientific Meeting of Philippine Phycological Society, Inc., Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) Auditorium, University of the Philippines Los Baños, Laguna, Philippines.
- 2009 July 31 Coronado, A.S. (2009 July 31). Leaf Shape Variation in Selected Philippine *Rhizophoraceae* Mangroves and Its Taxonomic Implications, 11th Annual Research Colloquium, College of Science, Polytechnic University of the Philippines, Philippines.

Publications

- 2017 Magno-Tan, M.J., Alejandrino, A.C., Dela Cruz, C.G., Inoc, A.C., & Coronado, A.S., Web-based Decision Support System for Broodstock Management of *Siganus guttatus* (Bloch, 1787) in Open Fish Cage. *International Journal of Machine Learning and Computing*, 2017, 7(6):208-212.
- 2016 Beroña, E.A., Buntag, D.R.B., Tan, M.J.M., & Coronado, A.S., Web-Based Decision Support System for Water Quality Monitoring and Prediction for Outdoor Microalgae Cultivation. *IOSR Journal of Computer Engineering*, 2016, 18(3):16-20.
- 2015 Magno-Tan, M.J., Rigor, J.G.C., San Juan, J.R., Jr., & Coronado, A.S., Automated Cell Counter for *Dunaliella* Under Laboratory Condition. *PUP Journal of Science and Technology*, 2015, 8:37-43.
- Villanuel, M.J.S., Coronado, A.S., & Camacho, M.V.DLC., Preliminary Assessment of Water Quality of Donata Falls in Polillo, Quezon, Philippines Using Macrobenthos. *PUP Journal of Science and Technology*, 2015, 8:11-24.
- 2014 Coronado, A.S., & Dionisio-Sese, M.L., Antimicrobial property of crude ethanolic extract from *Sargassum crassifolium*. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 2014, 16(4):383-386.
- Coronado, A.S., & Camacho, M.V.C., Influence of Yeast, Chicken Manure and Daily Feeding of *Chlorella ellipsoidea* in the Population Growth of *Moina micrura*. *PUP Journal of Science and Technology*, 2014, 7(1):18-27.
- Coronado, A.S., Dionisio-Sese, M.L., Antimicrobial Property of Crude Ethanolic Extract from *Sargassum crassifolium* J.G. Agardh. *Asian Journal of Microbiology, Biotechnology & Environmental Sciences Paper*, 2014, 16(3):471-474.

- 2013 Villaruel, M.C.J.S., & Coronado, A.S., Toxicity of Sulfated Polysaccharide Extracted From Brown Algae *Sargassum crassifolium* J.G. Agardh Using *Moina macrocopa* (Strauss, 1820). PUP Journal of Science and Technology, 2013, 6(1):31-42.
- 2011 Coronado, A.S., Mallari, J.G.S., & Balana, S.J.M., Community Structure of Zooplankton at Sampaloc Lake, San Pablo City, Laguna, Philippines. PUP Journal of Science and Technology, 2011, 4:43-50.
- 2008 Coronado, A.S., Torres, M.A.J., Panes, V.A., Demayo, C.G., Tolentino, V.S., & Lagunsad, C.B., Patterns of Leaf Shape Variations in *Ceriops tagal* (Perr.) C.B. Robb. PUP Journal of Science and Technology, 2008, 2(1):25-31.

Name Pamela A. Custodio

Sex Female

Organizational Affiliations

Assistant Professor, Department of Development Journalism, College of Development Communication, University of the Philippines Los Baños,

Fields of Specialization

Interpersonal and Participatory Communication

Community Communication and Qualitative Research

Agriculture

Papers Presented

- 2018 May 24-28 Mendiola, R.L.B., Custodio, P., & Bernardo, E. (2018 May 24-28). Twitter as public engagement or electronic elsewhere? The case of Project NOAH, 68th Annual International Communication Association (ICA) Conference, Prague, Czech Republic.
- 2017 September 19-20 Mendiola, R.L.B., Bernardo, E., & Custodio, P. (2017 September 19-20). Public Engagement in Science, Poster session. Philippine Association for the Advancement of Science and Technology (PHILAAST) Convention, Pasay City, Philippines.
- 2013 December 5-7 Carpio-Serrano, L., & Custodio, P. (2013 December 5-7). Reflections on CDC-UPLB's Undergraduate Communication Theory Class, 3rd National Conference of the Consortium of Development Communication Educators and Practitioners of the Philippines.
- 2012 October 22-24 Carpio-Serrano, L.B., & Custodio, P.A. (2012 October 22-24). When Digital Natives "Drop Off the Face of the World", 11th Asia Pacific Sociological Association Conference 2012 -"Sociology and Social Transformations in the Asia Pacific Region".
- 2010 April 6-7 Cangao, C.A.T., Custodio, P., & Borja-Osalla, M.T. (2010 April 6-7). Learning as an adventure: How online video gaming values can recreate the traditional classroom, 3rd Annual International Conferences on Computer Games, Multimedia and Allied Technology (CGAT 2010), Singapore Management University, Singapore.

Publications

- 2019 Ponce de Leon, I.Z., Custodio, P.A., & David, C., Depicting Science in a Public Debate: The Philippine Legal Challenge Against GMO Eggplant. *Science Communication*, 2019, 41(3):291-313.
- Mendiola, R.L.B., & Custodio, P.A., Chapter 10. Self-Reflexivity in DevCom Research: An Autoethnography: Meaning, Power, and Resistance. In: Dutta, M.J., & Zapata, D.B. (Eds.), *Communicating for Social Change: Meaning, Power, and Resistance*. Springer Nature Singapore Pte Ltd., Singapore, 2019:197-212.
- Amoyan, C.J., & Custodio, P.A., Chapter 4. Development Communication and the Dialogic Space: Finding the Voices Under the Mines: Meaning, Power, and Resistance. In: Dutta, M.J., & Zapata, D.B. (Eds.), *Communicating for Social Change: Meaning, Power, and Resistance*. Springer Nature Singapore Pte Ltd., Singapore, 2019:63-86.
- 2018 Mendiola, R.L.B., Custodio, P., & Bernardo, E., Twitter as public engagement or electronic elsewhere? The case of Project NOAH. 68th Annual International Communication Association (ICA) Conference, Prague, Czech Republic, 2018.
- 2016 Muya, G., & Custodio, P., Constructing the Student-Teacher Identities Through Mobile Phone Text Messages. *Advanced Science Letters*, 2016, 22(12):4151-4154.

- Mendiola, R.L.B., & Custodio, P., *Self-Reflexivity in DevCom Research: An Autoethnography. Communication for Social Change: Intersections of Theory and Practice*, Singapore, 2016.
- 2015 Pasa, K., Rahman, M.M., Diaz, C.P., Maksurat, S.N., Palis, F.G., & Custodio, P., *Impact of Community-led Action Research on Production Decisions and Food Adjustment Strategies in a Grain-Producing Village in Northwest Bangladesh. Asian Journal of Agriculture and Development*, 2015, 12(2):77-90.
- 2014 Secillano, I.J.S., & Custodio, P.A., *Understanding Notions of Local Governance in Libon, Albay (Philippines). SHS Web of Conferences*, 2014, 5(00004):doi: 10.1051/shsconf/20140500004.
- 2010 Cangao, C.A.T., Custodio, P., & Borja-Osalla, M.T., *Learning as an adventure: How online video gaming values can recreate the traditional classroom. Proceedings of the 3rd Annual International Conferences on Computer Games, Multimedia and Allied Technology*, 2010.

Name Kevin B. Dagbay

Sex Male

Education

Doctor of Philosophy in Biological Chemistry, University of Massachusetts, Amherst, USA 2017

Master of Science in Chemistry, University of the Philippines, 2008

Bachelor of Science in Biochemistry, University of the Philippines Manila, 2003

Fields of Specialization

Biological Chemistry

Biochemistry

Cloning

Mass Spectrometry

Apoptosis

Biomaterials

Drug Discovery

Electrospinning

Protein X-ray Crystallography

Structural Bioinformatics and Structural Biology

High Throughput Screening

Allosteric Regulation

Drug Delivery

Biotechnology

in vitro fermentation

Biosorption

Employment

Scientist, Scholar Rock, 2017 November-Present

Postdoctoral Research Fellow, Harvard Medical School, 2017

Postdoctoral Research Fellow, Boston Children's Hospital, 2017

Graduate Research / Teaching Assistance, University of Massachusetts Amherst, 2010 September-2017 April

University Research Associate, Natural Sciences Research Institute, University of the Philippines, 2007 December-2008 December

Faculty Member, Mapua University, 2003 October-2010 September

Association Membership

Associate Member, National Research Council of the Philippines

Member, The Protein Society

Member, Kapisanang Kimika ng Pilipinas (Chemical Society of the Philippines)

Member, Biotechnology Coalition of the Philippines

Member, Integrated Chemists of the Philippines

Member, Philippine Society for Biochemistry and Molecular Biology

Member, Philippine Environment Mutagen Society

Honors / Awards

Gordon Research Conference Fellowship, GRC on Molecular Structure Elucidation
2016 August

Best Poster Award, UMass Chemical-Biology Interface Training Program, UMass
Amherst/UMass Medical School 2016 June

William E. McEwen Fellowship Award for Outstanding Poster Presentation, 24th
Annual Research Symposium, Department of Chemistry, University of Massachusetts
Amherst 2014 August

3M Award for Most Outstanding Poster Presentation, 23rd Annual Research
Symposium, Department of Chemistry, University of Massachusetts Amherst 2013
August

Outstanding MS Thesis Award (Chemistry Category), Department of Science and
Technology - Advanced Science and Technology of the Philippine Council for
Advanced Science and Technology Research and Development (DOST-PCASRTD)
2009 December

1st Prize for Likha Award (Creative Research Award), National Invention Contest
(Team Category) cited for the "Development of Local Bioactive Polymer Nanofibrous
Scaffold by Electrospinning", Department of Science and Technology 2009 November

Opportunity Grant Awardee, (Fulbright) Philippine-American Education Foundation
2009 October

Best Poster Paper Presentation, 1st Regional Conference on Biotechnology, Manila,
Philippines, AUN/SEED-NET, JICA, DLSU 2009 July 30-31

Finalist (Team category), Outstanding Research and Development in Advanced
Science and Technology, Department of Science and Technology 2009 July

Outstanding Junior Faculty Award, Department of Chemistry, Chemical Engineering
and Biotechnology, Mapua Institute of Technology 2009 April

CHED International Travel Grant, Commission on Higher Education of the Republic
of the Philippines 2008 December

Best Poster Paper Presentation, 10th Eurasia International Conference on Chemical
Sciences 2008 January

DOST-SEI Science and Technology Scholarship, Department of Science and
Technology 1999-2003

High School Class Valedictorian, Saint Rita's College 1999 March

Researches

Completed

Enzyme -Catalyzed Conversion of Used Cooking Oil into Biodiesel

Papers Presented

- 2012 July 1-6 Singidas, L.A., Reyes, L., Tang, T., & Dagbay, K. (2012 July 1-6). Polycaprolactone-carrageenan Nanofibers Assembled by Electrospinning with Vitamin E Tpgs as a Surfactant, International Conference of Young Researchers on Advanced Materials (IUMRS - ICYRAM), Singapore.

Publications

- 2019 Okerberg, E.S., Dagbay, K.B., Green, J.L., Soni, I., Aban, A., Nomanbhoy, T.K., Savinov, S.N., Hardy, J.A., & Kozarich, J.W., Chemoproteomics Using Nucleotide Acyl Phosphates Reveals an ATP-Binding Site at the Dimer Interface of Procaspase-6. *Biochemistry*, 2019.
- 2018 Eron, S.J., Macpherson, D., Dagbay, K., & Hardy, J.A., Multiple Mechanisms of Zinc-Mediated Inhibition for the Apoptotic Caspases-3, -6, -7, and -8. *ACS Chemical Biology*, 2018, 13(5):1279-1290.
- 2017 Dagbay, K.B., & Hardy, J.A., Multiple proteolytic events in caspase-6 self-activation impact conformations of discrete structural regions. *Proceedings of the National Academy of Sciences of the United States of America*, 2017, 114(38):E7977-E7986.
Dagbay, K.B., Bolik-Coulon, N., Savinov, S.N., & Hardy, J.A., Caspase-6 Undergoes a Distinct Helix-Strand Interconversion upon Substrate Binding. *The Journal of Biological Chemistry*, 2017, 292(12):4885-4897.
Dagbay, K.B., Hill, M.E., Barrett, E., & Hardy, J.A., Tumor-Associated Mutations in Caspase-6 Negatively Impact Catalytic Efficiency. *Biochemistry*, 2017, 56(34):4568-4577.
- 2014 Dagbay, K., Eron, S.J., Serrano, B.P., Velázquez-Delgado, E.M., Zhao, Y., Lin, D., Vaidya, S., & Hardy, J.A., A multipronged approach for compiling a global map of allosteric regulation in the apoptotic caspases. *Methods in Enzymology*, 2014, 544:215-249.
Dagbay, K.B., & Sumera, F.C., Lauric Acid Derived Polyanhydrides: Synthesis, Characterization, *In vitro* Degradation and Drug Release Behavior. *Philippine Journal of Science*, 2014, 143(2):113-123.
- 2012 Singidas, L.A., Reyes, L., Tang, T., & Dagbay, K., Polycaprolactone-carrageenan Nanofibers Assembled by Electrospinning with Vitamin E Tpgs as a Surfactant. *Proceedings of the International Conference of Young Researchers on Advanced Materials*, 2012.
- 2009 Caparanga, A.R., Basilia, B.A., Dagbay, K.B., & Salvacion, J.W., Factors affecting degradation of polyethylene terephthalate (PET) during pre-flotation conditioning. *Waste Management*, 2009, 29(9):2425-2428.
- 2008 Mallillin, A.C., Trinidad, T.P., Raterta, R., Dagbay, K., & Loyola, A.S., Dietary fibre and fermentability characteristics of root crops and legumes. *The British Journal of Nutrition*, 2008, 100(3):485-488.
Basilia, B.A., Dagbay, K.B., Ledda, K.A., & Robles, A.P., In-vitro and In-vivo Screenings of Electrospun Polycaprolactone-carrageenan Nanofibrous Scaffolds for Tissue Engineering. *Nanotechnology 2008: Life Sciences, Medicine & Bio Materials - Technical Proceedings of the 2008 NSTI Nanotechnology Conference and Trade Show - TechConnect Briefs*, 2008, 2:306-309.

Name Romel A. Daya

Sex Male

Organizational Affiliations

Assistant Professor 4, Department of Educational Communication, College of Development Communication, University of the Philippines Los Baños, College, 4031 Laguna, Philippines

Education

Master of Science in Development Communication, University of the Philippines Los Baños, Laguna, Philippines

Bachelor of Science in Development Communication (cum laude), University of the Philippines Los Baños, Laguna, Philippines

Fields of Specialization

Educational Communication

Participatory Communication

Media Literacy

Community Education and Development

Media-based Learning Systems

Participatory Development

Basic and functional literacy

Employment

Assistant Professor 4, College of Development Communication, University of the Philippine

Association Membership

Founder & Auditor, Association of Development Communication Educators and Practitioners (ADCEP) Philippines Inc.

Member, Philippine Association of Communication Educators

Founder & alumnus, UP Photographers Society

Founder & alumnus, UP Road Trip

Faculty Volunteer, UPLB Ugnayan ng Pahinungod

Former Board Member, UPLB Alumni Association

Alumnus, UP Development Communicators' Society

Alumnus, UP Banahaw

Fellow, Salzburg (Austria) Global Seminar

Member, Gamma Sigma Delta Honor Society of Agriculture

Papers Presented

2018 February 7-8 Daya, R.A. (2018 February 7-8). Pagsusuring Semiotika sa Mga Mito sa Kalikasan sa mga Litrato sa *Travel Blogs* na Nagtatampok sa Calamianes, Palawan, BigkiSining:

Creativities and innovations for global environmental sustainability, 11th De La Salle University Congress, Manila, Philippines.

Publications

- 2019 Daya, R.A., The Filipinos and the Philippines in Nora Cruz Quebral's Development Communication Discourse: Strengthening Communication's Groundedness in a Nation's Context. *International Journal of Asia Pacific Studies*, 2019, 15(2):143-173.
- 2018 Daya, R.A., Pagsusuring Semiotika sa Mga Mito sa Kalikasan sa mga Litrato sa *Travel Blogs* na Nagtatampok sa Calamianes, Palawan. Proceedings of the 11th De La Salle University Congress, Manila, Philippines, 2018.
- 2014 Torres, C.S., Daya, R.A., Osalia, M.T.B., & Gopela, J.L.N., Analysis of the Dynamics of Biotech Corn Diffusion among Small-scale Farmers in the Philippines using the Innovation Tree Method. *Philippine Journal of Development Communication*, 2014, 6:31-63.
- 2013 Torres, C.S., Daya, R.A., Osalla, M.T.B., & Gopela, J.N., Adoption and Uptake Pathways of GM/Biotech Crops by Small Scale, Resource Poor Filipino Farmers. College of Development Communication, International Service for the Acquisition of Agri-biotech Applications (ISAAA) SEAsiaCenter, and SEAMEO Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA): Los Baños, Laguna, 2013.
- Rigor, L.A., Jr., & Daya, R.A., [Re]Creating the Lived Experiences of Women in a Struggle for Agrarian Reform in Hacienda Luisita. *Philippine Journal of Development Communication*, 2013, 5(1):22-47.
- 2012 Torres, C.S., Centeno, E.G., Daya, R.A., Osalia, M.T.B., & Gopela, J.N., Adoption and Uptake Pathways of Biotechnology Crops: The Case of Biotech Corn Farmers in Selected Provinces of Luzon. College of Development Communication, International Service for the Acquisition of Agri-biotech Applications (ISAAA) SEAsiaCenter, and SEAMEO Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA): Los Baños, Laguna, 2012.
- 2010 Daya, R.A., Experiences of facilitators in using ADIDS as a participatory approach in a training class: an exploratory study. *University of Southern Mindanao Research and Development*, 2010, 18(2):171-180.

Name Christian Paul P. de la Cruz

Sex Male

Organizational Affiliations

Research Staff, Parasitology Research Laboratory, Animal Biology Division, Institute of Biological Sciences, College of Arts and Sciences, University of the Philippines Los Baños, Laguna, Philippines

Faculty, Laguna State Polytechnic University, Los Baños, Laguna, Philippines

Education

Doctor of Philosophy in Animal Physiology, University of the Philippines, Philippines 2015

Master of Science in Parasitology, University of the Philippines, Philippines 2012

Bachelor of Science in Biology, University of St. La Salle Bacolod, Negros Occidental, Philippines 2009

Fields of Specialization

Animal Parasitology

Molecular Biology

Public Health

Environmental Science

Employment

Faculty, Laguna State Polytechnic University Los Baños, 2015 June-Present

Research Staff, University of the Philippines Los Baños, 2013 February-Present

Faculty, Miriam College, 2013 November-2014 March

Faculty, University of the Philippines Manila, 2013 June-2014 May

Research Associate, University of the Philippines Los Baños, 2012 May-2012 October

Research Intern, University of the Philippines Los Baños, 2011 November-2012 March

Research Assistant, University of the Philippines Los Baños, 2011 February-2011 October

Faculty, Negros Oriental State University, 2009 June-2009 October

Papers Presented

2014 March 26-27 Paller, V.G.V., Bandal, M.Z., Jr., de la Cruz, C.P.P. (2014 March 26-27). Parasitic Acanthocephala in Freshwater Fishes from the Seven Lakes of San Pablo, Philippines: a Prospective Heavy Metal Biosink in Aquatic Ecosystem, 81st General Membership Assembly, National Research Council of the Philippines.

2012 November 21-22 Magcale-Macandog, D.B., de la Cruz, C.P.P., Edrial, J.D., Reblora, M.A., Salvacion, A.R., Pabico, J.P., Marquez, T.L., Jr., Macandog, P.B.M., & Perez, D.K.B. (2012 November 21-22). Eliciting Factors Affecting Fish Kill Events in Taal Lake Through Participatory Approaches: a Tool for the Development of a Predictive Fish Kill Model, International Conference on Climate Change Impacts and Adaptation for Food and Environmental Security, Southeast Asian Regional Center for Graduate Study and

Publications

- 2019 Dandan, N.L.L., de la Cruz, C.P.P., & Ballesteros, T.W., Perceived Level of Emotional Intelligence and Sport Performance of College Varsity Athletes in Open-Skill and Closed-Skill Sports. *Research on Humanities and Social Sciences*, 2019, 9(12):10-17.
- 2017 de la Cruz, C., & Stensvold, R., Blastocystis. Global Water Pathogen Project. Part Three. Specific Excreted Pathogens: Environmental and Epidemiology Aspects, 2017.
de la Cruz, C.P.P., De Vera, N.M., Lapie, L.P., Catalma, M.N.A., & Bunal, R.V., Bioaccumulation and health risks assessment of lead (Pb) in freshwater Asian clams (*Corbicula fluminea*, Müller) from Laguna de Bay, Philippines. *Pollution Research*, 2017, 36(2):366-372.
- 2016 de la Cruz, C.P.P., Production performance of finisher broiler fed with cocoyam-corm meal as partial energy replacement for maize. *Veterinary World*, 2016, 9(10):1107-1112.
Barloa, E.P., Lapie, L.P., & de la Cruz, C.P.P., Knowledge, Attitudes, and Practices on Solid Waste Management among Undergraduate Students in a Philippine State University. *Journal of Environment and Earth Science*, 2016, 6(6):146-153.
Paller, V.G.V., Resurreccion, D.J.B., de la Cruz, C.P.P., & Bandal, M.Z., Acanthocephalan Parasites (*Acanthogyrus* sp.) of Nile Tilapia (*Oreochromis niloticus*) as Biosink of Lead (Pb) Contamination in a Philippine Freshwater Lake. *Bulletin of Environmental Contamination and Toxicology*, 2016, 96(6):810-815.
de la Cruz, C.P.P., Gorospe, M.M., & Paller, V.G.V., Blastocystis infection among backyard-raised pigs in Bay, Province of Laguna, the Philippines. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 2016, 18(2):209-217.
- 2014 Magcale-Macandog, D., de la Cruz, C.P.P., Edrial, J.D., Reblora, M.A., Pabico, J.P., Salvacion, A.R., Marquez, T.L., Jr., Macandog, P.B.M., & Perez, D.K.B., Eliciting Local Ecological Knowledge and Community Perception on Fishkill in Taal Lake through Participatory Approaches. *Journal of Environmental Science and Management*, 2014, 17(2):1-16.
- 2013 de la Cruz, C.P.P., Bandal, M.Z., Jr., Avila, A.R.B., & Paller, V.G.V., Distribution pattern of *Acanthogyrus* sp. (Acanthocephala: Quadrigyridae) in Nile tilapia (*Oreochromis niloticus* L.) from Sampaloc Lake, Philippines. *Journal of Nature Studies*, 2013, 12(2):11-17.
Paller, V.G.V., Salumbre, R.L., & de la Cruz, C.P.P., Asian clams (*Corbicula fluminea*) as bioindicators of *Cryptosporidium* contamination in Laguna de Bay, Philippines. *Ecology, Environment and Conservation*, 2013, 19(3):635-642.
- 2012 de la Cruz, C.P.P., Bird, C.O., & Isulat, M.D., Sprouting, survival and growth of young sugarcane (*Saccharum officinarum* L.) treated with diazotrophic bacteria (*Gluconacetobacter diazotrophicus*). *Philippine Agricultural Scientist*, 2012, 95(1):106-111.
de la Cruz, C.P.P., & Paller, V.G.V., Occurrence of *Neoechinorhynchus* sp. (Acanthocephala: Neoechinorhynchidae) in Cultured Nile Tilapia, [*Oreochromis niloticus* (L.), Perciformes: Cichlidae] From Sampaloc Lake, Philippines. *Asia Life Sciences*, 2012, 21(1):287-298.
- 2011 Magcale-Macandog, D.B., Balon, J.L., Engay, K.G., Nicopior, O.B.S., Luna, D.A., & de la Cruz, C.P., Assessment of the Environmental Degradation and Proposed Solutions in the Los Baños Subwatershed Through Participatory Approaches. *Journal of Nature Studies*, 2011, 10(2):1-15.

Name Ralph John Lamadrid De la Cruz

Sex Male

Organizational Affiliations

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

Fields of Specialization

Matrix decompositions

Matrix analysis

Mathematics

Publications

- 2018 Dela Cruz, R.J., & Granario, D.Q., Products of symplectic normal matrices. Products of symplectic normal matrices, 2018, 543:162-172.
- 2017 De la Cruz, R.J., Merino, D.I., & Paras, A.T., Skew ϕ polar decompositions. Linear Algebra and its Applications, 2017, 531:129-140.
De la Cruz, R.J., Merino, D.I., & Paras, A.T., Every $2n$ -by- $2n$ complex matrix is a sum of three symplectic matrices. Linear Algebra and its Applications, 2017, 517:199-206.
De la Cruz, R.J., & dela Rosa, K., Each $2n$ -by- $2n$ complex symplectic matrix is a product of $n+1$ commutators of J-symmetries. Linear Algebra and its Applications, 2017, 517:53-62.
- 2016 De la Cruz, R.J.L., & Granario, D., The ϕ_s polar decomposition when the cosquare of S is nonderogatory. Electronic Journal of Linear Algebra, 2016, 31:754-764.
De la Cruz, R.J., & Fassbender, H., On the diagonalizability of a matrix by a symplectic equivalence, similarity or congruence transformation. Linear Algebra and its Applications, 2016, 496:288-306.
- 2015 De la Cruz, R.J., Merino, D.I., & Paras, A.T., S orthogonal matrices and S symmetries. Linear Algebra and its Applications, 2015, 474:213-229.
De la Cruz, R.J., Each symplectic matrix is a product of four symplectic involutions. Linear Algebra and its Applications, 2015, 466:382-400.
De la Cruz, R.J., Trace Invariance for Quaternion Matrices. Science Diliman, 2015, 27(2):1-9.
- 2014 De la Cruz, R.J., dela Rosa, K.L., Merino, D.I., & Paras, A.T., The Cartan-Dieudonné-Scherk theorems for complex S -orthogonal matrices. Linear Algebra and its Applications, 2014, 458:251-260.
De la Cruz, R., De la Rosa, K., Merino, D., & Paras, A., The Cartan-Dieudonné-Scherk theorems for complex S -orthogonal matrices. Linear Algebra and its Applications, 2014, 458:251-260.
- 2012 De la Cruz, R.J., & Paras, A.T., On S -orthogonal orbits of some S -normal matrices when S is skew symmetric. Journal of Mathematical Society of the Philippines, 2012:1-99.
- 2011 De la Cruz, R.J., Merino, D.I., & Paras, A.T., The ϕ_s polar decomposition of matrices. Linear Algebra and its Applications, 2011, 434(1):4-13.

Name Catherine C. De Luna

Sex Female

Organizational Affiliations

University Researcher II, Center for Integrated Natural Resources and Environment Management (INREM), Office of the Vice Chancellor for Research and Extension, University of the Philippines Los Baños, Laguna, Philippines

Fields of Specialization

Sustainability

Natural Resource Management

Agroforestry

Animal Science

Resource Economics

Social Forestry

Researches

Completed

Enhancing the LGU (local government unit) capacity for implementing conservation farming villages as a strategy for climate change adaptation and upland development

Papers Presented

2010 Visco, R.G., Carandang, W.M., Estoque, R.C., Noriel-Labastilla, P.F.K.M., & de Luna, November 23-25 C.C. (2010 November 23-25). Landscape agroforestry dynamics in Tigbi sub-watershed of the Makiling Forest Reserve in Los Baños, Laguna, Philippines, International Conference on Forestry Education and Research for the Asia Pacific Region, College, Laguna.

2010 Tolentino, L.L., Paelmo, R.F., Landicho, L.D., de Luna, C.C., & Cabahug, R.D. (2010 September 7-10). Prospects and Dilemmas of Working Together for Sustainable Future: The Case of the DBP-Forest Program in the Philippines, Asian Rural Sociology Association International Conference, Bicol University, Legazpi City, Philippines.

1992 Sevilla, C.C., de Luna, C.C., & Castro, E.C., Jr. (1992 November 23-28). Draught November 23-28 performance of water buffalo and cattle in the Philippines, Australian Centre for International Agricultural Research workshop held in conjunction with 6th Asian-Australasian Association of Animal Production Societies.

Publications

2019 Ramirez, M.A.M., Pulhin, J.M., Garcia, J.E., Tapia, M.A., Pulhin, F.B., Cruz, R.V.O., De Luna, C.C., & Inoue, M., Landscape Fragmentation, Ecosystem Services, and Local Knowledge in the Baroro River Watershed, Northern Philippines. *Resources*, 2019, 8(4):164.

2016 Landicho, L.D., Paelmo, R.F., Cabahug, R.D., de Luna, C.C., Visco, R.G., & Tolentino, L.L., Climate Change Adaptation Strategies of Smallholder Agroforestry Farmers in the Philippines. *Journal of Environmental Science and Management*, 2016, 19(1):37-45. Cruz, R.O., Carandang, W.M., de Luna, C., Carandang, V., Gevaña, D., & Galapia, G.A., Climate change adaptation and upland development through Conservation Farming Villages. In: Sajise, P.E., Cadiz, M.C.H., & Bantayan, R.B., (Eds.), *Learning and Coping with Change: Case Stories of Climate Change Adaptation in Southeast*

Asia, 2016.

- 2013 Carandang, A.P., Camacho, L.D., Gevaña, D.T., Dizon, J.T., Camacho, S.C., de Luna, C.C., Pulhin, F.B., Combalicer, E.A., Paras, F.D., Peras, R.J.J., & Rebugio, L.L., Economic valuation for sustainable mangrove ecosystems management in Bohol and Palawan, Philippines. *Forest Science and Technology*, 2013, 9(3):118-125.
- 2012 Camacho, L.D., Combalicer, M.S., Yeo-Chang, Y., Combalicer, E.A., Carandang, A.P., Camacho, S.C., de Luna, C.C., & Rebugio, L.L., Traditional forest conservation knowledge/technologies in the Cordillera, Northern Philippines. *Forest Policy and Economics*, 2012, 22:3-8.
- 2011 Tolentino, L.L., Cabahug, R.D., Paelmo, R.F., de Luna, C.C., & Landicho, L.D., Potentials of agroforestry in climate change adaptation: experiences of the selected agroforestry farmers in the Philippines. *Journal of ISSAAS (International Society for Southeast Asian Agricultural Sciences)*, 2011, 17(1).
Payonga, A.P., Cruz, R.V.O., Pacoy, D.B., Dimog, N.F., Carandang, W.M., Galapia, G.A., Utzurum, S.B., Jr., & de Luna, C.C., Forest rehabilitation through agroforestry in the Philippines: the conservation farming villages approach. *Proceedings of International Symposium on Rehabilitation of Tropical Rainforest Ecosystems*, 2011:209-214.
- 2010 Tolentino, L.L., Paelmo, R.F., Landicho, L.D., de Luna, C.C., & Cabahug, R.D., Prospects and Dilemmas of Working Together for Sustainable Future: The Case of the DBP-Forest Program in the Philippines. In: *Asian Rural Sociology IV, Proceedings of the Asian Rural Sociology Association International Conference*, 2010, II:159-167.
- 2009 Camacho, L.D., Combalicer, E.A., Yeo-Chang, Y., Combalicer, M.S., De Luna, C.C., & Camacho, S.C., Traditional forest conservation knowledge/technologies: The Case of the Ifugaos, Philippines. *Korean Forest Society*, 2009, 2(12):599-601.
Landicho, L.D., Cabahug, R.D., & De Luna, C.C., Engaging in School-Led Multisectoral Collaboration: Implications to Agroforestry Promotion in the Philippine Uplands. *The Journal of Agricultural Education and Extension*, 2009, 15(1):69-79.
- 2003 Villancio, V.T., Lapitan, R.L., Cabahug, R.D., Arboleda, L.P., de Luna, C.C., Paelmo, R.F., Papag, A.T., & Solatre, J.S., Sustaining agriculture and forestry through agroforestry initiatives of people in the upland: cases in the Philippines. *Philippine Journal of Crop Science*, 2003, 28(suppl.1).
- 1993 Sevilla, C.C., de Luna, C.C., & Castro, E.C., Jr., Draught performance of water buffalo and cattle in the Philippines. *Australian Centre for International Agricultural Research (ACIAR) Proceedings*, Bangkok, Thailand, 1993, 46:33-39.

Name Joseph Flores Dela Cruz

Sex Male

Organizational Affiliations

Chair, College of Veterinary Medicine, University of the Philippines Los Baños, Laguna, Philippines

Assistant Professor 4, Department of Basic Veterinary Sciences, College of Veterinary Medicine, University of the Philippines Los Baños, College, Laguna, Philippines

Education

Doctor of Philosophy in Cellular and Molecular Biology, Hankyong National University, Anseong, South Korea 2015

Master of Science in Animal Nutrition and Biochemistry, University of the Philippines Los Baños, Laguna, Philippines 2010

Doctor of Veterinary Medicine, University of the Philippines Los Baños, Laguna, Philippines 2002

Fields of Specialization

Molecular Biotechnology

Animal Nutrition

Macroscopic Anatomy

Animal Breeding and Genetics

Employment

Assistant Professor, University of the Philippines Los Baños, 2009 June-Present

Papers Presented

2017 September 14-15 Wandita, T.G., Joshi, N., Dela Cruz, J., & Hwang, S.G. (2017 September 14-15). (Poster) Anti-diabetic potential of *Euphorbia tithymaloides* L. ethanol extract: enhancement of pre-adipocyte differentiation and glucose uptake in 3T3-L1 cells, 5th International Conference Drug Discovery India 2017, Bengaluru, India.

2017 April 22-26 Wandital, T.G., Dela Cruz, J., & Hwang, S.G. (2017 April 22-26). (Poster) The effect of acetate on enhancing the proliferation and preadipocyte differentiation of stromal vascular cells isolated from Hanwoo beef cattle, Experimental Biology 2017, Chicago, IL, USA.

Publications

2018 Hong, H., Dela Cruz, J.F., Kim, W.S., Yoo, K., & Hwang, S.G., *Glehnia littoralis* Root Extract Inhibits Fat Accumulation in 3T3-L1 Cells and High-Fat Diet-Induced Obese Mice by Downregulating Adipogenic Gene Expression. Evidence-based Complementary and Alternative Medicine, 2018:1243049.

Wandita, T.G., Joshi, N., Dela Cruz, J., & Hwang, S.G., *In vitro* evaluation of anti-inflammatory and anti-diabetic potential effects of *Euphorbia tithymaloides* ethanol extract. Indonesian Journal of Pharmacy, 2018, 29(1):1-9.

2017 Hong, H., An, J.C., Dela Cruz, J., & Hwang, S.G., *Cnidium officinale* Makino extract induces apoptosis through activation of caspase-3 and p53 in human liver cancer HepG2 cells. Experimental and Therapeutic Medicine, 2017, 14(4):3191-3197.

2016 Dela Cruz, J., Choi, S.G., Oh, Y.K., & Hwang, S.G., Low extracellular calcium and

retinoic acid concentration promotes adipocyte differentiation in 3T3-L1 preadipocytes. *Philippine Science Letters*, 2016, 10(1):8-13.

Abanto, O.D., Dela Cruz, J.F., & Hwang, S.G., Effects of *Cnidium Officinale* (Makino) and *Ulmus Pumila* (Linne.) Extracts on Adipogenesis in 3T3-L1 Preadipocytes. *Journal of Animal Production Advances*, 2016, 6(11):1008-1018.

Bumanglag, E.K.B., Dela Cruz, J.F., & Olarve, J.P., Effects of Hydrogen Peroxide and Silver Complex on the Potability of Drinking Water in Broiler. *Austin Journal of Veterinary Science & Animal Husbandry*, 2016, 3(2):1024.

Sanchez, A.E.P., Dela Cruz, J.F., & Olarve, J.P., Effect of Blend of Enzymes, Organic Catalyst and Probiotics on the Physico-Chemical Properties of Swine Farm Wastewater. *Austin Journal of Veterinary Science & Animal Husbandry*, 2016, 3(1):1023.

Dela Cruz, J., Chu, X.T., & Hwang, S.G., Licorice (*Glycyrrhiza glabra*) Root Extract Alleviated TCDD-Induced Toxicity in Primary Rat Hepatocytes. *Journal of Plant Chemistry and Ecophysiology*, 2016, 1(2):1010.

Dela Cruz, J., Choi, S.G., & Hwang, S.G., Differentiation of Hanwoo Beef Cattle Intramuscular Stromal Vascular Cells Treated with Different Concentrations of Calcium and Retinoic Acid. *Austin Biology*, 2016, 1(1):1005.

Vergara, J.S., Dela Cruz, J., Kim, C.M., & Hwang, S.G., Increased adipocyte differentiation may be mediated by extracellular calcium levels through effects on calreticulin and peroxisome proliferator activated receptor gamma expression in intramuscular stromal vascular cells isolated from Hanwoo beef cattle. *Italian Journal of Animal Science*, 2016, 15(2):256-263.

Lumbera, W.M.L., Dela Cruz, J., Yang, S.-H., & Hwang, S.G., Heat Shock Protein Augmentation of *Angelica gigas* Nakai Root Hot Water Extract on Adipogenic Differentiation in Murine 3T3-L1 Preadipocytes. *Asian Australasian Journal of Animal Sciences*, 2016, 29(3):419-427.

2015 Dela Cruz, J.F., Vergara, E.J., Cho, Y., Hong, H.O., Oyungerel, B., & Hwang, S.G., *Glehnia littoralis* Root Extract Induces G0/G1 Phase Cell Cycle Arrest in the MCF-7 Human Breast Cancer Cell Line. *Asian Pacific Journal of Cancer Prevention*, 2015, 16(18):8113-8117.

Dela Cruz, J.F., Oh, Y.L., & Hwang, S.G., The Control of Stromal Vascular Cell Differentiation by Retinoic Acid and Calcium in Hanwoo Beef Cattle Adipose Tissue. *Journal of Animal Production Advances*, 2015, 5(11):835-844.

Park, W.Y., Vergara, E.J., Hong, S.W., Dela Cruz, J.F., & Hwang, S.G., Summer and Winter Seasons Coincide with Changes in the Nutritional Needs and Corresponding Alterations of Blood Biochemical Parameters of Korean Hanwoo Beef Cattle. *Journal of Animal Production Advances*, 2015, 5(11):820-826.

Park, W.Y., Lumbera, W.M.L., Hong, S.W., Dela Cruz, J.F., & Hwang, S.G., Programmed Feeding Response on the Growing Performance and Blood Biochemical Profile of Hanwoo Beef Heifers during Summer and Winter Season. *Journal of Animal Production Advances*, 2015, 5(11):788-793.

Park, J.Y., Lumbera, W.M.L., Dela Cruz, J.F., Jeong, S.E., & Hwang, S.G., The Hot Water Extract of *Angelica Gigas* Nakai Root Promotes Adipogenic Differentiation via Activation of the Insulin Signaling Pathway in 3T3-L1 Cells. *Journal of Physiology and Pharmacology Advances*, 2015, 5(11):795-802.

Lumbera, W.M.L., Dela Cruz, J., Yang, S.-H., & Hwang, S.G., Heat Shock Alleviation Effect of *Angelica gigas* Nakai Root Hot Water Extract Through Immunomodulation and Enhancement of Heat Shock Protein Expression in Murine Splenocytes. *Asian Academic Research Journal of Multidisciplinary*, 2015, 2(5):35-48.

Park, W.Y., Dela Cruz, J.F., Hong, S.W., & Hwang, S.G., Effect of Different Nutritional Levels on the Performance and Energy-Related Blood Metabolites of Hanwoo Beef Heifers during Summer and Winter. *Journal of Animal Production Advances*, 2015,

- 5(10):765-770.
- Dela Cruz, J.F., Kim, Y.S., Lumbera, W.M., & Hwang, S.G., Viscum Album Var Hot Water Extract Mediates Anti-cancer Effects through G1 Phase Cell Cycle Arrest in SK-Hep1 Human Hepatocarcinoma cells. *Asian Pacific Journal of Cancer Prevention*, 2015, 16(15):6417-6421.
- 2014 Dela Cruz, J., Byambaragchaa, M., Choi, S.-G., & Hwang, S.G., Ethanol Extract of *Ulmus pumila* Ameliorates Heat Stress through the Induction of Heat Shock Proteins Expression in RAW264.7 Macrophage Cells. *Journal of Animal Environmental Science*, 2014, 20(4):147-154.
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- 2012 Dela Cruz, J.F., Acda, S.P., Centeno, J.R., & Carandang, N.F., Effects of different corn hybrids on performance parameters, carcass yield and organoleptic characteristics of broilers. *Philippine Journal of Veterinary and Animal Sciences*, 2012, 38(1):23-33.
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Name Roger Gasper Dolorosa

Sex Male

Organizational Affiliations

Associate Professor, College of Fisheries and Aquatic Sciences, Western Philippine University, Puerto Princesa Campus, Sta. Monica, Puerto Princesa City 5300

Education

Doctor of Philosophy in Environmental Science, University of East Anglia, Norwich, United Kingdom 2012

Fields of Specialization

Aquatic Resource Conservation

Ecology

Taxonomy

Papers Presented

2015 December 9-10 Cayatoc, F.B., Dolorosa, R.G., Becira, J.G., Pagliawan, H.B., Balisco, R.A.T., Montano, B.S., Rodriguez, E.F., Dieron, N.D., Matillano, J., & Gonzales, B.J. (2015 December 9-10). Sustainable Coral Reef Ecosystem Management in Bacuit Bay, El Nido, Palawan: A Conservation Effort on Coral Reef Rehabilitation, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Cayatoc, F.B., Dolorosa, R.G., Balisco, R.A.T., Matillano, J.D., & Gonzales, B.J. (2015 December 9-10). Reef Assessment in Matinloc, Tapiutan and Cadlao Islands, El Nido, Palawan, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Dolorosa, R.G., & Matillano, J.A. (2015 December 9-10). Changes in coral cover and reef associated fauna in Rasa Island Wildlife Sanctuary, Narra, Palawan, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Salazar, C.B., Balisco, R.A.T., & Dolorosa, R.G. (2015 December 9-10). Species Inventory of Commercially Exploited Sea Cucumbers in Rasa Island Wildlife Sanctuary, Narra, Palawan, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Baguinbin, D., Dolorosa, R.G., Balisco, R.A.T., & Baaco, A.T. (2015 December 9-10). Profitability of live lobster trading in Araceli, Palawan, Philippines, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Delfin, M.T.V., & Dolorosa, R.G. (2015 December 9-10). Sea cucumber fishery in Rasa Island Wildlife Sanctuary, Narra, Palawan, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 December 9-10 Paduga, J.R., & Dolorosa, R.G. (2015 December 9-10). Abundance of Sea Cucumbers and Catch per Unit Efforts in Rasa Island Wildlife Sanctuary, Narra, Palawan, 2nd Palawan Research Symposium, Puerto Princesa City, Philippines.

2015 May 27-29 Dolorosa, R.G., Grant, A., & Gill, J.A. (2015 May 27-29). Spatial and temporal abundance of *Tectus niloticus* in marine protected areas in Palawan, Philippines: Prospects for conservation, 4th International Conference on Environmental Research and Technology, Park Royal Hotel, Penang, Malaysia.

Publications

- 2019 Ecube, K.M.A., Villanueva, E.G., Dolorosa, R.G., & Cabaitan, P.C., Notes on the first record of *Tridacna noae* (Röding, 1798) (Cardiidae: Tridacninae) in Palawan, Philippines. *The Palawan Scientist*, 2019, 11.
- 2017 Gonzales, B.J., & Dolorosa, R.G., Establishing and Monitoring Coral and Giant Clam Gardens. Asian Development Bank. Consultant's report, Manila (TA 7813-REG). 1. Coral and Giant Clam Gardens. 2. Sustainable Financing. 3. Marine Protected Areas. 4. Philippines, 2017.
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- 2016 Hombre, S.E., Gonzales, J.B., Baguinbin, D.M., Balisco, R.A.T., & Dolorosa, R.G., Preliminary Checklist of Marine Gastropods and Bivalves in the Kalayaan Island Group Palawan, Western Philippines. *Philippine Journal of Systematic Biology*, 2016, 10:25-34.
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- Cayatoc, F.B., Dolorosa, R.G., Balisco, R.A.T., Matillano, J.D., & Gonzales, B.J., Reef Assessment in Matinloc, Tapiutan and Cadlao Islands, El Nido, Palawan. *Proceedings of the 2nd Palawan Research Symposium 2015. National Research Forum on Palawan Sustainable Development, "Science, Technology & Innovation". Puerto Princesa, Palawan, Philippines, 2016:40-52.*
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- 2015 Garagara, L.P., Dolorosa, R.G., & Baaco, A.T., Water parameters of Pulang Lupa Lake, an abandoned open pit mine in Puerto Princesa City, Palawan, Philippines and its potential as bird watching destination. *The Palawan Scientist*, 2015, 7:12-27.
- Dolorosa, R.G., Size composition and abundance of Red Striped sea cucumber *Thelenota rubralineata* in Cagayancillo, Palawan, Philippines. *The Palawan Scientist*, 2015, 7:40-42.
- Conales, S.F., Bundal, N.A., & Dolorosa, R.G., High density of *Tridacna crocea* in exposed massive corals proximate the Ranger Station of Tubbataha Reefs Natural Park, Cagayancillo, Palawan, Philippines. *The Palawan Scientist*, 2015, 7:36-39.
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- 2011 Dolorosa, R.G., Conales, S.F., Jr., & Bundal, N.A., Initial Stock Assessment of *Terebra maculata* (Gastropoda: Terebridae) in Tubbataha Reefs Natural Park, Palawan, Philippines. *The Philippine Scientist*, 2011, 48:85-99.
- 2010 Dolorosa, R.G., Songco, A.M., Calderon, V., Magbanua, R., & Matillano, J.A., Population structure and abundance of *Trochus niloticus* in Tubbataha Reefs Natural Park, Palawan, Philippines with notes on poaching effects. *SPC Trochus Information Bulletin #15*, 2010:17-23.
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- 2005 Dolorosa, R.G., Biology of the mangrove-associated porcelain crab *Petrolisthes teres* Melin (Decapoda: Anomura: Porcellnidae) from Puerto Princesa Bay, Palawan, Philippines. *Journal of Aquatic Sciences*, 2005, 2(2):1-13.
- Dolorosa, R.G., & Schoppe, S., Focal benthic mollusks (Mollusca:Bivalvia and Gastropoda) of selected sites in Tubbataha Reefs National Park, Palawan, Philippines. *Science Diliman*, 2005, 17(2):1-10.
- 1994 Gonzales, B.J., & Dolorosa, R.G., A survey of the serranid and lutjanid fishes in Ulugan Bay, Northwestern Palawan, with notes on their economic aspects. *The Palawan Scientist*, 1994, 1(2):35-43.
- Gonzales, B.J., Dolorosa, R., Blanco, R., Okamura, O., & Maeda, T., An Artificially Made Seagrass Bed: Its Role in a Shallow Subtidal Zone and Probable Consequences. *Bulletin of Marine Science and Fisheries, Kochi University*, 1994:57-61.

Name Lorissa Joana Esguerra-Buenas

Sex Female

Organizational Affiliations

Associate Dean, College of Engineering and Computing Sciences (CECS), Batangas State University ARASOF Nasugbu Campus, Nasugbu, Batangas, Philippines

Fields of Specialization

Energy

Engineering

Android Application

Researches

Completed

Tuy Municipal Health Center Information System

Engineering Design of Batangas State University's Real-time Faculty Class Attendance Monitoring and Management System Using GPS (Global Positioning System)

Publications

- 2016 Dalangin, E.M., Buenas, L.J.E., & Drio, M.A.C., Green Wave: A Reserved Energy Source. PUP Journal of Science and Technology, 2016, 9(1):61-72.
- 2015 Buenas, L.J.E., Malvar, Z.A.R., Maranan, J.A.B., Malabanan, C.C., & Enriquez, M.L.F., Attendroid: An Android Application in Attendance Management System. Asia Pacific Journal of Multidisciplinary Research, 2015, 3(4):140-147.
Esguerra-Buenas, L.J., Design and Materials of E-Mouse. Asia Pacific Journal of Multidisciplinary Research, 2015, 3(4):68-73.
- 2014 Buenas, L.J.E., Dalangin, E.M., & Masipag, E.G., Online Automatic Switch of Appliances. Journal of Information Engineering and Applications, 2014, 4(1):34-43.
Buenas, L.J.E., & Caringal, J.R.V., Tuy Municipal Health Center Information System. Information and Knowledge Management, 2014, 4(1):86-95.
Destreza, F.G., Buenas, L.J.E., Antonio, J.A.V., Bauyon, C.C., & Veroya, G.M., CECS MLA Project Style: A Thesis Primer. 2nd Edition. Createspace Independent Publishing Platform, 2014.

Name Sherwin Joseph Consignado Felicidadario

Sex Male

Organizational Affiliations

Financial Adviser, Manulife Philippines

Education

Master of Science in Development Communication, University of the Philippines Los Baños, College, Laguna, Philippines 2013

Bachelor of Science in Development Communication, University of the Philippines Los Baños, College, Laguna, Philippines 2002

Fields of Specialization

Development Communication

Science Communication

Community Broadcasting

Employment

Assistant Professor, University of the Philippines Los Baños, 2013 August-2018 January

Financial Adviser, Manulife Philippines, 2010 June-Present

University Research Associate II, University of the Philippines Los Baños, 2003 July-2005 August

Systems Administrator, University of the Philippines Los Baños, 2003 July-2013 March

Association Membership

Member, UP SIBOL

President, College of Development Communication Alumni Association

Papers Presented

2019 April Lego, C., & Felicidadario, S.J.C. (2019 April). Extent of Participation of Community Facilitators in the Development of Yaman Dagat: Radyo Serye para sa Wasto at Maunlad na Pananalapi, 5th World Conference on Media and Mass Communication, Kuala Lumpur, Malaysia.

2014 October 18-20 Inglesias, M.C.M., & Felicidadario, S.J.C. (2014 October 18-20). Impact of Feedback Dimensions on Police Officers' Performance in Crime Reduction and Security System in the Province of Laguna, Philippines: The Case of Laguna Provincial Police Office, International Conference on Communication and Media 2014 (i-COME '14), Langkawi, Malaysia.

Publications

2019 Lego, C., & Felicidadario, S.J.C., Extent of Participation of Community Facilitators in the Development of Yaman Dagat: Radyo Serye para sa Wasto at Maunlad na Pananalapi. 5th World Conference on Media and Mass Communication, Kuala Lumpur, Malaysia, 2019.

2017 Galang, J.A.DJ., & Felicidadario, S.J.C., Retention and Adoption of Information in the TV School-on-the-air Programme, *Hanep Gulay* in Majayjay, Laguna, Philippines. ASEAN Journal of Open Distance Learning, 2017, 9(1):22-32.

- 2015 Francisco, R.P.F., Cabrera, L.A., Castillo, H.M.C., Lim, A.G.T., Felicidadario, S.J.C., & Velasco, M.T.H., The DevCom Los Baños Style of Communication Materials Development. *The Philippine Journal of Development Communicaiton*, 2015, 7(1).
 Felicidadario, S.J., & Torres, C., Enterprise Information System and Organizational Communication: The Case of Shoreline Kabalikat sa Kaunlaran, Inc.(SKKI) in Cavite, Philippines. *Philippine Journal of Development Communication*, 2015, 7:99-120.
- 2014 Inglesias, M.C.M., & Felicidadario, S.J.C., Impact of Feedback Dimensions on Police Officers' Performance in Crime Reduction and Security System in the Province of Laguna, Philippines: The Case of Laguna Provincial Police Office. *Procedia - Social and Behavioral Sciences*, 2014, 155:248-252.
- 2013 Villar, R., Albia, J., Felicidadario, S.J., & Lim, A., Afloat and Shoreward: Shoreline Kabalikat sa Kaunlaran's Story of Transforming Communities. *Shoreline Kabalikat sa Kaunlaran, Inc., Philippines*, 2013.

Name Nathan C. Habana

Sex Male

Organizational Affiliations

Assistant Professor, Groundwater Hydrology, Water & Environmental Research Institute of the Western Pacific, WERI Bldg., Rm. 115, University of Guam Station, Mangilao, Guam 96923

Fields of Specialization

Environmental Science

Hydrology

Environmental Engineering

Groundwater

Hydrogeology

Contaminant Transport Hydrology

Papers Presented

2018 June 29-30 Denton, G.R.W., Sian Denton, C.M., Kim, Y.S., Jenson, J.W., Habana, N.C., & Lander, M.L. (2018 June 29-30). Perfluorooctane Sulfonate (PFOS): A Containment of Emerging Concern in Guam's Groundwater, The IRES - 415 International Conference on Engineering and Natural Sciences (UCENS), Beijing, China.

2017 December 4-7 Habana, N., Jenson, J., & Gingerich, S. (2017 December 4-7). Evaluating Best-Practice Capacities for a Carbonate Island Karst Aquifer: Northern Guam Lens Aquifer, Guam, USA, Karst Hydrology session-NGWA Groundwater Summit, NGWA, Nashville, Tennessee.

2017 November 9 Superales, D., Habana, N.C., Kim, B., Jenson, J., & Gingerich, S. (2017 November 9). NGLA Groundwater Model Explorations, Guam Advisory Council Meeting, Tumon, Guam.

2017 September 11 & 18 Habana, N., Jenson, J., Kim, B., Lander, M., Dougher, B., Miller, E., Superales, D., & Rouse, J. (2017 September 11 & 18). Guam Hydrologic Survey Workshop, WERI, University of Guam, Mangilao, Guam.

2012 September 16-21 Habana, N.C., Olsen, A.E., Jenson, J.W., & Salvacion, J.L. (2012 September 16-21). AQUA CHARGE: A Model for Estimating Groundwater Recharge in an Uplifted Island Karst Aquifer, Guam, USA, International Water Association, Busan, Korea.

Publications

2018 Denton, G.R.W., Sian Denton, C.M., Kim, Y.S., Jenson, J.W., Habana, N.C., & Lander, M.L., Perfluorooctane Sulfonate (PFOS): A Containment of Emerging Concern in Guam's Groundwater (Abstract). The IRES - 415 International Conference on Engineering and Natural Sciences (UCENS), Beijing, China, 2018.

2017 Habana, N., Jenson, J., Kim, B., Lander, M., Dougher, B., Miller, E., Superales, D., & Rouse, J., Guam Hydrologic Survey Workshop. Water and Environmental Research Institute of the Western Pacific, University of Guam, Mangilao, Guam, 2017.

Habana, N., Rouse, J., & Jenson, J., Expansion of Baseline Data for the Northern Guam Lens Aquifer and Evaluation of Innovative Technologies to Reduce Containment Input. Guam Hydrologic Survey Workshop, GHS Workshop, Water Environmental Research Institute (WERI), University of Guam, Mangilao, Guam, 2017.

- Habana, N., Jenson, J., & Gingerich, S., Evaluating Best-Practice Capacities for a Carbonate Island Karst Aquifer: Northern Guam Lens Aquifer, Guam, USA. Karst Hydrology session-NGWA Groundwater Summit, NGWA, Nashville, Tennessee, 2017.
- Miller, E., Habana, N., Lander, M., & Jenson, J., Chloride and Production Trends. Abstracts and Program University of Guam Conference on Island Sustainability, University of Guam, Tumon, Guam, 2017.
- Habana, N., & Jenson, J., Guam Water Kids and Guam Department of Education, Northern Guam Lends Aquifer Tour. University of Guam, Mangilao, Guam, 2017.
- 2015 Simard, C.A., Jenson, J.W., Lander, M.A., Manzanilla, R.M., Superales, D.G., & Habana, N.C., Salinity in the Northern Guam Lens Aquifer. Technical Report No. 143, Water Environmental Research Institute of the Western Pacific, University of Guam, 2015.
- Habana, N.C., Jenson, J.W., & Gingerich, S.B., Exploring Best-Practice Capacities for the Northern Guam Lens Aquifer. Abstracts and Program, Second Conference on Water Resources Sustainability Issues on Tropical Islands, Honolulu: A7, 2015.
- 2014 Vam, D.T., Bendixson, V.M., Roff, D.F., Simard, C.A., Schumann, R.M., Habana, N.C., & Jenson, J.W., Topography of the Basement Rock beneath the Northern Guam Lens Aquifer and its Implications for Groundwater Exploration and Development. Technical Report No. 142, Water Environmental Research Institute of the Western Pacific, University of Guam, 2014.
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- 2013 Habana, N.C., Salvacion, J.L., Jenson, J.W., & Rouse, J.D., VADOCHARGE-N: a Vadose Flow and N-Transport Simulation Model for the Northern Guam Lens Aquifer. International Journal of Environmental Engineering Science and Technology Research, 2013, 1(11):268-287.
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- 2009 Habana, N.C., Heitz, L.F., Olsen, A.E., & Jenson, J.W., Vadose Flow Synthesis for the Northern Guam Lens Aquifer. Technical Report No. 127, Water and Environmental Research Institute of the Western Pacific, University of Guam, 2009.
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Name Lea Angsinco Jimenez

Sex Female

Organizational Affiliations

Associate Professor V and Director, Regional ICRM Center, Davao Oriental State College of Science and Technology, Davao, Philippines

Education

Doctor of Philosophy in Higher Education Major in Biology, Davao del Norte State College, Davao, Philippines 2010

Master of Science Fundamentals & Applied Marine Ecology (FAME), Marine Ecology (*Great Distinction*), Vrije Universiteit Brussel, Brussels, Belgium 1997

Bachelor of Science in Marine Biology, Ateneo de Cagayan de Oro University (Xavier University), Misamis Oriental, Mindanao, Philippines 1982

Bachelor of Science in Chemistry, Ateneo de Davao University, Davao del Sur, Mindanao, Philippines 1980

Fields of Specialization

Marine Science

Marine Biology

Ecology

Employment

Director, Regional ICRM Center, Davao Oriental State College of Science and Technology, 1990-Present

Fisheries Technologist, Institute of Fisheries Research Development, Mindanao State University, 1985 September-1989 October

Papers Presented

2018 May 28-31 Mizuno, K. Tabeta, S., Matsumoto, Y., Sakamoto, S., Sugimoto, Y., Ogawa, T., Sugimoto, K., Jimenez, L.A., Terayama, K., Fukami, H., Sakagami, M., Deki, M., & Kawakubo, A. (2018 May 28-31). Development of a Towed Optical Camera Array System (SSS: Speedy Sea Scanner) for Sea Environmental Monitoring, 2018 OCEANS - MTS/IEEE Kobe Techno-Oceans (OTO), Kobe, Japan.

2013 March 5-8 Mochizuki, M., Asada, A., Ura, T., Yamamuro, M., Fortes, M.D., & Jimenez, L.A. (2013 March 5-8). Off-line observation system based on acoustic video camera for understanding behavior of underwater life, 2013 IEEE International Underwater Technology Symposium (UT), Tokyo, Japan.

Publications

2018 Abreo, N.A.S., Macusi, E.D., & Jimenez, L.A., A survey of subtidal anthropogenic marine debris (AMD) in Mayo Bay, Mati City, Davao Oriental, Philippines. *Philippine Journal of Science*, 2018, 147(4):599-602.

Mizuno, K. Tabeta, S., Matsumoto, Y., Sakamoto, S., Sugimoto, Y., Ogawa, T., Sugimoto, K., Jimenez, L.A., Terayama, K., Fukami, H., Sakagami, M., Deki, M., & Kawakubo, A., Development of a Towed Optical Camera Array System (SSS: Speedy Sea Scanner) for Sea Environmental Monitoring. 2018 OCEANS - MTS/IEEE Kobe Techno-Oceans (OTO), 2018:doi:10.1109/OCEANSKOBE.2018.8558885.

2017 Mizuno, K., Asada, A., Matsumoto, Y., Sugimoto, K., Fujii, T., Yamamuro, M., Fortes,

- M.D., Sarceda, M., & Jimenez, L.A., A simple and efficient method for making a high-resolution seagrass map and quantification of dugong feeding trail distribution: A field test at Mayo Bay, Philippines. *Ecological Informatics*, 2017, 38:89-94.
- 2016 Kasai, A., Tsuduki, H., Jimenez, L.A., Li, Y.-C., Tanaka, S., & Sato, H., Incidence of three *Kudoa* spp., *K. neothunni*, *K. hexapunctata*, and *K. thunni* (Myxosporea: Multivalvulida), in *Thunnus tunas* distributed in the western Pacific Ocean. *Parasitology Research*, 2016, 116(4):1137-1150.
- 2015 Tamaru, M., Yamaki, S., Jimenez, L.A., & Sato, H., Morphological and molecular genetic characterization of three *Capillaria* spp. (*Capillaria anatis*, *Capillaria pudendotecta*, and *Capillaria madseni*) and *Baruscapillaria obsignata* (Nematoda: Trichuridae: Capillariinae) in avians. *Parasitology Research*, 2015, 114(11):4011-4022.
- 2013 Mochizuki, M., Asada, A., Ura, T., Yamamuro, M., Fortes, M.D., & Jimenez, L.A., Off-line observation system based on acoustic video camera for understanding behavior of underwater life. 2013 IEEE International Underwater Technology Symposium (UT), 2013:doi:10.1109/UT.2013.6519828.
- 2012 Nguyen, T.C., Li, Y.-C., Makouloutou, P., Jimenez, L.A., & Sato, H., *Posthodiplostomum* sp. Metacercariae in the Trunk Muscle of Northern Snakeheads (*Channa argus*) from the Fushinogawa River, Yamaguchi, Japan. *Journal of Veterinary Medical Science*, 2012, 74(10):1367-1372.
- Coomans, A., De Ley, I.T., Jimenez, L.A., & De Ley, P., Morphological, molecular characterisation and phylogenetic position of *Longidorus mindanaoensis* n. sp. (Nematoda: Longidoridae) from a Philippine *Avicennia* mangrove habitat. *Nematology*, 2012, 14(3):285-307.
- 2011 Macusi, E.D., Katikiro, R.E., Ashoka Deepananda, K.H.M., Jimenez, L.A., Conte, A.R., & Fadli, N., Human induced degradation of coastal resources in Asia Pacific and implications on management and food security. *Journal of Nature Studies*, 2011, 9(2):13-28.

Name Geoffrey Chan Li

Sex Male

Organizational Affiliations

Post doctoral Research Fellow, Department of Biochemistry, Vanderbilt University
School of Medicine, Greater Nashville Area, Nashville, Tennessee, USA

Education

Doctor of Philosophy in Chemistry, University of Minnesota Twin Cities, Minneapolis,
Minnesota, USA 2017

Bachelor of Science in Biochemistry (*magna cum laude*), University of the Philippines
Manila, Philippines 2004

Fields of Specialization

Biochemistry
Physical Chemistry
Spectroscopy
Biophysics
Membrane Proteins
Nuclear Magnetic Resonance Spectroscopy
Proteins
Protein-Protein Interaction
Protein Kinases
Membrane Proteins
Structural Biology
Protein Dynamics
Micelles
Biophysical Chemistry
Biomolecular Nuclear Magnetic Resonance
Conformational Dynamics
Detergents
Membrane Protein Purification
Protein Kinase Inhibitors

Employment

Lecturer, Department of Biochemistry, Vanderbilt University, 2018 October-2018
November

Junior Co-Chair, Vanderbilt Postdoctoral Association, 2018 August-2019 July

Moderator, Organizing Committee Member, 2018 BRET Annual Career Symposium,
2018 June-

Post doctoral Research Fellow, Department of Biochemistry, Vanderbilt University, 2017 March-Present

Lecturer, Minnesota NMR Workshop 2017, 2016 June-

President, Chateau Student Housing Cooperative Board of Directors, 2015-

Judge, Protein Modeling Event, NameMinnesota Science Olympiad, 2015 March-2016 March

Teaching Assistant, Department of Chemistry, University of Minnesota Twin Cities, Minneapolis, Minnesota, United States, 2014 September-2014 December

Policy Committee Chair, Chateau Student Housing Cooperative Board of Directors, 2014 January-2014 December

Board Member, Chateau Student Housing Cooperative Board of Directors, 2013-

Graduate Research Assistant, Department of Chemistry, University of Minnesota Twin Cities, Minneapolis, Minnesota, United States, 2012 January-2017 February

Graduate Teaching Assistant, Department of Chemistry, University of Minnesota Twin Cities, Minneapolis, Minnesota, United States, 2011 September-2013 May

Chemistry Instructor, University of the Philippines Manila, 2004-2011

Association Membership

Member, Biophysical Society

Member, Protein Society

Member, University of the Philippines Biochemistry Society

Member, Philippine Association of Chemistry Society

Member, American Chemical Society

Member, American Association for Cancer Research

Honors / Awards

Teaching Assistant Honorable Mention, Department of Chemistry, University of Minnesota 2015 September

Education Committee Travel Award, Biophysical Society 2015 February

Excellence in Graduate Studies Fellowship, Department of Chemistry, University of Minnesota 2013

Achievement Award for getting 4.0 grade-point average, Department of Chemistry, University of Minnesota 2012

4th Placer in Philippine Chemistry Licensure Examination, Philippine Professional Regulation Commission 2004

Publications

- 2019 Li, G.C., Forster-Benson, E.T.C., & Sanders, C.R., Genetic intolerance analysis as a tool for protein science. *Biochimica et Biophysica Acta (BBA) - Biomembranes*, 2019:<https://doi.org/10.1016/j.bbamem.2019.183058>.
Wang, Y., Manu, V.S., Kim, J., Li, G., Ahuja, L.G., Aoto, P., Taylor, S.S., & Veglia, G., Globally correlated conformational entropy underlies positive and negative cooperativity in a kinase's enzymatic cycle. *Nature Communications*, 2019, 10(1):799.
- 2018 Tomanisi, M.D., Wang, Y., Karamafrooz, A., Li, G., Beuming, T., Gao, J., Taylor, S.S., Veglia, G., & Simon, S.M., Conformational Landscape of the PRKACA-DNAJB1

- Chimeric Kinase, the Driver for Fibrolamellar Hepatocellular Carcinoma. *Scientific Reports*, 2018, 8:720.
- 2017 Hutchison, J.M., Lu, Z., Li, G.C., Travis, B., Mittal, R., Deatherage, C.L., & Sanders, C.R., Dodecyl- β -Melibioside Detergent Micelles as a Medium for Membrane Proteins. *Biochemistry*, 2017, 56(41).
- 2016 Veglia, G., & Li, G., Tunable Liaisons: eEF-2K, CaM, and Calcium. *Structure*, 2016, 24(9):1438-1439.
- Li, G., Olivieri, C., Neibergall, M., Kim, J., Taylor, S., Muretta, J., & Veglia, G., Elucidating the Mechanism of Recognition and Binding of Protein Kinase Inhibitor by Protein Kinase a using NMR and Fluorescence Spectroscopy. *Biophysical Journal*, 2016, 110(3):558a.
- Karamafrooz, A.N., Kim, J., Li, G., Simon, S.M., Taylor, S.S., & Veglia, G., NMR Structural/Functional Characterization of an Oncogenic Mutant of cAMP-Dependent Protein Kinase A: PRKACA-DNAJB1. *Biophysical Journal*, 2016, 110(3):47A.
- Kim, J., Li, G., Walters, M.A., Taylor, S.S., & Veglia, G., Uncoupling Catalytic and Binding Functions in the Cyclic AMP-Dependent Protein Kinase A. *Structure*, 2016, 24(3).
- Kim, J., Wang, Y., Li, G., & Veglia, G., A Semi-Automated Assignment Protocol for Methyl Group Side-Chains in Large Proteins. *Methods in Enzymology*, 2016, 566:35-57.
- 2015 Li, G.C., Srivastava, A.K., Kim, J., Taylor, S.S., & Veglia, G., Mapping the Hydrogen Bond Networks in the Catalytic Subunit of Protein Kinase A Using H/D Fractionation Factors. *Biochemistry*, 2015, 54(26):4042-4049.
- Li, G., Kim, J., Chao, F., McDonald, L., & Veglia, G., Probing Multiple Timescale Dynamics of Protein Kinase A-Inhibitor Complexes. *Biophysical Journal*, 2015, 108(2):60a-61a.
- 2007 Siao, P.C., Li, G.C., Engle, H.L., Ilao, L.V., & Trinidad, L.C., Biosorption of Cu(II) ions from synthetic and actual wastewater using three algal species. *Journal of Applied Phycology*, 2007, 19(6):733-743.

Name Edison Roi D. Macusi

Sex Male

Organizational Affiliations

Instructor and Researcher, Regional Integrated Coastal Resource Management Center (RIC-XI), Davao Oriental State College of Science and Technology, Mati, Davao Oriental

Education

Doctor of Philosophy in Fisheries Ecology, Wageningen University & Research, Wageningen, Netherlands 2016

Master of Science in International Studies in Aquatic Tropical Ecology, University of Bremen, Bremen, Germany 2008

Bachelor of Science in Biology, University of the Philippines, Philippines 2003

Fields of Specialization

Marine Ecology

Fisheries Ecology

Fisheries Management

Biodiversity

Employment

Instructor and Researcher, Regional Integrated Coastal Resource Management Center, Davao Oriental State College of Science and Technology, 2017 May-Present

Project Research Assistant, Marine Science Institute, University of the Philippines Diliman, 2005 March-2006 June

Science Research Specialist I, Philippine Rice Research Institute, 2004 March-2004 October

Instructor, University of the Philippines Baguio, 2003 June-2003 October

Papers Presented

2016 January 26-27 Macusi, E.D., Babaran, R., & van Zwieten, P.A.M. (2016 January 26-27). Socioeconomic and fishing operation characteristics of artisanal and commercial Fish Aggregating Devices (FAD) fishers from Southern Philippines, 2nd International Conference on Fisheries and Aquatic Sciences, Iloilo City, Philippines.

2014 October 22-24 Macusi, E., & Babaran, R. (2014 October 22-24). The Spatial distribution of FADs and short and long term decision making of tuna fishers from General Santos City, Philippines, National Research Symposium, Quezon City, Philippines.

2014 September 2-3 Macusi, E.D., Babaran, R., & van Zwieten, P.A.M. (2014 September 2-3). The spatial distribution of fishing effort and short-term decision-making of tuna fish aggregating device (FAD) fishers from General Santos City, Philippines, 6th International Conference on Agribusiness Economic and Management, Davao City, Philippines.

2013 Macusi, E.D., Nugroho-Satrioaje, W., van Zwieten, P.A.M., & Poos, J.J. (2013). (Poster) Fish aggregating devices as efficient fishing aid: Impact on catch trends, Wageningen Institute of Animal Sciences.

- 2013 June 26-28 Katikiro, R., Macusi, E.D., & Ashoka Deepananda, K.H.M. (2013 June 26-28). Impacts of hand-out offers on livelihoods of coastal fishing communities, Maritime Research (MARE) conference People and the Sea VII, Amsterdam, The Netherland.
- 2013 June 26-28 Katikiro, R., Macusi, E.D., & Ashoka Deepananda, K.H.M. (2013 June 26-28). Tandilo fishing as a coping strategy for women in coastal fishing communities, Maritime Research (MARE) conference People and the Sea VII, Amsterdam, The Netherland.

Publications

- 2019 Macusi, E.D., Laya-og, M.E., & Abreo, N.A.S., Wild lobster (*Panulirus ornatus*) fry fishery in Balete bay, Davao Oriental: Catch trends and implications to fisheries management. *Ocean & Coastal Management*, 2019, 168:340-349.
- 2018 Abreo, N.A.S., Macusi, E.D., & Jimenez, L.A., A survey of subtidal anthropogenic marine debris (AMD) in Mayo bay, Mati City, Davao Oriental, Philippines. *Philippine Journal of Science*, 2018, 147(4):597-600.
 Vidal, K.C., Macusi, E.D., & Ponce, A.G., Inventory and Morphometrics of Anuran Species Found in Mt. Kilala of the Mt. Hamiguitan Range Wildlife Sanctuary, Governor Generoso, Davao Oriental, Philippines. *Philippine Journal of Science*, 2018, 147(4):629-638.
- 2017 Macusi, E.D., Abreo, N.A.S., & Babaran, R.P., Local ecological knowledge (LEK) on fish behavior around anchored FADs: the case of tuna purse seine and ringnet fishers from Southern Philippines. *Frontiers in Marine Science*, 2017, 4:188.
 Macusi, E.D., Katikiro, R.E., & Babaran, R.P., The influence of economic factors in the change of fishing strategies of anchored FAD fishers in the face of declining catch, General Santos City, Philippines. *Marine Policy*, 2017, 78:98-106.
 Macusi, E.R. D., Fish Aggregating Devices and the Role of Socio-economic Factors in Driving Spatial Effort Allocation of Fishers. Discussion Paper Series - Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), 2017, 2016(4):53.
- 2016 Abreo, N.A.S., Macusi, E.D., Blatchley, D.D., & Cuenca, G.C., Ingestion of Marine Plastic Debris by Green Turtle (*Chelonia mydas*) in Davao Gulf, Mindanao, Philippines. *Philippine Journal of Science*, 2016, 145(1):17-23.
 Abreo, N.A.S., Macusi, E.D., Blatchley, D.D., & Cuenca-Ocay, G.C., First Evidence of Plastic Ingestion by the Rare Deraniyagala's Beaked Whale (*Mesoplodon hotaula*). *IAMURE International Journal of Ecology and Conservation*, 2016, 19:16-36.
- 2015 Katikiro, R.E., Macusi, E.D., & Ashoka Deepananda, K.H.M., Challenges facing local communities in Tanzania in realising locally-managed marine areas. *Marine Policy*, 2015, 51:220-229.
 Macusi, E.D., Babaran, R.P., & van Zwieten, P.A.M., Strategies and tactics of tuna fishers in the payao (anchored FAD) fishery from General Santos City, Philippines. *Marine Policy*, 2015, 62:63-73.
 Katikiro, R., Ashoka Deepananda, K.H.M., & Macusi, E., Interplay between perceived changes in fishery and social structures in Tanzanian coastal fishing communities. *Fisheries Research*, 2015, 164:249-253.
 Abreo, N.A.S., Macusi, E.D., & Cuenca, G.C., Nutrient enrichment, sedimentation, heavy metals and plastic pollution in the marine environment and its implications on Philippine marine biodiversity: A Review. *IAMURE International Journal of Ecology and Conservation*, 2015, 15:111-168.
 Macusi, E.D., Abreo, N.A.S., Cuenca, G.C., Ranara, C.T.B., Cardona, L.T., Andam, M.B., Guanzon, G.C., Katikiro, R.E., & Ashoka Deepananda, K.H.M., The potential impacts of climate change on freshwater fish, fish culture and fishing communities. *Journal of Nature Studies*, 2015, 14(2):14-31.

- Cuenca, G.C., Macusi, E.D., Abreo, N.A.S., Ranara, C.T., Andam, M.B., Cardona, L.C., & Conserva, G.G., Mangrove ecosystems and associated fauna with special reference to mangrove crabs in the Philippines: A Review. *IAMURE International Journal of Ecology and Conservation*, 2015, 15:60-110.
- Macusi, E.D., Babaran, R.P., & Ingles, J.T., Vertical Movements, Behavior and Habitat Utilization of Adult Yellowfin Tuna (*Thunnus albacares*) Tagged in West Philippine Sea, Mindoro Island, Philippines. *IAMURE International Journal of Ecology and Conservation*, 2015, 15:280-298.
- 2014 Macusi, E., & Babaran, R., The Spatial distribution of FADs and short and long term decision making of tuna fishers from General Santos City, Philippines. National Research Symposium, Quezon City, Philippines, 2014.
- 2013 Katikiro, R., Macusi, E., & Ashoka Deepananda, K.H.M., Changes in fisheries and social dynamics in Tanzanian coastal fishing communities. *Western Indian Ocean*, 2013, 12(2):95-110.
- Macusi, E.D., & Ashoka Deepananda, K.H.M., Factors that structure algal communities in tropical rocky shores: what have we learned?. *International Journal of Scientific and Research Publications*, 2013, 3(12):1-13.
- Ashoka Deepananda, K.H.M., & Macusi, E.D., Human Disturbance in a Tropical Rocky Shore Reduces Species Diversity. *The Philippine Scientist*, 2013, 50:39-58.
- Macusi, E.D., & Fisscher, G., Can Complaining Modify a Smoking Environment: A Study on the Effects of Complaining on Smoking Behavior in Different Bars Using Agent-Based Model Implementation. *Social Science Diliman*, 2013, 9(2):1-23.
- Macusi, E., Nugroho Satrioajie, W., Bailey, M., Babaran, R., & van Zwieten, P.A.M., Characterising FAD based tuna fisheries within the Philippines and Indonesia. Proceedings of "Maritime Futures", the 7th MARE People and the Sea conference. - Amsterdam, The Netherlands: Centre for Maritime Research, 2013:85-86.
- Katikiro, R.E., Macusi, E., & Ashoka Deepananda, K.H.M., Interplay Between Changes in Fishery and Social Dynamic in Coastal Fishing Communities of Tanzania. *Western Indian Ocean Journal of Marine Science*, 2013, 12(2):95-110.
- 2012 Katikiro, R.E., & Macusi, E., Impacts of climate change on West African fisheries and its implications on food production. *Journal of Environmental Science and Management*, 2012, 15(2):83-95.
- Ashoka Deepananda, K.H.M., & Macusi, E.D., Human Disturbance on Tropical Rockyshore Assemblages and the Role of Marine Protected Areas in Reducing Its Impact. *Philippine Agricultural Scientist*, 2012, 95(1):87-98.
- Macusi, E.D., Grazing Drives Spatial Variation in the Abundance and Distribution Patterns of Autotrophs in Tropical Rocky Shore. *Philippine Journal of Science*, 2012, 141(2):141-156.
- Ashoka Deepananda, K.H.M., & Macusi, E.D., The Changing Climate and Its Implications to Capture Fisheries: a Review. *Journal of Nature Studies*, 2012, 11(1&2):71-87.
- Ashoka Deepananda, K.H.M., & Macusi, E.D., Human Disturbance on Tropical Rockyshore Assemblages and the Role of Marine Protected Areas in Reducing its Impact. *Philippine Agricultural Scientist*, 2012, 95(1):87-98.
- 2011 Macusi, E.D., Katikiro, R.E., Ashoka Deepananda, K.H.M., Jimenez, L.A., Conte, A.R., & Fadli, N., Human induced degradation of coastal resources in Asia Pacific and implications on management and food security. *Journal of Nature Studies*, 2011, 9(2):13-28.
- 2010 Macusi, E.D., Effect of different herbivore guilds on the abundance and distribution patterns of autotrophs on a semi-exposed tropical rocky shore, Hong Kong. *The Philippine Scientist*, 2010, 47:173-203.

Name Dennis I. Merino

Sex Male

Organizational Affiliations

Professor, Department of Mathematics Southeastern Louisiana University, 500 Western Avenue, Hammond Louisiana, USA

Education

Doctor of Philosophy in Mathematical Sciences (Matrix Analysis), The John Hopkins University, Baltimore, Maryland 1992

Master of Science in Engineering, The John Hopkins University, Baltimore, Maryland 1990

Bachelor of Science in Mathematics (*summa cum laude*), University of the Philippines, Diliman, Quezon City 1986

Fields of Specialization

Mathematics

Matrix Analysis

Employment

Associate Editor, Science Diliman, 2017-Present

Professor, Southeastern Louisiana University, 2004 August-Present

Associate Professor, Southeastern Louisiana University, 1998 August-2004 July

Assistant Professor, Southeastern Louisiana University, 1992 August-1998 July

Mathematician, National Institutes of Health, 1990 May-1990 July

Teaching Research Assistant, John Hopkins University, 1989 August-1992 May

Instructor, University of the Philippines, 1986 October-1988 May

Honors / Awards

Balik Scientist Awardee, Department of Science and Technology 2009

Papers Presented

2011 February Pant, S., & Merino, D.I. (2011 February 24-26). Sum of Orthogonal Matrices, The 24-26 Mathematical Association of America Louisiana/Mississippi Section 88th Annual Meeting, The University of Mississippi, Oxford, MS, USA.

2011 February Pant, S., & Merino, D.I. (2011 February 24-26). Reducibility of $P_n(\alpha) = \alpha^{n+1}$ over \mathbb{Z}_2 , The Mathematical Association of America Louisiana/Mississippi Section 88th Annual Meeting, The University of Mississippi, Oxford, MS, USA.

Publications

2018 Dela Rosa, K.L., Merino, D.I., & Paras, A.T., The subspaces spanned by Householder vectors associated with an orthogonal or a symplectic matrix. *Linear Algebra and its Applications*, 2018, 546:37-49.

2017 De la Cruz, R.J., Merino, D.I., & Paras, A.T., Every $2n$ -by- $2n$ complex matrix is a sum of three symplectic matrices. *Linear Algebra and its Applications*, 2017, 517:199-206.

De la Cruz, R.J., Merino, D.I., & Paras, A.T., Skew ϕ polar decompositions. *Linear*

- Algebra and its Applications, 2017, 531:129-140.
- 2016 Granario, D.Q., Merino, D.I., & Paras, A.T., The sum of two ϕ_S orthogonal matrices when $S^{-1}S$ is normal and $-1 \notin \sigma(S^{-1}S)$. *Linear Algebra and its Applications*, 2016, 495:67-89.
Abara, M.N.M., Merino, D.I., Rabanovich, V.I., Sergeichuk, V.V., & Sta Maria, J.P., Each n -by- n matrix with $n > 1$ is a sum of 5 coninvolutory matrices. *arxiv.org*, Cornell University, 2016:arXiv:1608.02503.
Kunwor, B., Merino, D.I., Reyes, E.N., & Walls, G.A., The Real Orthogonal Group and Vahlen Matrices. *Science Diliman*, 2016, 28(2):27-53.
- 2015 Granario, D.Q., Merino, D.I., & Paras, A.T., The ϕ_S polar decomposition when the cosquare of S is normal. *Linear Algebra and its Applications*, 2015, 467:75-85.
de la Cruz, R.J., Merino, D.I., & Paras, A.T., S orthogonal matrices and S symmetries. *Linear Algebra and its Applications*, 2015, 474:213-229.
Gueco, E.N., Merino, D.I., & Paras, A.T., The Inertia of the Hermitian H corresponding to H Unitary Matrices. *Science Diliman*, 2015, 27(1):91-101.
- 2014 De la Cruz, R., De la Rosa, K., Merino, D., & Paras, A., The Cartan-Dieudonné-Scherk theorems for complex S -orthogonal matrices. *Linear Algebra and its Applications*, 2014, 458:251-260.
- 2013 Granario, D.Q., Merino, D.I., & Paras, A., The ϕ_S polar decomposition. *Linear Algebra and its Applications*, 2013, 438(1):609-620.
- 2012 de la Rosa, K.L., Merino, D.I., & Paras, A.T., The J -Householder matrices. *Linear Algebra and its Applications*, 2012, 436(5):1189-1194.
Merino, D.I., Paras, A.T., & Teh, T.E.D., The Λ_S -Householder matrices. *Linear Algebra and its Applications*, 2012, 436(7):2653-2664.
- 2011 De la Cruz, R.J., Merino, D.I., & Paras, A.T., The ϕ_S polar decomposition of matrices. *Linear Algebra and its Applications*, 2011, 434(1):4-13.
Merino, D.I., Paras, A.T., Reyes, E., & Walls, G., The sum of orthogonal matrices in $M_n(\mathbb{Z}_k)$. *Linear Algebra and its Applications*, 2011, 434(10):2170-2175.
- 2010 Merino, D.I., Paras, A.T., & Pelejo, D.C.P., On the ϕ_J polar decomposition of matrices. *Linear Algebra and its Applications*, 2010, 432(5):1165-1175.
Abara, M.N.M., Merino, D.I., & Paras, A.T., ϕ_S Orthogonal matrices. *Linear Algebra and its Applications*, 2010, 432(11):2834-2846.
- 2009 Dato-on, J.E., Merino, D.I., & Paras, A.T., The ϕ_J polar decomposition of matrices with rank 2. *Linear Algebra and its Applications*, 2009, 430(2):756-761.
Horn, D.Q., Merino, D.I., & Paras, A.T., The ψ_S polar decomposition. *Linear Algebra and its Applications*, 2009, 431(8):1249-1256.
- 2007 Abara, M.N.M., Merino, D.I., & Paras, A.T., Skew-coninvolutory matrices. *Linear Algebra and its Applications*, 2007, 426(2):540-557.
- 2005 Li, K., Merino, D.I., & Reyes, E.N., The n -dimensional hyperboloid and hyperbolic geometry. *Southeastern University*, 2005:1-13.
- 2004 Abara, M.N.M., & Merino, D.I., Matrix Decompositions. *Matimyas Matematika*, 2004, 27(1-3):56-64.
- 2003 Goodson, G.R., Horn, R.A., & Merino, D.I., Quasi-real normal matrices and eigenvalue pairings. *Linear Algebra and its Applications*, 2003, 369:279-294.
- 1999 Horn, R.A., & Merino, D.I., The Jordan Canonical Forms of complex orthogonal and skew-symmetric matrices. *Linear Algebra and its Applications*, 1999, 302-303(1-3):411-421.
Merino, D.I., & Sergeichuk, V.V., Littlewood's algorithm and quaternion matrices. *Linear Algebra and its Applications*, 1999, 298(1):193-208.

- 1996 Horn, R.A., Li, C.-K., & Merino, D.I., Distances between the graphs of matrices. *Linear Algebra and its Applications*, 1996, 240:65-77.
- 1995 Horn, R.A., & Merino, D.I., Contragredient equivalence: A canonical form and some applications. *Linear Algebra and its Applications*, 1995, 214:43-92.
- 1994 Horn, R.A., Li, C.-K., & Merino, D.I., Linear Operators Preserving Complex Orthogonal Equivalence on Matrices. *Siam Journal on Matrix Analysis and Applications*, 1994, 15(2):1-14.
- 1993 Li, C.-K., & Merino, D.I., Linear operators preserving unitary t -congruence (orthogonal similarity) on complex (real) Matrices. *Linear and Multilinear Algebra*, 1993, 35(2):83-105.
- Horn, R.A., & Merino, D.I., A Real-Coninvolutory Analog of the Polar Decomposition. *Linear Algebra and its Applications*, 1993, 190:209-227.

Name Herbert Palines

Sex Male

Organizational Affiliations

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

Education

Doctor of Philosophy in Mathematics, University of the Philippines, Diliman, Quezon City, Philippines 2017

Master of Science in Mathematics, University of the Philippines Los Baños, Laguna, Philippines 2011

Bachelor of Science in Mathematics (Major in Teaching), University of the Philippines Los Baños, Laguna, Philippines 2005

Fields of Specialization

Mathematics

Coding Theory

Algebra

Applied and Computational Mathematics

Mathematics Education

Employment

Assistant Professor 2, University of the Philippines Los Baños, 2011 September-Present

Instructor of Mathematics, University of the Philippines Los Baños, 2006 June-2011 August

Part-time Instructor, Southern Luzon State University, 2005 June-2006 March

Publications

- 2018 Dela Cruz, B.P.B., Lampos, J.M.T., Palines, H.S., & Sison, V.P., A New Construction of Anticode-Optimal Grassmannian Codes. Annual Convention of the Mathematical Society of the Philippines, Clark, Pampanga, Philippines, 2018.
Corro, E.C.T., Lampos, J.M.T., Palines, H.S., & Sison, V.P., Orbit Codes over $M_2(F_q)$ and Their Homogenous Distance. Journal of Physics: Conference Series, 2018, 960:012004.
- 2017 Jitman, S., Palines, H.S., & dela Cruz, R.B., On Quasi-Abelian Complementary Dual Codes. In: Barbero Á., Skachek V., Ytrehus Ø. (eds) Coding Theory and Applications. ICMCTA 2017. Lecture Notes in Computer Science, Springer Cham, 2017, 10495:192-206.
Palines, H.S., Jitman, S., & dela Cruz, R.B., Hermitian self-dual quasi-abelian codes. Journal of Algebra Combinatorics Discrete Structures and Applications, 2017, 5(1):5-18.
- 2012 Palines, H.S., & Sison, V.P., Deriving the Parity Check Matrix of a Ring Convolutional Code. Journal of the Mathematical Society of the Philippines, 2012, 35(1-2):57-63.
Palines, H.S., & Sison, V.P., A Computer Search Algorithm for Optimum Free Distance Binary Convolutional Codes. Philippine Computing Journal, 2012, 7(2):47-53.

Name Florencia G. Palis

Sex Female

Fields of Specialization

Anthropology

Statistics

Sustainable Agriculture

Crop Production

Agricultural Development

Soil and Water Conservation

Climate Change and Agriculture

Crop Management

Organic Farming

Organic Agriculture

Plant Protection

Integrated Pest Management

Crop Science

Nutrient Management

Food Security

Farming

Crop Protection

Conservation Agriculture

Pest Management

Agro-biodiversity

Farm Management

Integrated Crop Management

Pesticides

Rice

Biopesticide development

Pesticide Toxicity

Agrochemicals

Agricultural Economics

Medical Anthropology

Cultural Anthropology

Agricultural Plant Science

Employment

Professor, Department of Social Sciences, University of the Philippines Los Baños, 2014 August-Present

Researches

Completed

State of the Art: Social Science Research in Southern Tagalog

Papers Presented

- 2009 December 6-11 Lampayan, R.M., Palis, F.G., Flor, R.B., Bouman, B.A.M., Quicho, E.D., De Dios, J.L., Espiritu, A., Sibayan, E.B., Vicmundo, V.R., Lactaoen, A.T., & Soriano, J.B. (2009 December 6-11). Adoption and dissemination of "safe alternate wetting and drying" in pump irrigated rice areas in the Philippines, 60th International Executive Council Meeting & 5th Asian Regional Conference, New Delhi, India.
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- 2002 September 11-14 Palis, F.G., Morin, S., & Hossain, M. (2002 September 11-14). Social Capital and Diffusion of Integrated Pest Management Technology: A Case Study in Central Luzon, Philippines, Social Research Conference, CIAT, Cali, Columbia.
- 1987 October 11-17 Palis, F., Pingali, P.L., & Litsinger, J.A. (1987 October 11-17). A multiple-pest economic threshold for rice (a case study in the Philippines), International Workshop on Crop Loss Assessment to Improve Pest Management in Rice and Rice-based Cropping Systems in South and Southeast Asia.
- 1984 May 21-23 Hoque, M.M., & Palis, F.G. (1984 May 21-23). Yield loss of corn [*Zea mays*] at different damage levels, Anniversary and Annual Convention Pest Control Council of the Philippines, Los Baños, Laguna, Philippines.
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Fields of Specialization
 Forestry
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Papers Presented

- 2014 October 5-11 Paras, F., & Rahman, S.A. (2014 October 5-11). Community Perspectives for Cacao-based Agroforestry Development in Camalig, Albay Province in the Philippines: An Application of Q Methodolog, XXIV IUFRO World Congress "Sustaining Forests, Sustaining People: The Role of Research, Salt Lake City, Utah, USA.
- 2013 October 21-23 Carandang, A.P., Pulhin, J.M., Camacho, L.D., Camacho, S.C., Paras, F.D., Del Rosario, P.J.B., & Tesoro, F.O. (2013 October 21-23). Transition to Sustainable Forest Management and Rehabilitation in the Philippines , Transition to Sustainable Forest Management and Rehabilitation: The Enabling Environment and Roadmap, Beijing, China.
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- 2011 Rahman, S.A., Desissa, D., Sasaoka, M., Paras, F.D., Healey, J., & Sunderland, T., Changing paradigms in a changing climate: adaptive innovation towards forest management institutions to manage tropical forest in South and Southeast Asia. *Proceedings of the 8th World Congress of the International Association for Landscape Ecology*, 2011:439-440.
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- 2010 Paras, F.D., Rebugio, L.L., Pulhin, J.M., & Torres, C.S., Foresters: Heroes or Foes? Attitudes and Perceptions of Selected Public Towards the Forestry Profession. *International Conference on Forestry Education and Research for the Asia Pacific Region*, College, Los Baños, Laguna, 2010.
- Camacho, L.D., Rebugio, L.L., Camacho, S.C., Carandang, A.P., & Paras, F.D., Economic aspects of community-based forest management program as a strategy for forest landscape restoration in the Philippines. *Forest Science and Technology*, 2010, 3(2):108-116.
- 2009 Paras, F.D., *Implicit Attitudes of Forestry Students Toward the Forestry Profession*. *Journal of International Society for Southeast Asian Agricultural Sciences*, 2009.
- 2007 Camacho, L.D., Rebugio, L.L., Camacho, S.C., Carandang, A.P., & Paras, F.D., Economic aspects of community-based forest management program as a strategy for forest landscape restoration in the Philippines. *Forest Science and Technology*, 2007, 3(2):108-116.

Name **Rose Jane J. Peras**
Sex Female
Fields of Specialization
Qualitative Analysis
Research Methodology
Governance
Climate Change Adaptation
Social Capital
REDD+

Papers Presented

- 2010 Cantre, C.G., Pulhin, J.M., Peras, R.J.J., & Tapia, M. (2010 November 23-25). Coastal
November 23-25 communities and mangrove forest in the face of a changing climate: the case of Bacacay, Albay, Philippines, International Conference on Forestry Education and Research for the Asia Pacific Region,, College, Laguna, Philippines.
- 2005 Pulhin, J.M., Lasco, R.D., Cruz, R.V.O., Peras, R.J.J., & Pulhin, F.B. (2005 November 30 -
November 30 - December 1). People and places vulnerable to climate variability and extremes: views
December 1 from the watershed communities, 2005 Symposium of the Forests and Natural Resources Research Society of the Philippines, Inc., College, Laguna, Philippines.

Publications

- 2018 Tapia, M.A., Pulhin, J.M., Nelson, G.L.M., Predo, C.D., Peria, A.S., Peras, R.J.J., Lasco, R.D., Pulhin, F.B., & Evangelista, R.J.P., Involvement of Women in Farm Decision-making and Adaptive Capacity to Extreme Events of Farming Households in Ligao City, Albay, Philippines. *Journal of Environmental Science and Management*, 2018, 21(2):70-81.
- 2017 Peras, R.J.J., Pulhin, J.M., & Inoue, M., Vulnerability of Community-Based Forest Management to Climate Variability and Extremes: Emerging Insights on the Contribution of REDD+. *Small-scale Forestry*, 2017, 16(2):249-274.
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Mohammed, A.J., Inoue, M., Shivakoti, G.P., Nath, T.K., Jashimuddin, M., De-Zoysa, M., Kaskoyo, H., Pulhin, J.M., & Peras, R.J., Analysis of National Forest Programs for REDD+ Implementation in six South and Southeast Asia countries. *Forest Systems*, 2016, 25(2):e601.
Peria, A.S., Pulhin, J.M., Tapia, M.A., Predo, C.D., Jr., Peras, R.J.J., Evangelista, R.J.P., Lasco, R.D., & Pulhin, F.B., Knowledge, Risk Attitudes and Perceptions on Extreme Weather Events of Smallholder Farmers in Ligao City, Albay, Bicol, Philippines. *Journal of Environmental Science and Management*, 2016:31-41.
Pulhin, J.M., Peras, R.J.J., Pulhin, F.B., & Gevaña, D.T., Farmers' Adaptation to Climate Variability: Assessment of Effectiveness and Barriers Based on Local Experience in Southern Philippines. *Journal of Environmental Science and Management*, 2016:1-14.
- 2015 Mohammed, A.J., Inoue, M., Peras, R.J., Nath, T.K., Jashimuddin, M., & Pulhin, J.M., Transformation Strategy for Managing Coupled Socio-Ecological Systems: Case Studies from Bangladesh and the Philippines. *Small-scale Forestry*, 2015, 15(2):213-

227.

Peras, R.J., Pulhin, J.M., & Inoue, M., Local stakeholders' assessment of community-based forest management and the implications for REDD Plus implementation in the Philippines. *Asia Life Sciences*, 2015, 24(1):349-381.

Pulhin, J.M., Peras, R.J.J., & Tapia, M.A., Chapter 11 Philippines: Multi-tiered Forest Governance System on Uneven Playing Field. *Multi-level Forest Governance in Asia: Concepts, Challenges and the Way Forward*, 2015.

2014 Tapia, M., Pulhin, J., & Peras, R.J., Vulnerability and adaptation to climate change of selected community-based forest management areas in Oas, Albay, Philippines. *Asia Life Sciences*, 2014, 23(2):567.

2013 Carandang, A.P., Camacho, L.D., Gevaña, D.T., Dizon, J.T., Camacho, S.C., de Luna, C.C., Pulhin, F.B., Combalicer, E.A., Paras, F.D., Peras, R.J.J., & Rebugio, L.L., Economic valuation for sustainable mangrove ecosystems management in Bohol and Palawan, Philippines. *Forest Science and Technology*, 2013, 9(3):118-125.

2010 Pulhin, J.M., Lasco, R.D., Pulhin, F.B., Ramos, L., & Peras, R.J.J., Chapter 11: Climate change adaptation and community forest management. *Community*, 2010, 4:243-263.

Pulhin, J.M., Peras, R.J.J., & Tapia, M.A., Climate Change Adaptation in Water and Agricultural Sectors in the Philippines: Some Issues and Challenges. *Asian Journal of Environment and Disaster Management (AJEDM)*, 2010, 2(4):471.

2008 Peras, R.J.J., Pulhin, J.M., Lasco, R.D., Cruz, R.V.O., & Pulhin, F.B., Climate Variability and Extremes in the Pantabangan-Carranglan Watershed, Philippines: Assessment of Impacts and Adaptation Practices. *Journal of Environmental Science and Management*, 2008, 11(2):14-31.

2007 Pulhin, J.M., Peras, R.J.J., Cruz, R.V.O., Lasco, R.D., Pulhin, F.B., & Tapia, M.A., Climate Variability and Extremes in the Pantabangan-Carranglan Watershed of the Philippines: An Assessment of Vulnerability. In: Leary, N., Conde, C., Kulkarni, J., Nyong, A., Pulhin, J. (Eds.), *Climate Change and Vulnerability*. London: Earthscan, 2007.

2006 Chokkalingam, U., Carandang, A.P., JM Pulhin, J.M., Lasso, R.D., Peras, R.J.J., & Torna, T., One Century Of Forest Rehabilitation In The Philippines: Approaches, Outcomes And Lessons. Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2006.

Pulhin, J.M., Peras, R.J.J., Cruz, R.V.O., Lasco, R.D., Pulhin, F.B., & Tapia, M.A., Vulnerability of communities to climate variability and extremes: the Pantabangan-Carranglan watershed in the Philippines. *AIACC Working Papers, Assessment of Impacts and Adaptations to Climate Change*, 2006, 44.

Lasco, R.D., Carandang, A.P., Chokkalingam, U., Pulhin, J.M., Razal, R.A., Acosta, R.T., Natividad, M.Q., & Peras, R.J.J., Chapter IV: Bottlenecks and recommended actions: Stakeholder perspectives from Regions III, VII and XI. In: Chokkalingam, U., Carandang, A.P., JM Pulhin, J.M., Lasso, R.D., Peras, R.J.J., & Torna, T. (Eds.), *One century of forest rehabilitation in the Philippines*, Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2006:107-121.

Chokkalingam, U., Pulhin, J.M., Carandang, A.P., Peras, R.J., Lasco, R.D., & Natividad, M.Q., Outcomes and sustainability: lessons from the ground. In: Chokkalingam, U., Carandang, A.P., JM Pulhin, J.M., Lasso, R.D., Peras, R.J.J., & Torna, T. (Eds.), *One century of forest rehabilitation in the Philippines*, Center for International Forestry Research (CIFOR), Bogor, Indonesia, 2006.

Pulhin, J.M., Chokkalingam, U., Peras, R.J., Acosta, R.T., Carandang, A.P., Natividad, M.Q., Lasco, R.D., & Razal, R., Chapter 1: Historical Overview. *Semiconductors and Semimetals*, In: Chokkalingam, U., Carandang, A.P., JM Pulhin, J.M., Lasso, R.D., Peras, R.J.J., & Torna, T. (Eds.), *One century of forest rehabilitation in the Philippines*, Center for International Forestry Research (CIFOR), Bo, 2006, 47:6-41.

- 1996 Balatibat, J.B., Peras, R.J.J., Jumawid, R.J.J., & Fernando, E.S., Bamboo-roosting bats (*Tylonycteris*, Vespertilionidae) in the Subic Bay Forest Reserve, Philippines. *Asia Life Sciences*, 1996, 5(2):107-112.

Name Mark Angelo Cabrera Purio

Sex Male

Organizational Affiliations

Faculty, Electronics Engineering Department, Adamson University, San Marcelino St., Ermita, Manila

Fields of Specialization

Intelligent Systems

Image Processing

Machine Vision

Agriculture

Papers Presented

- 2018 October 28-31 De Guzman, M.D., Josue, F.A.M., Raynes, M.J.S., & Purio, M.A.C. (2018 October 28-31). Feedback Control and Monitoring System for a Potable Rainwater and Groundwater Harvester, TENCON 2018 - 2018 IEEE Region 10 Conference, Jeju, South Korea.
- 2017 November 5-8 Damasco, L.S.A., Enriquez, J.P.M., Razon, M.N.P., & Purio, M.A.C. (2017 November 5-8). Automated conditioning system for mangrove nursery, TENCON 2017 - 2017 IEEE Region 10 Conference, Penang, Malaysia.
- 2017 November 5-8 Galindez, Z.C., Ituralde, T.M.S., Pablo, R.J.R., & Purio, M.A.C. (2017 November 5-8). Design and development of ground and rainwater purification control system in remote areas, TENCON 2017 - 2017 IEEE Region 10 Conference, Penang, Malaysia.
- 2016 November 22-25 Purio, M.A.C., Matanguihan, J.D.P., Peña, S.K.R., Principe, G.M.V., & Tabada, E.J.T. (2016 November 22-25). Solar-Powered Paddy Grain Humidifier-Dryer, 2016 IEEE Region 10 Conference (TENCON), Singapore.
- 2016 November 22-25 Purio, M.A.C., Sacopon, M.J.P.L., Salvador, J.J.O., & Velasco, F.A.B. (2016 November 22-25). Development of the system and method for delivery using Radio Frequency Identification (I-BOX), 2016 IEEE Region 10 Conference (TENCON), Singapore.
- 2015 December 9-12 Abad, A.G.C., Guerrero, L.M.F.G., Ignacio, J.K.M., Magtibay, D.C., Purio, M.A.C., & Raguindin, E.Q. (2015 December 9-12). A simulation of a power surge monitoring and suppression system using LabVIEW and multisim co-simulation tool, 2015 International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM).
- 2015 November 1-4 Alano, F.I., Anzures, A.S., Ondevilla, J.G., & Purio, M.A.C. (2015 November 1-4). LabVIEW-based motion activated security camera, TENCON 2015 - 2015 IEEE Region 10 Conference, Macao, China.
- 2015 November 1-5 Purio, M.A.C., Acebuche, J.C., Barallas, J.B., Merjudio, K.L.C., Obico, P.N., & Raguindin, E.Q. (2015 November 1-5). A system for reducing third-hand smoke, TENCON 2015 - 2015 IEEE Region 10 Conference, Macao, China.
- 2014 October 22-25 Almen, M.J.T., Garcia, J.P.A., Cantos, K.S., Santiago, J.M.M., Purio, M.A.C., & Rañola, A.B.C. (2014 October 22-25). NI LabVIEW based breathing trainer with biofeedback and plethysmography, TENCON 2014 - 2014 IEEE Region 10 Conference, Bangkok, Thailand.

2014 October 22-25 Agustin, P.R.B., Lazaro, R.C., Mazo, M.D.L., Vidal, A.C.P., Raguindin, E.Q., & Purio, M.A.C. (2014 October 22-25). MATLAB based drowsiness detection system using an array of sensors and fuzzy logic, TENCON 2014 - 2014 IEEE Region 10 Conference, Bangkok, Thailand.

Publications

- 2018 De Guzman, M.D., Josue, F.A.M., Raynes, M.J.S., & Purio, M.A.C., Feedback Control and Monitoring System for a Potable Rainwater and Groundwater Harvester. TENCON 2018 - 2018 IEEE Region 10 Conference, 2018:doi:10.1109/TENCON.2018.8650308.
- 2017 Damasco, L.S.A., Enriquez, J.P.M., Razon, M.N.P., & Purio, M.A.C., Automated conditioning system for mangrove nursery. TENCON 2017 - 2017 IEEE Region 10 Conference, 2017:doi:10.1109/TENCON.2017.8228292.
- Galindez, Z.C., Ituralde, T.M.S., Pablo, R.J.R., & Purio, M.A.C., Design and development of ground and rainwater purification control system in remote areas. TENCON 2017 - 2017 IEEE Region 10 Conference, 2017:doi:10.1109/TENCON.2017.8228297.
- 2016 Purio, M.A.C., Matanguihan, J.D.P., Peña, S.K.R., Principe, G.M.V., & Tabada, E.J.T., Solar-Powered Paddy Grain Humidifier-Dryer. 2016 IEEE Region 10 Conference (TENCON), 2016:doi:10.1109/TENCON.2016.7848688.
- Purio, M.A.C., Sacopon, M.J.P.L., Salvador, J.J.O., & Velasco, F.A.B., Development of the system and method for delivery using Radio Frequency Identification (I-BOX). 2016 IEEE Region 10 Conference (TENCON), 2016:doi:10.1109/TENCON.2016.7848430.
- 2015 Abad, A.G.C., Guerrero, L.M.F.G., Ignacio, J.K.M., Magtibay, D.C., Purio, M.A.C., & Raguindin, E.Q., A simulation of a power surge monitoring and suppression system using LabVIEW and multisim co-simulation tool. 2015 International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), 2015:doi:10.1109/HNICEM.2015.7393204.
- Alano, F.I., Anzures, A.S., Ondevilla, J.G., & Purio, M.A.C., LabVIEW-based motion activated security camera. TENCON 2015 - 2015 IEEE Region 10 Conference, 2015:doi:10.1109/TENCON.2015.7372752.
- Purio, M.A.C., Acebuche, J.C., Barallas, J.B., Merjudio, K.L.C., Obico, P.N., & Raguindin, E.Q., A system for reducing third-hand smoke. TENCON 2015 - 2015 IEEE Region 10 Conference, 2015:doi:10.1109/TENCON.2015.7372749.
- 2014 Almen, M.J.T., Garcia, J.P.A., Cantos, K.S., Santiago, J.M.M., Purio, M.A.C., & Rañola, A.B.C., NI LabVIEW based breathing trainer with biofeedback and plethysmography. TENCON 2014 - 2014 IEEE Region 10 Conference, 2014:doi:10.1109/TENCON.2014.7022352.
- Agustin, P.R.B., Lazaro, R.C., Mazo, M.D.L., Vidal, A.C.P., Raguindin, E.Q., & Purio, M.A.C., Matlab based drowsiness detection system using an array of sensors and fuzzy logic. TENCON 2014 - 2014 IEEE Region 10 Conference, 2014:doi:10.1109/TENCON.2014.7022353.

Name Roberto De La Fuente Rañola Jr.

Sex Male

Education

Doctor of Philosophy in Agricultural Economics, University of Minnesota, Minnesota, USA

Master in Agricultural Development Economics, Australian National University, Canberra, Australia

Bachelor of Science in Agricultural Business, University of the Philippines Los Baños, Laguna, Philippines

Fields of Specialization

Resource and Environmental Economics

Farming Systems

Soil Conservation

Project Analysis Feasibility Study Preparation

Employment

Vice Chancellor for Administration, University of the Philippines Los Baños, 2005-2011

Association Membership

Board Member and Past-President, Philippine Agricultural Economics and Development Association

Member, Philippine Society of Animal Scientist

Executive Vice President, Madecor Environmental Managements Systems, Inc.

Publications

- 2018 Thoai, T.Q., De La Fuente Rañola, R., Jr., & Camacho, L.D., The Importance of Weather Forecasts and Meteorological Information in Adaptation to Climate Change in Agricultural Production: Some Preliminary Findings. *Philippine Agricultural Scientist*, 2018, 101(4):377-392.
- Thoai, T.Q., De La Fuente Rañola, R., Jr., Camacho, L.D., & Simelton, E., Determinants of farmers' adaptation to climate change in agricultural production in the central region of Vietnam. *Land Use Policy*, 2018, 70:224-231.
- 2017 Tien, N.D., Rañola, R.F., Jr., & Thuy, P.T., Potential Impact of the REDD+ Program on Poverty Reduction in Nghe An Province, Vietnam. *Forests*, 2017, 8(10):376.
- 2016 Javier, J.M., Rapera, C.L., Rañola, R.F., Jr., & Alcantara, A.J., Valuing public preferences for ludong (*Cestraeus plicatilis valenciennes 1836*) conservation program in Cagayan river systems, Philippines. *Journal of Environmental Science and Management*, 2016(Sp.2):30-38.
- 2015 Razafindrabe, B.H.N., Cuesta, M.A., He, B., Rañola, R.F., Jr. Yaota, K., Inoue, S., Saito, S., Masuda, T., Concepcion, R.N., Santos-Borja, A., & Kada, R., Flood risk and resilience assessment for Santa Rosa-Silang subwatershed in the Laguna Lake region, Philippines. *Environmental Hazards*, 2015, 14(1):16-35.
- 2014 Rañola, R.F., Rañola, F.M., Tan, M.F.O., & Casin, M.C.S., Emerging Socio-Economic and Environmental Issues Affecting Food Security: A Case Study of Silang-Santa Rosa

Subwatershed. In: Kaneko, N., Yoshiura, S., & Kobayashi, M. (Eds.), *Sustainable Living with Environmental Risks*, Springer, Tokyo, 2014:123-135.

Rola, W.R., Rañola, R.F., Jr., Macandog, D.M., & Rola, A.C., Technological and institutional challenges to food security in the Philippines. In: Nagothu, U.S., (Ed.), *Food Security and Development*, Center for Strategic Planning and Policy Studies, University of the Philippines Los Baños, Laguna, Philippines, 2014.

Idago, R.G., Rañola, R.F., Jr., Tramline transport facilities increase the productivity of temperate vegetable farms in the uplands of Benguet Province, Philippines.. *Journal of ISSAAS (International Society for Southeast Asian Agricultural Sciences)*, 2014, 18(1):147-159.

2010 Magcale-Macandog, D.B., Rañola, F.M., Rañola, R.F., Jr., Ani, P.A.B., & Vidal, N.B., Enhancing the food security of upland farming households through agroforestry in Claveria, Misamis Oriental, Philippines. *Agroforestry Systems*, 2010, 79(3):327-342.

Thoai, T.Q., & Rañola, R.F., Jr., Decision making by upland farmers on forest management in the northwest mountainous region of Vietnam. *Journal of ISSAAS (International Society for Southeast Asian Agricultural Sciences)*, 2010, 16(1):68-82.

Name Lucrecio L. Rebugio

Sex Male

Organizational Affiliations

Professor Emeritus and Independent Natural Resources and Environmental Professional, University of the Philippines Los Baños,

Education

Doctor of Philosophy in Community Development major in Forestry and Natural Resource Management, University of the Philippines, 1977

Master in Natural Resource Sociology and Administration, Yale University School of Forestry and Environmental Studies, New Haven, Connecticut, USA 1969

Fields of Specialization

Community Development

Forestry and Natural Resource Management

Natural Resource Sociology and Administration

Publications

- 2013 Camacho, L.D., Carandang, A.P., Gevaña, D.T., Pulhin, F.B., Camacho, S.C., Dizon, J.T., Combalicer, E.A., Paras, F.D., & Rebugio, L.L., Financial Analysis of Carbon Sequestration of Man-Made Mangrove Forests in Bohol, Philippines. *Ecosystems & Development Journal*, 2013, 4(1):14-22.
- Carandang, A.P., Camacho, L.D., Gevaña, D.T., Dizon, J.T., Camacho, S.C., de Luna, C.C., Pulhin, F.B., Combalicer, E.A., Paras, F.D., Peras, R.J.J., & Rebugio, L.L., Economic valuation for sustainable mangrove ecosystems management in Bohol and Palawan, Philippines. *Forest Science and Technology*, 2013, 9(3):118-125.
- 2012 Camacho, L.D., Combalicer, M.S., Yeo-Chang, Y., Combalicer, E.A., Carandang, A.P., Camacho, S.C., de Luna, C.C., & Rebugio, L.L., Traditional forest conservation knowledge/technologies in the Cordillera, Northern Philippines. *Forest Policy and Economics*, 2012, 22:3-8.
- 2011 Camacho, L.D., Gevaña, D.T., Carandang, A.P., Camacho, S.C., Combalicer, E.A., Rebugio, L.L., & Yeo-Chang, Y., Tree biomass and carbon stock of a community-managed mangrove forest in Bohol, Philippines. *Forest Science and Technology*, 2011, 7(4):161-167.
- 2010 Rebugio, L.L., Carandang, A.P., Dizon, J.T., Pulhin, J.M., Camacho, L.D., Lee, D.K., & Peralta, E.O., Promoting sustainable forest management through community forestry in the Philippines. *IUFRO World Series*, 2010, 25:355-368.
- 2009 Carandang, M.G., Camacho, L.D., Carandang, A.P., Camacho, S.C., Gevaña, D.T., Rebugio, L.L., & Yeo-Chang, Y., Sustainable thatching materials production from nipa (*nypa fruticans*) in Bohol, Philippines. *Forest Science and Technology*, 2009, 5(1):17-22.
- 2007 Camacho, L.D., Tolentino, E.L., Jr., Rebugio, L.L., & Camacho, S.C., Economics of using water use efficient forest landscape restoration tree species. *Forest Science and Technology*, 2007, 3(2):101-107.
- Camacho, L.D., Rebugio, L.L., Camacho, S.C., Carandang, A.P., & Paras, F.D., Economic aspects of community-based forest management program as a strategy for forest landscape restoration in the Philippines. *Forest Science and Technology*, 2007, 3(2):108-116.
- Rebugio, L.L., Pulhin, J.M., Carandang, A.P., Peralta, E.O., Camacho, L.D., &

- Bantayan, N.C., Forest Restoration and Rehabilitation in the Philippines. In: Lee, D.K., (Ed.), *Keep Asia Green Volume I "Southeast Asia"*, 2007:125-169.
- 2006 Dizon, J.T., Calderon, M.M., Camacho, L.D., Carandang, M.G., Rebugio, L.L., & Tolentino, N.M., Institutionalization of a water user fee for watershed management. *Forest Science and Technology*, 2006, 2(1):51-56.
- 2005 Rebugio, L.L., & Camacho, L.D., Reorienting forestry education to sustainable forest management : The case of the university of the Philippines Los Banos college of forestry and natural resources. *Forest Science and Technology*, 2005, 1(2):193-198.
- 2002 Rebugio, L., & Camacho, L., Curriculum Change in Forestry: A Response to the Paradigm Shift in Natural Resources Management. *Journal of Southeast Asian Education*, 2002, 3(2):182-224.

Name Jonathan W.L. Salvacion

Sex Male

Organizational Affiliations

Dean, Mapua Institute of Technology, 658 Muralla St., Intramuros, Manila, Philippines

Education

Doctor of Engineering in Chemical Engineering, Tokyo Institute of Technology, Tokyo, Japan 1996

Fields of Specialization

Chemical Engineering

Remote Sensing

Geochemistry

Hydrogeology

Employment

Director, Mapua Institute of Technology, 2006-Present

Dean, Mapua Institute of Technology, 2005 July-Present

Director, Center for Integrative and Development Studies, University of the Philippines, 2004-2005

Researches

Completed

Enzyme -Catalyzed Conversion of Used Cooking Oil into Biodiesel

Papers Presented

- 2015 July 20 Quiambao, E., & Salvacion, J.L. (2015 July 20). Investigation of Pesticide Malathion Contamination in Pagsanjan Lumban Watershed, Philippines, 4th Engineering Research and Development for Technology (ERDT) Congress, SMX Convention Center, Pasay City.
- 2013 Habana, N.C., Salvacion, J.L., Jenson, J.W., & Rouse, J.D. (2013 September 30 - 01 September 30 - October 2013). VADOCHARGE-N: a vadose flow and N-transport simulation model for the Northern Guam Lens Aquifer, 2013 International Conference on Sustainable Environmental Technologies, Manila, Philippines.
- 2012 Habana, N.C., Olsen, A.E., Jenson, J.W., & Salvacion, J.L. (2012). AQUA CHARGE: A Model for Estimating Groundwater Recharge in an Uplifted Island Karst Aquifer, Guam, USA, International Water Association, Busan.

Publications

- 2016 Arshadi, M., Shakeri, H., & Salvacion, J.W.L., A green adsorbent for the removal of BTEX from aqueous media. RSC Advances, 2016, 17(6):14290-14305.
- 2015 Shakeri, H., Arshadi, M., & Salvacion, J.W.L., Removal of BTEX by using a surfactant - Bio originated composite. Journal of Colloid and Interface Science, 2015, 466:186-197.
- 2014 Arshadi, M., Soleymanzadeh, M., Salvacion, J.W.L., & SalimiVahid, F., Nanoscale Zero-Valent Iron (NZVI) supported on sinoguelas waste for Pb(II) removal from aqueous solution: Kinetics, thermodynamic and mechanism. Journal of Colloid and Interface Science, 2014, 426:241-251.

- Arshadi, M., SalimiVahid, F., Salvacion, J.W.L., & Soleymanzadeh, M., Adsorption studies of methyl orange on an immobilized Mn-nanoparticle: Kinetic and thermodynamic. *RSC Advances*, 2014, 31(4):16005-16017.
- Soleymanzadeh, M., Arshadi, Salvacion, J.W.L., & SalimiVahid, F., A new and effective nanobiocomposite for sequestration of Cd(II) ions: Nanoscale zerovalent iron supported on sineguelas seed waste. *Chemical Engineering Research and Design*, 2014, 93:696-709.
- Calagui, M.J., Senoro, D.B., Kan, C.C., Salvacion, J.W., Futralan, C.M., & Wan, M.W., Adsorption of Indium (III) ions from aqueous solution using chitosan-coated bentonite beads. *Journal of Hazardous Materials*, 2014, 277:120-126.
- 2013 Habana, N.C., Heitz, L.F., Olsen, A.E., Jenson, J.W., & Salvacion, J.L., VADOCHARGE: Groundwater Recharge Model for an Uplifted Island Karst Aquifer, Guam, USA. *International Journal of Environmental Engineering Science and Technology Research*, 2013, 1(8):141-164.
- Arshadi, M., SalimiVahid, F., Salvacion, J.W.L., & Soleymanzadeh, M., A practical organometallic decorated nano-size SiO₂-Al₂O₃ mixed-oxides for methyl orange removal from aqueous solution. *Applied Surface Science*, 2013, 280:726-736.
- 2012 Shoeybi, M., & Salvacion, J.L., Organic Component and Nitrogen Removal of Fresh Waste Leachate by Circulating on Old Waste Deposits as a Pretreatment. *International Journal of Environmental Science and Development*, 2012, 3(2):157-160.
- Shakeri, H., Shoeybi, M., & Salvacion, J.L., Experimental Analytical Simulation Method in Landfill Geomembrane Liner Design. *International Journal of Environmental Science and Development*, 2012, 3(2):161-166.
- Shoeybi, M., Kamel, A.S., & Salvacion, J.L., Landfill Leachate Circulation on Old Waste Pretreatment Performance Prediction with Artificial Neural Networks. *International Journal of Environmental Science and Development*, 2012, 3(3):223-227.
- Shoeybi, M., & Salvacion, J.L., Landfill Leachate Degradation in Tropical Maritime Climate; an Experimental Laboratory Scale Study. 2012 International Conference on Environment Science and Engineering, Singapore, 2012, 32:103-108.
- 2009 Caparanga, A.R., Basilia, B.A., Dagbay, K.B., & Salvacion, J.W.L., Factors affecting degradation of polyethylene terephthalate (PET) during pre-flotation conditioning. *Waste Management*, 2009, 29(9):2425-2428.
- 1996 Salvacion, J.L., Ohta, A., Shimura, R., Ohtaguchi, K., & Koide, K., Effects of Alcohol and Particle Concentrations on Longitudinal Liquid Dispersion Coefficient in Gel-Particle-Suspended Bubble Column. *Journal of Chemical Engineering of Japan*, 1996, 29(5):884-888.
- 1995 Salvacion, J.L., Murayama, M., Ohtaguchi, K., & Koide, K., Effects of Alcohols on Gas Holdup and Volumetric Liquid Phase Mass Transfer Coefficient in Gel-Particle-Suspended Bubble Column. *Journal of Chemical Engineering of Japan*, 1995, 28(4):434-442.

Name **Romeo E. Sanchez Jr.**

Sex Male

Organizational Affiliations

Associate Professor, Department of Veterinary Paraclinical Sciences (DVPS), College of Veterinary Medicine (CVM), University of the Philippines-Los Banos (UPLB)

Education

Doctor of Veterinary Science, Department of Virology, Faculty of Veterinary Medicine, Ghent University, Belgium 2003

Master of Science in Molecular Biology, Institute of Molecular Biology and Biotechnology, Faculty of Science, Vrije Universiteit Brussel, Belgium 1999

Doctor of Veterinary Medicine, College of Veterinary Medicine, University of the Philippines, Los Banos, aguna, Philippines 1992

Fields of Specialization

Epidemiology

Veterinary Science

Molecular Biology

Veterinary Virology

Immunology

Swine Medicine

Association Membership

Member, Philippine Veterinary Medical Association

Member, National Research Council of the Philippines

Member, Veterinary Practitioners Association of the Philippines

Member, Gamma Sigma Delta Honor Society

Member, UP Alpha Chiron Society

Member, UP Eagles

Member, Ang Lingkod ng Panginoon Community-Los Baños

Honors / Awards

Talent Search for Young Scientists Award, NAST-DUPONT 2004

Young Researcher Award, International Pig Veterinary Society (IPVS) Congress 1994

EU Ph.D Grant, 2000-2003

Belgian Administration for Development Cooperation Fellowship, Belgian Administration for Development Cooperation 1997-99

Young Scientist Award, National Academy of Science and Technology (NAST) 2004

Trainings

22nd International Pig Veterinary Society (IPVS) Congress, Durban, SA 2008

3rd Asian Pig Veterinary Society (APVS) Congress, Wuhan, China 2007

European Society of Veterinary Virology Symposium, Brescia, Italy 2000

2nd Asian Pig Veterinary Society (APVS) Congress, Manila, Philippines 2005

18th International Pig Veterinary Society (IPVS) Congress, Hamburg, Germany 2004

1st Asian Pig Veterinary Society (APVS) Congress, Seoul, South Korea 2003

3rd PRRSV-Aujeszky's Disease Symposium, Ploufragan, France 1999

OIE Symposium on Classical Swine Fever, Birmingham, England 1998

14th International Pig Veterinary Society (IPVS) Congress Congress, Bologna, Italy 1996

OIE Symposium on Aujeszky's Disease, Bangkok, Thailand 1994

13th International Pig Veterinary Society (IPVS) Congress, Bangkok, Thailand 1994

Papers Presented

- 2008 Sanchez, R. (2008). Severe Outbreaks of High fever and Abortions in Commercial Pigs Farms in Luzon, Philippines, Philippine Veterinary Medical Association Annual Convention, Boracay, Philippines.
- 2007 Sanchez, R., Margallo, S., & Magtibay, E. (2007). Isolation of swine influenza H3N2 virus and determination of herd-level seroprevalence in Luzon, Philippines, 3rd Asian Pig Veterinary Society Congress, Wuhan, China.
- 2003 Nauwynck, H., Sanchez, R.E., Meerts, P., Mateusen, B., & Pensaert, P. (2003). New Insights in the Pathogenesis of PCV2 Infections in Fetuses, 1st Asian Pig Veterinary Society Congress, Seoul, South Korea.
- 2005 Sanchez, R., Pajarillaga, G., Manlapaz, R., Margallo, S., Domingo, C., Cullanan, R., & Messina, L. (2005). Herd-level seroprevalence of swine influenza H1N1 virus in Luzon, Philippines, 2nd Asian Pig Veterinary Society Congress, Manila, Philippines.
- 2003 Meerts, P., Sanchez, R.E., Mateusen, B., Nauwynck, H.J., & Pensaert, M.B. (2003). Prevalence of PMWS in Suspected and Non-suspected Belgian Farms, 4th International Symposium on Emerging and Re-emerging Pig Diseases, Rome, Italy.
- 2003 Mateusen, B., Sanchez, R.E., Van Soom, A., Meerts, P., Maes, D.G.D., & Nauwynck, H.J. (2003). Susceptibility of Pig Embryos to Porcine Circovirus Type 2 Infection, 4th International Symposium on Emerging and Re-emerging Pig Diseases, Rome, Italy.
- 2002 Sanchez, R.E., Meerts, P., Nauwynck, H., & Pensaert, M.P. (2002). Clinical and Virological Outcome of PCV2 Infections in Late-Term Fetuses and Newborn Piglets, 17th International Pig Veterinary Society Congress, Iowa.
- 2001 Sanchez, R.E., Nauwynck, H., & Pensaert, M.P. (2001). Serological Survey of Porcine Circovirus 2 Antibodies in Domestic and Feral Pig Populations in Belgium, ssDNA Viruses of Plants, Birds, Pigs and Primates. St. Malo, France.
- 2000 Van Reeth, K., Sanchez, R.E., & Pensaert, M.B. (2000). A Cross-Protection Study in Piglets with Swine Influenza Viruses of H1N1 and H1N2 Subtypes, European Society of Veterinary Virology Symposium, Brescia, Italy.
- 1994 Geerts, P., & Sanchez, R. (1994). Use of Brain Tissue in the Diagnosis of Chronic Classical Swine Fever, 13th International Pig Veterinary Society Congress, Bangkok, Thailand.

Publications

- 2012 Nauwynck, H.J., Sanchez, R., Meerts, P., Lefebvre, D.J., Saha, D., Huang, L., & Misinzo, G., Cell tropism and entry of porcine circovirus 2. *Virus Research*, 2012, 164(1-2):43-45.
- 2010 Nauwynck, H., Van Soom, A., Sanchez, R., Meerts, P., Mateusen, B., Misinzo, G., Lefebvre, D., & Saha, D., PCV2 impact on reproduction in swine. Merial PCVD and swine influenza forum: proceedings (pp. 4-17). Presented at the Merial PCVD and Swine Influenza Forum, 2010.
- 2004 Sanchez, R.E., Jr., Meerts, P., Nauwynck, H.J., Ellis, J.A., & Pensaert, M.B., Characteristics of porcine circovirus 2 replication in lymphoid organs of piglets inoculated in late gestation or postnatally and possible relation to clinical and pathological outcome of infection. *Journal of Veterinary Diagnostic Investigation*, 2004, 16(3):175-185.
- Pensaert, M., Sanchez, R.E., Jr., Ladekjaer-Mikkelsen A.S., Allan, G., & Nauwynck, H.J., Viremia and effect of fetal infection with porcine viruses with special reference to porcine circovirus 2 infection. *Veterinary Microbiology*, 2004, 98:175-183.
- Mateusen, B., Sanchez, R.E., Van Soom, A., Meerts, P., Maes, D.G.D., & Nauwynck, H.J., Susceptibility of pigs embryos to porcine circovirus type 2 infection. *Theriogenology*, 2004, 61(1):91-101.
- Meerts, P., Nauwynck, H.J., Sanchez, R.E., Mateusen, B., & Pensaert, M.B., Prevalence of porcine circovirus 2-related wasting on Belgian farms with or without a history of postweaning multisystemic wasting syndrome. *Vlaams Diergeneeskundig Tijdschrift*, 2004, 73(1):31-38.
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- 2003 Sanchez, R.E., Jr., Meerts, P., Nauwynck, H., & Pensaert, M., Change of porcine circovirus 2 target cells during development in pigs from fetal to early postnatal life. *Veterinary Microbiology*, 2003, 95(1-2):15-25.
- 2001 Sanchez, R.E., Jr., Nauwynck, H., McNeilly, F., Allan, G., & Pensaert, M.B., Porcine circovirus 2 infection in swine foetuses inoculated at different stages of gestation. *Veterinary Microbiology*, 2001, 83(2):169-176.
- 1999 Nollet, H., Laevens, H., Deprez, P., Sanchez, R., Van Driessche, E., & Muylle, E., The use of non-immune plasma powder in the prophylaxis of neonatal *Escherichia coli* diarrhoea in calves. *Zentralblatt fur Veterinarmedizin. Reihe A*, 1999, 46(3):185-196.
- 1995 Geerts, P., Pensaert, M., & Sanchez, R.E., A serological study on infection patterns and persistence of classical swine fever in infected farms in the Philippines. *Journal of Veterinary Science*, 1995, 57:917-920.

Name Meriam Makinano Santillan

Sex Female

Organizational Affiliations

College Dean, College of Engineering and Information Technology, Caraga State University, Ampayon, Butuan City, Philippines

Education

Master of Science in Remote Sensing, University of the Philippines, Diliman, Quezon City, Philippines

Bachelor of Science in Geodetic Engineering, Caraga State University, Ampayon, Butuan City, Philippines

Fields of Specialization

Remote Sensing

Geographic Information System

Hydrology

Geoinformatics

Spatial Analysis

Satellite Image Processing

Vegetation Mapping

Environment

Papers Presented

- 2019 March 12-14 Santillan, J.R., Amora, A.M., Makinano-Santillan, M., Gingo, A.L., & Marqueso, J.T. (2019 March 12-14). Analyzing the Impacts of Land Cover Change to the Hydrologic and Hydraulic Behaviors of the Philippines' Third Largest River Basin, 10 Joint Workshop "Multidisciplinary Remote Sensing for Environmental Monitoring", Kyoto, Japan.
- 2019 March 12-14 Makinano-Santillan, M., Serviano, J., Rubillos, C.K., Amora, A., Santillan, J.R., Morales, E.M., Marqueso, J.T., & Gingo, A.L. (2019 March 12-14). Near-Real Time Hazard Monitoring and Information Dissemination Through Integration of Remote Sensing, GIS, Numerical Modelling, Web Applications and Social Media, 10 Joint Workshop "Multidisciplinary Remote Sensing for Environmental Monitoring", Kyoto, Japan.
- 2017 September 18-22 Santillan, J.R., & Makinano-Santillan, M. (2017 September 18-22). Elevation-based Sea-level Rise Vulnerability Assessment of Mindanao, Philippines: Are Freely-available 30-m Dems Good Enough?, ISPRS Geospatial Week, Wuhan, China.
- 2016 October 17-21 Cutamora, L.C., Serviano, J.L., Pulido, S.P., Santillan, J.R., Makinano-Santillan, M.M., Makinano, R.M., Berdera, M.A., Estorque, A.C.N., & Culdora, J.P. (2016 October 17-21). Assessment of Spatial Interpolation Techniques for River Bathymetry Generation and Integration in Lidar Dtm: Impacts in River Flow Simulations, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.
- 2016 October 17-21 Makinano-Santillan, M., & Santillan, J. (2016 October 17-21). Effective Flood Forecasting and Early Warning Through Application of LIDAR And Related Geospatial Technologies, 37th Asian Conference on Remote Sensing, Colombo, Sri

Lanka.

- 2016 October 17-21 Amora, A.M., Santillan, J.R., Makinano-Santillan, M., Marqueso, J.T., & Gingo, A.L. (2016 October 17-21). Characterizing Flood Hazards in an Alluvial Fan During Extreme Rainfall Events Using LIDAR and Numerical Modeling, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.
- 2016 October 17-21 Santillan, J.R., & Makinano-Santillan, M. (2016 October 17-21). The Use of LIDAR Data and 1D-2D Model Simulations in Assessing the effectiveness of Flood Control Structures under Extreme/Climate Change Scenarios, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.
- 2016 October 3-5 Santillan, J.R., Serviano, J.L., Makinano-Santillan, M., & Marqueso, J.T. (2016 October 3-5). Influence of River Bed Elevation Survey Configurations and Interpolation Methods on the Accuracy of LiDAR Dtm-based River Flow Simulations, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, International Conference on Geomatic and Geospatial Technology (GGT), Kuala Lumpur, Malaysia.
- 2016 October 17-21 Morales, E.M.O., Moyon, E.S., Santillan, J.R., & Makinano-Santillan, M. (2016 October 17-21). Interactive Flood Risk Forecasting Web-application Using Openlayers API and Javascript, 37th Asian Conference on Remote Sensing.
- 2016 July 10-15 Santillan, J.R., Makinano-Santillan, M., & Cutamora, L.C. (2016 July 10-15). Integrating LiDAR and flood simulation models in determining exposure and vulnerability of buildings to extreme rainfall-induced flood hazards, IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Beijing, China.
- 2016 July 10-15 Santillan, J.R., Makinano-Santillan, M., & Makinano, R.M. (2016 July 10-15). Vertical accuracy assessment of ALOS World 3D - 30M Digital Elevation Model over northeastern Mindanao, Philippines, 2016 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Beijing, China.

Publications

- 2019 Santillan, J.R., Amora, A.M., & Makinano-Santillan, M., Gingo, A.L., & Marqueso, J.T., Analyzing the Impacts of Land Cover Change to the Hydrologic and Hydraulic Behaviors of the Philippines' Third Largest River Basin. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 2019, IV3-W1:41-48.
- Makinano-Santillan, M., Serviano, J., Rubillos, C.K., Amora, A., Santillan, J.R., Morales, E.M., Marqueso, J.T., & Gingo, A.L., Near-Real Time Hazard Monitoring and Information Dissemination Through Integration of Remote Sensing, GIS, Numerical Modelling, Web Applications and Social Media. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 2019, IV-3/W1.
- 2017 Santillan, J.R., & Makinano-Santillan, M., Elevation-based Sea-level Rise Vulnerability Assessment of Mindanao, Philippines: Are Freely-available 30-m Dems Good Enough?. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 2017, XLII-2/W7.
- 2016 Makinano-Santillan, M., & Santillan, J.R., Mapping Suitable Areas for Mass Propagation of Sago Palms in the Philippines. In Book: Paluga, M.J.D., Eds., BANWA Monograph Series 1 Mapping Sago: Anthropological, Biophysical and Economic Aspects, Chapter: 7, University of the Philippines Mindanao, 2016.
- Santillan, J., & Makinano-Santillan, M., Recent Distribution of Sago Palms in the Philippines. In Book: Paluga, M.J.D., Eds., BANWA Monograph Series 1 Mapping Sago: Anthropological, Biophysical and Economic Aspects, Chapter: 4, University of the Philippines Mindanao, 2016.

Cutamora, L.C., Serviano, J.L., Pulido, S.P., Santillan, J.R., Makinano-Santillan, M.M., Makinano, R.M., Berdera, M.A., Estorque, A.C.N., & Culdora, J.P., Assessment of Spatial Interpolation Techniques for River Bathymetry Generation and Integration in Lidar Dtm: Impacts in River Flow Simulations. Proceedings of the 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka, 2016.

Makinano-Santillan, M., & Santillan, J., Effective Flood Forecasting and Early Warning Through Application of LIDAR and Related Geospatial Technologies. Proceedings of the 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka, 2016.

Amora, A.M., Santillan, J.R., Makinano-Santillan, M., Marqueso, J.T., & Gingo, A.L., Characterizing Flood Hazards in an Alluvial Fan During Extreme Rainfall Events Using LIDAR and Numerical Modeling. Proceedings of the 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka, 2016.

Santillan, J.R., & Makinano-Santillan, M., The Use of LIDAR Data and 1D-2D Model Simulations in Assessing the effectiveness of Flood Control Structures under Extreme/Climate Change Scenarios. Proceedings of the 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka, 2016.

Santillan, J.R., Marqueso, J.T., Makinano-Santillan, M., & Serviano, J.L., Beyond Flood Hazard Maps: Detailed Flood Characterization with Remote Sensing, GIS and 2D Modelling. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, International Conference on Geomatic and Geospatial Technology, Kuala Lumpur, Malaysia, 2016, XLII-4.

Santillan, J.R., Serviano, J.L., Makinano-Santillan, M., & Marqueso, J.T., Influence of River Bed Elevation Survey Configurations and Interpolation Methods on the Accuracy of LiDAR Dtm-based River Flow Simulations. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, International Conference on Geomatic and Geospatial Technology (GGT), Kuala Lumpur, Malaysia, 2016, Volume XLI.

Santillan, J.R., Makinano-Santillan, M., & Cutamora, L.C., Integrating LiDAR and flood simulation models in determining exposure and vulnerability of buildings to extreme rainfall-induced flood hazards. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Beijing, China, 2016.

Santillan, J.R., Makinano-Santillan, M., & Makinano, R.M., Vertical accuracy assessment of ALOS World 3D - 30M Digital Elevation Model over northeastern Mindanao, Philippines. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2016.

Morales, E.M.O., Moyon, E.S., Santillan, J.R., & Makinano-Santillan, M., Interactive Flood Risk Forecasting Web-application Using Openlayers API and Javascript. 37th Asian Conference on Remote Sensing 2016, Colombo, Sri Lanka, 2016.

Santillan, J.R., Makinano-Santillan, M., Amora, A.M., Morales, E.M.O., Cutamora, L.C., & Asube, L.C.S., Near-real Time Simulation and Geo-visualization of Flooding in the Philippines' Deepest Lake. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2016.

Name Fernando P. Siringan

Sex Male

Organizational Affiliations

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

Professor 1, National Institute of Geological Sciences, University of the Philippines, Diliman, Quezon City

Education

Doctor of Philosophy in Geology, Rice University Houston Texas, USA 1993

Fields of Specialization

Earth and Space Science

Marine/Coastal Geology

Seismic Stratigraphy

Sedimentology

Marine Science

Oceanography

Geology

Employment

Consultant, Manila Water Company Inc.

Consultant, ENR Caliraya-Laguna

Consultant, Maunsell-Sual

Consultant, OxFam Great Britain-Philippines

Association Membership

Regular Member, National Research Council of the Philippines

Honors / Awards

Achievement Award (Earth and Space Sciences), NRCP-DOST 2003

Celestino Dizon Professorial Chair, 2004

Trainings

Workshop on the Asian Fore Arc Project, Australian National University 2004 August 5

Researches

Completed

Coastal erosion in San Fernando, La Union: Trends, causes and possible mitigation measures

Hazard assessment of the Bali-Baquero River System, Mt. Pinatubo, Zambales

Influence of salinity on primary productivity of Laguna Lake during the last few hundred years from sediment geochemistry

Closing the land-sea pathway link in the hundred tropics:submarine groundwater discharge

Northern La Union Coastal Erosion Project

Paleo-environment and early human occupation of the Pampanga Coastal Lowlands (Philippines)

Paleo-environmental reconstructions of coral reefs

Papers Presented

- 2004 Ag 5-6 Siringan, F.P. (2004 Ag 5-6). Paleo Environmental Research in Northern Luzon and the Batanes Islands, Workshop on the Asian Fore Arc Project, Australian National University.
- 2004 Ja 13-20 Siringan, F.P. (2004 Ja 13-20). Record of double Holocene highstand in the Philippines., 5th International Conference on Asian Marine Geology and 1st Annual Meeting of IGCP475 DeltaMAP and APN Mega-Deltas, Bangkok and Ayutthaya, Thailand.
- 2004 Ja 13-20 Siringan, F.P. (2004 Ja 13-20). Paleoenvironments and Paleo-sea levels from the Delta Complex North of Manila Bay, Philippines, 5th International Conference on Asian Marine Geology and 1st Annual Meeting of IGCP475 DeltaMAP and APN Mega - Deltas, Bangkok and Ayutthaya, Thailand.
- 2004 Ja 13-20 Siringan, F.P. (2004 Ja 13-20). Reconstruction of flooding history in the Pampanga Delta Plain from anecdotal accounts, 5th International Conference on Asian Marine Geology and 1st Annual Meeting of IGCP475 Delta MAP and APN Mega-Deltas, Bangkok and Ayutthaya, Thailand.

Publications

- 2014 Jaraula, C.M.B., Siringan, F.P., Klingel, R., Sato, H., & Yokhama, Y., Records and causes of Holocene salinity shifts in Laguna de Bay, Philippines. *Quaternary International*, 2014, 349:207-220.
- 2013 Reotita, J., Siringan, F.P., Zhang, J., & Azanza, R., Paleoenvironment changes in Juag Lagoon, Philippines based on sedimentology, bulk geochemistry and stable isotopes and their implication to nitrification. *Quaternary International*, 2013, 333:110-121.
- Hong, G.H., Kim, C.J., Yeemin, T., Siringan, F.P., Zhang, J., Lee, H.M., Choi, K.Y., Yang, D.B., Ahn, Y.W., & Ryu, J. H., Potential Release of PCBs from Plastic Scientific Gear to Fringing Coral Reef Sediments in the Gulf of Thailand. *Deep Sea Research Part II: Topical Studies in Oceanography*, 2013, 96:41-49.
- Zhang, J., Morrison, R.J.A., Yeemin, T., & Siringan, F.P., Coral Reefs under the climate and anthropogenic perturbations (CorReCAP): an IOC/WESTPAC approach. *Deep Sea Research Part II: Topical Studies in Oceanography*, 2013, 96:1-4.
- 2012 Villanoy, C., David, L., Cabrera, O., Atrigenio, M., Siringan, F.P., Aliño, P., & Villaluz, M., Coral reef ecosystems protect shore from high-energy waves under climate change scenarios. *Climatic Change*, 2012, 112(2):493-505.
- Yñiguez, A.T., Cayetano, A., Villanoy, C.L., Alabia, I., Fernandez, I., Palermo, J.D., Benico, G., Siringan, F.P., & Azanza, R.V., Investigating the roles of intrinsic and extrinsic factors in the blooms of *Pyrodinium bahamense* var. *compressum* using an individual-based model. *Procedia Environmental Sciences*, 2012, 13:1462-1476.
- 2011 Kim, J.W., Isobe, T., Chang K.H., Amano, A., Maneja, R.H., Zamora, P.B., Siringan, F.P., & Tanabe, S., Levels and distribution of organophosphorus flame retardants and plasticizers in fishes from Manila Bay, the Philippines. *Environmental Pollution*, 2011, 159(12):3653-3659.
- Ramaswamy, B.R., Kim, J.-W., Isobe, T., Chang, K.-H., Amano, A., Miller, T.W., Siringan, F.P., & Tanabe, S., Determination of preservative and antimicrobial

- compounds in fish from Manila Bay, Philippines using ultra high performance liquid chromatography tandem mass spectrometry, and assessment of human dietary exposure. *Journal of Hazardous Materials*, 2011, 192(3):1739-1745.
- Baula, I.U., Azanza, R.V., Fukuyo, Y., & Siringan, F.P., Dinoflagellate cyst composition, abundance and horizontal distribution in Bolinao, Pangasinan, Northern Philippines. *Harmful Algae*, 2011, 11:33-44.
- Kim, J.W., Isobe, T., Ramaswamy, B.R., Chang, K.H., Amano, A., Miller, T., Siringan, F.P., & Tanabe, S., Contamination and bioaccumulation of benzotriazole ultraviolet stabilizers in fish from Manila Bay, the Philippines using an ultra-fast liquid chromatography-tandem mass spectrometry. *Chemosphere*, 2011, 85(5):751-758.
- Senal, M.I.S., Jacinto, G.S., San Diego-McGlone, M.L., Siringan, F.P., Zamora, P., Soria, L., Cardenas, M.B., Villanoy, C., & Cabrera, O., Nutrient inputs from submarine groundwater discharge on the Santiago Reef Flat, Bolinao, Northwestern Philippines. *Marine Pollution Bulletin*, 2011, 63(5-12):195-200.
- Yokoyama, Y., Suzuki, A., Siringan, F., Maeda, Y., Abe, Ouchi, A., Ohgaito, R., Kawahata, H., & Matsuzaki, H., Mid-Holocene palaeoceanography of the northern South China Sea using coupled fossil-modern coral and atmosphere-ocean GCM model. *Geophysical Research Letters*, 2011, 38(L00F03):doi:10.1029/2010GL044231.
- 2010 Cardenas, M. B., Zamora, P.B., Siringan, F.P., Lapus, M. R., Rodolfo, R. S. , Jacinto, G. S., San Diego-McGlone, M. L., Villanoy, C. L., Cabrera, O., & Senal, M.I., Linking regional sources and pathways for submarine groundwater discharge at a reef by electrical resistivity tomography, ^{222}Rn , and salinity measurements. *Geophysical Research Letters*, 2010, 37(L16401):doi:10.1029/2010GL044066.
- Liu, Z., Colin, C., Li, X., Zhao, Y., Tou, S., Chen, Z., Siringan, F.P., Liu, J.T., Huang, C-Y., You, C-F., & Huang, K-F., Clay mineral distribution in surface sediments of the northeastern South China Sea and surrounding fluvial drainage basins: Source and transport. *Marine Geology*, 2010, 277:48-60.
- Shen, C.-C., Siringan, F.P., Lin, K., Dai, C.-F., & Gong, S-Y, Sea-level rise and coral-reef development of northwestern Luzon since 9.9 ka. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 2010, 292:465-473.
- Hosono, T., Siringan, F.P., Yamanaka, T., Umezawa, Y., Onodera, S., Nakano, T., & Taniguchi, M., Application of multi-isotope ratios to study the source and quality of urban groundwater in Metro Manila, Philippines. *Applied Geochemistry*, 2010, 25:900-909.
- Hosono, T., Su, C-C., Siringan, F.P., Amano, A., Onodera, S., Effects of environmental regulations on heavy metal pollution decline in core sediments from Manila Bay. *Metal Pollution Bulletin*, 2010, 60:780-785.
- Stevenson, J., Siringan, F.P., Finn, J., Madulid, D., & Heijnis, H., Paoay Lake, Northern Luzon, the Philippines: a record of Holocene environmental change. *Global Change Biology*, 2010, 16(6):1672-1688.
- Isobe, T., Amano, A., Chang, K.-H., Maneja, R.H., Zamora, P.B., SanDiego-McGlone, M.L., Siringan, F.P., Prudente, M., Miller, T.W., & Tanabe, S., Retrospective Assessment of Environmental Pollution by PBDEs and HBCDs Using Sediment Core from Manila Bay, the Philippines. In: Isobe, T., Nomiyama, K., Subramanian, A., & Tanabe, S. (Eds.), *Interdisciplinary Studies on Environmental Chemistry - Environmental Specimen Bank*. TERRAPUB, 2010:61-65.
- 2009 Liu, Z., Zhao, Y., Colin, C., Siringan, F.P., & Wu, Q., Chemical weathering in Luzon, Philippines from clay mineralogy and major-element geochemistry of river sediments. *Applied Geochemistry*, 2009, 24:2195-2205.
- Sta. Maria, E.J., Siringan, F.P., Bulos, A.d.M., & Sombrito, E.Z., Estimating sediment accumulation rates in Manila Bay, a marine pollution hot spot in the Seas of East Asia. *Marine Pollution Bulletin*, 2009, 59:164-174.
- Chang, K.-H., Amano, A., Miller, T.W., Isobe, T., Maneja, R., Siringan, F.P., Imai, H., &

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Hydrology

Biodiversity

Water Quality

Ecosystem Ecology

Wildlife Conservation

Aquatic Ecology

Water Quality Monitoring

Ecological Monitoring

Water Quality Assessment

Stream Ecology

Papers Presented

2016 October 17-21 Toledo-Bruno, A.G., Paquit, J., & Casas, J.V. (2016 October 17-21). Integrating GIS with Landuse Decision-making: The Case of Central Mindanao University, Philippines, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.

2016 October 17-21 Puno, G.R., Marin, R.A., & Toledo-Bruno, A.G. (2016 October 17-21). Geowep Model Application in Simulating Soil Erosion in Bamboo Planted and Cultivated Catchments, 37th Asian Conference on Remote Sensing, Colombo, Sri Lanka.

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- 2009 Toledo-Bruno, A.G., Linking social and biophysical variables of water governance: An application of the model. *State University of New York College of Environmental Science and Forestry*, 2009.

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Education

Doctor of Philosophy in Extension Education (cognate in Social Forestry), University of the Philippines Los Baños, Laguna, Philippines

Certificate in Adult Education, George Mason University, Maryland, USA

Master of Science in Development Communication (cognate in Rural Sociology), University of the Philippines Los Baños, Laguna, Philippines

Bachelor of Science in Communication, major in Development Journalism, University of the Philippines Los Baños, Laguna, Philippines

Fields of Specialization

Communication

Communication Theory

Social Communication

Strategic Communication

Communication Science

Communication Planning

Researches

Completed

Rural communication services: trends, challenges, and prospects

Papers Presented

- 2015 Hassan, M.K., Torres, C.S., Jamias, S.B., Velasco, M.T.H., & Ocampo, M.C. (2015
December 17 December 17). Rural Communication Services in the Delivery and Adoption of Saline-Tolerant Rice Variety among Farmers in Amtali, Barguna District, Bangladesh, International conference on "Communication/Culture and the Sustainable Development Goals (CCSDG): Challenges for a New Generation", Chiang Mai University, Thailand.

Publications

- 2018 Torres, C.S., & Manyozo, L., Asian Contributions to Communication for Development and Social Change. In: Servaes J. (Eds), Handbook of Communication for Development and Social Change. Springer, Singapore, 2018:1-21.
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- 1991 Cruz, R.V., Torres, C.S., & Arocena-Francisco, H., Agroecosystem analysis of Makiling

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1990 Torres, C.S., Extension strategies: pitfalls and opportunities. UP Los Baños FDC Occasional Paper, 1990.

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Strategic Communication

Health Communication

Social Marketing

Scientific and Technical Writing and Editing

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Communication and Media

Educational Technology

Teacher Training

Publications

2016 Hassan, M.K., Torres, C.S., Jamias, S.B., Velasco, M.T.H., & Ocampo, M.C., Rural Communication Services in the Delivery and Adoption of Saline-Tolerant Rice Variety among Farmers in Amtali, Barguna District, Bangladesh. *The Philippine Journal of Development Communication*, 2016, 8:53-79.

2015 Francisco, R.P.F., Cabrera, L.A., Castillo, H.M.C., Lim, A.G.T., Felicidadario, S.J.C., & Velasco, M.T.H., The DevCom Los Baños Style of Communication Materials Development. *The Philippine Journal of Development Communication*, 2015, 7:121.

2012 Saldajeno, P.B., Florece, L.M., Lasco, R.D., & Velasco, M.T.H., Vulnerability Assessment of Upland Communities in Sibalom Natural Park, Antique, Using Capital-based Approach. *Journal of Environmental Science and Management*, 2012, 15(2):1-12.

2009 Cagasan, E.G., & Velasco, M.T.H., Impacts of the Techno Gabay Program in Eastern Visayas, Philippines as revealed by stakeholders' stories of significant change. *Annals of Tropical Research*, 2009, 31(2):41-68.

Cagasan, E.G., & Velasco, M.T.H., Using stories of change to monitor and evaluate impacts of the Techno Gabay Program in Eastern Visayas, Philippines. *The Philippine*

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Assistant Professorial Lecturer, De La Salle University, 2012 May-2018 March

Group Exercise Instructor, Fitness First Philippines, Inc., 2011 June-2018 March

Analyst, Nidec Motor Corporation, 2011 February-2012 June

Technical Services Representative, Convergys, 2010 October-2011 January

Technical Services Associate, Glenwood Technologies International, Inc., 2009 August-2010 March

Publications

- 2018 Angeles, A.C.S., Ples, M.B., & Vitor, R.J.S., The effect of pramiracetam in the myelination of the hippocampus in the BALB/c mouse (*Mus musculus*). National Journal of Physiology, Pharmacy and Pharmacology, 2018, 8(3):431-435.
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Geoinformatics
Santillan, Meriam Makinano

Geology
Siringan, Fernando P.

GIS
Camacho, Sofronio C.

Governance
Peras, Rose Jane J.

Grounded Theory
Anito, Jr., Jovito Cagape

Groundwater
Habana, Nathan C.

Health Communication
Velasco, Ma. Theresa H.

High Throughput Screening
Dagbay, Kevin B.

Hydraulic Modelling
Amora, Arthur Mapalad

Hydrogeology
Salvacion, Jonathan W.L.
Habana, Nathan C.

Hydrological Modeling
Amora, Arthur Mapalad

Hydrology
Toledo-Bruno, Angela Grace I.
Habana, Nathan C.
Amora, Arthur Mapalad
Santillan, Meriam Makinano

Image Processing
Purio, Mark Angelo Cabrera

Immunology
Sanchez, Romeo E.

in vitro fermentation
Dagbay, Kevin B.

Integrated Crop Management
Palis, Florencia G.

Integrated Pest Management
Palis, Florencia G.

Intelligent Systems
Purio, Mark Angelo Cabrera

Interpersonal and Participatory
Communication
Custodio, Pamela A.

Kinetic Modeling
Bungay, Vergel C.

Laboratory Animal Science
Vitor II, Rodel Jonathan Santos

Land Use
Camacho, Sofronio C.

Machine Learning
Arago, Nilo M.

Machine Vision
Purio, Mark Angelo Cabrera

Macroscopic Anatomy
Dela Cruz, Joseph Flores

Management and Leadership
Velasco, Ma. Theresa H.

Mangrove Ecology
Bandibas-Natividad, Mariche

Mangroves
Bandibas-Natividad, Mariche

Manufacturing
Amatosa, Jr., Teodoro Astorga

Marine biodiversity
Abreo, Neil Angelo Seniel

Marine Biology
Jimenez, Lea Angsinco

Marine biology
Abreo, Neil Angelo Seniel

Marine ecology
Abreo, Neil Angelo Seniel

Marine Ecology
Macusi, Edison Roi D.

Marine fisheries
Abreo, Neil Angelo Seniel

Marine pollution
Abreo, Neil Angelo Seniel

Marine Science
Siringan, Fernando P.
Jimenez, Lea Angsinco

Marine/Coastal Geology
Siringan, Fernando P.

Mass Spectrometry
Dagbay, Kevin B.

Mathematics
De la Cruz, Ralph John Lamadrid
Palines, Herbert
Merino, Dennis I.

Mathematics Education
Palines, Herbert

Matrix Analysis
Merino, Dennis I.

Matrix analysis
De la Cruz, Ralph John Lamadrid

Matrix decompositions
De la Cruz, Ralph John Lamadrid

Media Literacy
Daya, Romel A.

Media-based Learning Systems
Daya, Romel A.

Medical Anthropology Palis, Florencia G.	Operations Research Carandang, Myrna G.
Membrane Protein Purification Li, Geoffrey Chan	Organic Agriculture Palis, Florencia G.
Membrane Proteins Li, Geoffrey Chan Li, Geoffrey Chan	Organic Farming Palis, Florencia G.
Micelles Li, Geoffrey Chan	Participatory Communication Daya, Romel A.
Molecular Biology Sanchez, Romeo E. de la Cruz, Christian Paul P.	Participatory Development Daya, Romel A.
Molecular Biotechnology Dela Cruz, Joseph Flores	Pedagogy and Education Anito, Jr., Jovito Cagape
Natural Resource Management De Luna, Catherine C.	Pest Management Palis, Florencia G.
Natural Resource Sociology and Administration Rebugio, Lucrecio L.	Pesticide Toxicity Palis, Florencia G.
Natural Resources Assessment Carandang, Myrna G.	Pesticides Palis, Florencia G.
Natural Resources Economics and Policy Carandang, Antonio P.	Phycology Coronado, Armin Santos
Neural Networks and Artificial Intelligence Arago, Nilo M.	Physical Chemistry Li, Geoffrey Chan
Nuclear Magnetic Resonance Spectroscopy Li, Geoffrey Chan	Physical Organic Chemistry Baluyut, John Y.
Nutrient Management Palis, Florencia G.	Physiology Vitor II, Rodel Jonathan Santos
Oceanography Siringan, Fernando P.	Plant Protection Palis, Florencia G.
	Process Modeling Bungay, Vergel C.

Process Simulation
Adornado, Adonis P.

Project Analysis Feasibility Study
Preparation
Rañola, Roberto De La Fuente

Protein Dynamics
Li, Geoffrey Chan

Protein Kinase Inhibitors
Li, Geoffrey Chan

Protein Kinases
Li, Geoffrey Chan

Protein X-ray Crystallography
Dagbay, Kevin B.

Protein-Protein Interaction
Li, Geoffrey Chan

Proteins
Li, Geoffrey Chan

Public Health
de la Cruz, Christian Paul P.

Publications Writing, Editing, and
Production
Velasco, Ma. Theresa H.

Qualitative Analysis
Peras, Rose Jane J.

Qualitative Social Research
Velasco, Ma. Theresa H.

Quantum Chemistry
Baluyut, John Y.

Rainfall Runoff Modelling
Amora, Arthur Mapalad

Reaction Kinetics
Bungay, Vergel C.

Reactor Modeling
Bungay, Vergel C.

REDD+
Peras, Rose Jane J.

Reinforced Concrete
Amatosa, Jr., Teodoro Astorga

Remote Sensing
Santillan, Meriam Makinano
Camacho, Sofronio C.
Salvacion, Jonathan W.L.

Research Methodology
Peras, Rose Jane J.

Resource and Environmental Economics
Rañola, Roberto De La Fuente

Resource Economics
De Luna, Catherine C.

Rice
Palis, Florencia G.

Rural Development Planning
Camacho, Leni Diamante

Satellite Image Processing
Santillan, Meriam Makinano

Science Communication
Felicidario, Sherwin Joseph Consignado
Velasco, Ma. Theresa H.

Science Education
Anito, Jr., Jovito Cagape

Scientific and Technical Writing and Editing
Velasco, Ma. Theresa H.

Sedimentology
Siringan, Fernando P.

Seismic Stratigraphy
Siringan, Fernando P.

Sensor Technology
Arago, Nilo M.

Separation Technology
Bungay, Vergel C.

Signal Processing
Arago, Nilo M.

Social Capital
Peras, Rose Jane J.

Social Communication
Torres, Cleofe S.

Social Forestry
Paras, Floribel D.
De Luna, Catherine C.

Social Marketing
Velasco, Ma. Theresa H.

Socioeconomics
Camacho, Leni Diamante

Soil and Water Conservation
Palis, Florencia G.

Soil Conservation
Rañola, Roberto De La Fuente

Solution Thermodynamics
Bungay, Vergel C.

Spatial Analysis
Santillan, Meriam Makinano

Spectroscopy
Li, Geoffrey Chan

Statistics
Palis, Florencia G.

Strategic Communication
Torres, Cleofe S.
Velasco, Ma. Theresa H.

Stream Ecology
Toledo-Bruno, Angela Grace I.

Structural Bioinformatics and Structural
Biology
Dagbay, Kevin B.

Structural Biology
Li, Geoffrey Chan

Sustainability
De Luna, Catherine C.

Sustainable Agriculture
Palis, Florencia G.

Swine Medicine
Sanchez, Romeo E.

Systematics
Bonachita-Sanguila, Marites L.

Taxonomy
Dolorosa, Roger Gasper

Teacher Training
Velasco, Ma. Theresa H.

Teaching and Learning
Anito, Jr., Jovito Cagape

Telecommunications Engineering
Arago, Nilo M.

Theoretical Chemistry
Baluyut, John Y.

Vegetation Mapping
Santillan, Meriam Makinano

Veterinary Science
Sanchez, Romeo E.

Veterinary Virology
Sanchez, Romeo E.

Water
Toledo-Bruno, Angela Grace I.

Water Quality
Toledo-Bruno, Angela Grace I.

Water Quality Assessment
Toledo-Bruno, Angela Grace I.

Water Quality Monitoring
Toledo-Bruno, Angela Grace I.

Watershed
Toledo-Bruno, Angela Grace I.

Wildlife Conservation
Toledo-Bruno, Angela Grace I.

Writing and Editing in Filipino
Velasco, Ma. Theresa H.

Zooplankton
Coronado, Armin Santos