

# SPECIAL RECOGNITION PROGRAM

FOR THE GRADUATING BATCH OF

20



22



## PROGRAMME

- I. Academic Procession
- II. Entrance of Colors and National Anthem
- III. Welcome Remarks **Dr. Giovanni A. Tapang**  
*Dean*
- IV. Introduction of the Guest Speaker **Dr. Lillian Jennifer V. Rodriguez**  
*Associate Dean for Student, Alumni and Public Affairs*
- V. Keynote Address **Raymundo Cipriano P. Cayabyab**  
*National Artist for Music*
- VI. Presentation of Token to the Guest Speaker
- VII. Special Recognition of Retired Faculty and Staff
- VIII. Presentation of Graduates **National Institute of Physics**  
**National Institute of Molecular Biology and Biotechnology**  
**Institute of Mathematics**  
**Materials Science and Engineering Program**  
**Marine Science Institute**  
**National Institute of Geological Sciences**  
**Institute of Environmental Science and Meteorology**  
**Institute of Chemistry**  
**Institute of Biology**

**IX.** Dean's Medallions

**X.** Response in behalf of the  
2021-2022 MS/PhD Graduates

**Cherrie May M. Olaya**  
*Most Outstanding Ph.D. Graduate*

**XI.** Response in behalf of the  
2021-2022 BS Graduates

**Peter John M. Burgos**  
*Excellence in B.S Studies*

**XII.** Closing Remarks

**Dr. Eizadora T. Yu**  
*Associate Dean for Mentoring,  
Academic Progress and  
Advancement*

**XIII.** UP Naming Mahal

**XIV.** Recessional

## 2021-2022 RECIPIENTS OF THE DEAN'S MEDALLION

### LETICIA SHAHANI AWARD FOR BEST UNDERGRADUATE THESIS OR RESEARCH PAPER

|   |   |
|---|---|
| Applied Physics:<br>Undergraduate Thesis: | <b><i>Richelle Jade L. Tuquero</i></b><br>"Influence of harmonic confinement and contact interaction in an atom-cavity system"  |
| Adviser:                                  | Dr. Jayson Cosme  |
| Physics:<br>Undergraduate Thesis:         | <b><i>Jesus Miguel Yulo, II</i></b><br>"Dynamics and strange attractors of stellar pulsation in one-zone models of long-period variable stars"  |
| Adviser:                                  | Dr. Michael Francis Ian Vega, II  |
| Mathematics:<br>Undergraduate Thesis:     | <b><i>Margaret Esther C. Cruz</i></b><br>"Application of the Coloring-Book Approach in Finding the Coordination Sequences for Some Uniform Tilings"                                   |
| Adviser:                                  | Dr. Manuel Joseph Loquias   |
| Geology:<br>Undergraduate Research Paper: | <b><i>Layla Gabrielle B. Sevilla</i></b><br>"Influence of the COVID-19 pandemic on the water clarity of aquaculture areas in the philippines"   |
| Advisers:                                 | Dr. Carlos Primo David  |
| Chemistry:<br>Undergraduate Thesis:       | <b><i>Lorenzo Angelo M. Mapalo</i></b><br>"Conferring Color and Antibacterial Properties on Cotton Fabric using Green-Synthesized Gold and Silver Nanoparticles"                      |
| Adviser:                                  | Dr. Michelle D. Regulacio   |
| Biology:<br>Undergraduate Thesis:         | <b><i>Skylla Dennise U. Diaz</i></b><br>"Assessment of Acoustic Indices as Proxies for Avian Species Richness in the National Science Complex, University of the Philippines Diliman" |
| Adviser:                                  | Jelaine Gan and Dr. Giovanni Tapang   |

**CS EXCELLENCE AWARD**  
**FOR OUTSTANDING B.S. GRADUATES**

|                   |                            |                        |
|-------------------|----------------------------|------------------------|
| Applied Physics   | Jerico Miguel T. Rangel    | <i>Magna Cum Laude</i> |
| Physics           | Marc Cyrel M. Magnawa      | <i>Summa Cum Laude</i> |
| Molecular Biology | John Rafael F. Ambag       | <i>Summa Cum Laude</i> |
| Mathematics       | Peter John M. Burgos       | <i>Summa Cum Laude</i> |
| Geology           | Hannah Yvette P. Bumanglag | <i>Magna Cum Laude</i> |
| Chemistry         | Janrick G. Cayetano        | <i>Summa Cum Laude</i> |
| Biology           | Kris Jypson T. Esturas     | <i>Summa Cum Laude</i> |

**DR. EDGARDO D. GOMEZ AWARD**

***Cherrie May Mogueis Olaya***

B.S. Applied Physics; University of the Philippines, Diliman; 2013; M.S. Physics; University of the Philippines, Diliman; 2017

Dissertation Title "Surface Plasmon Resonance-Enhanced Goos-Hänchen Shift and its Sensing Device Application"

Co-Adviser Dr. Nathaniel P. Hermosa II, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Takuo Tanaka, Team Leader, Innovative Photon Manipulation Research Team, RIKEN Center for Advanced Photonics, Japan

**EXCELLENCE IN B.S. STUDIES**

***Peter John M. Burgos***

***Summa Cum Laude***

Undergraduate Thesis "On Umbral Methods of Integration"

Co-Adviser Polly W. Sy, Ph.D., D.Sc.

Co-Adviser Olive R. Cawiding, M.Sc.

**MOST OUTSTANDING M.S. GRADUATE**

***Mae Ashley Gloria Nacario***

B.S. Biology; University of the Philippines, Los Baños; 2011

Master's Thesis "DNA Fingerprinting Using BOX-A1R and (GTG)<sub>5</sub> Primers to Identify Spatial Variations of Fecal Contamination along Pasig River, Philippines"

Adviser Dr. Windell L. Rivera, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## **MOST OUTSTANDING Ph.D. GRADUATE**

### ***Cherrie May Mogueis Olaya***

B.S. Applied Physics; University of the Philippines, Diliman; 2013; M.S. Physics; University of the Philippines, Diliman; 2017

Dissertation Title "Surface Plasmon Resonance-Enhanced Goos-Hänchen Shift and its Sensing Device Application"

Co-Adviser Dr. Nathaniel P. Hermosa II, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Takuo Tanaka, Team Leader, Innovative Photon Manipulation Research Team, RIKEN Center for Advanced Photonics, Japan

**CANDIDATES FOR GRADUATION**  
**NATIONAL INSTITUTE OF PHYSICS**  
**DOCTOR OF PHILOSOPHY (PHYSICS)**

**As of Second Semester, AY 2020 - 2021**

***Bess Garcia Singidas***

B.S., M.S. Physics; University of the Philippines, Diliman; 2004, 2006

Dissertation Title "Optoelectronics in the Graphene-GaAs Interface"

Adviser Dr. Roland V. Sarmago, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***Neil Irvin Fermin Cabello***

B.S. Applied Physics; University of the Philippines, Diliman; 2010; M.S. Physics; University of the Philippines, Diliman; 2012

Dissertation Title "Terahertz Emission Characteristics of Silicon Nanostructure-Coated Gallium Arsenide Photoconductive Antenna"

Adviser Dr. Armando S. Somintac, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Cherrie May Mogueis Olaya***

B.S. Applied Physics; University of the Philippines, Diliman; 2013; M.S. Physics; University of the Philippines, Diliman; 2017

Dissertation Title "Surface Plasmon Resonance-Enhanced Goos-Hänchen Shift and its Sensing Device Application"

Co-Adviser Dr. Nathaniel P. Hermosa II, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Takuo Tanaka, Team Leader, Innovative Photon Manipulation Research Team, RIKEN Center for Advanced Photonics, Japan

## As of Second Semester, AY 2021-2022

### ***Francesca Isabel Narciso De Vera***

B.S. Physics; Polytechnic University of the Philippines; 2004; M.S. Physics; University of the Philippines, Diliman; 2012

Dissertation Title "Superconductivity and Grain Coupling Behaviour of  $\text{Bi}_2\text{Sr}_{2-x}\text{In}_x\text{CaCu}_2\text{O}_{8+\text{D}}$  (In-Doped Bi-2212) Bulks and Films"

Adviser Dr. Roland V. Sarmago, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Vladimir Paat Villegas***

B.S., M.S. Physics; University of the Philippines, Diliman; 2014, 2018

Dissertation Title "Refrigeration and Spin Transport in a One-Dimensional Fermi-Hubbard Optical Lattice Exposed to External Electromagnetic Fields and a Fermi Gas Bath"

Adviser Dr. Cristine DLR. Villagonzalo, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City



**INSTITUTE OF MATHEMATICS**

**DOCTOR OF PHILOSOPHY (MATHEMATICS)**

**As of Midyear 2021**

***Dennis Llemit***

B. Secondary Education; University of the Philippines, Diliman; 2007; M.S. Applied Mathematics; University of the Philippines, Diliman; 2010

Dissertation Title “Portfolio Optimization in a Regime Switching Jump Diffusion with Delay Market Model”

Adviser: Dr. Jose Maria L. Escaner IV, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Lu Kevin Sy Ong***

B.S. Mathematics; University of the Philippines, Diliman; 2012; PMAM; University of the Philippines, Diliman; 2014

Dissertation Title “On the Propagation of Chaos for Recombination Models and Exponential Decay of Free Energy”

Adviser Dr. Jose Maria L. Escaner IV, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Dom Vito Albino Briones***

B.S. Mathematics; University of the Philippines, Los Baños; 2018; M.S. Mathematics; University of the Philippines, Diliman; 2019

Dissertation Title “Association Schemes on Triples from Two-transitive Groups”

Adviser Dr. Jose Maria P. Balmaceda, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**MATERIALS SCIENCE AND ENGINEERING PROGRAM**

**DOCTOR OF PHILOSOPHY**  
**(MATERIALS SCIENCE AND ENGINEERING)**

**As of Second Semester, AY 2021-2022**

***Philippe Martin Baguio Tingzon***

B.S. Applied Physics; University of the Philippines, Diliman; 2014; M.S. Materials Science and Engineering; University of the Philippines, Diliman; 2016

Dissertation Title      “Study of Residual Stress Experienced by MEMS Tunable VCSEL Devices with a Bridge-type Design”

Adviser                      Dr. Armando S. Somintac, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**MARINE SCIENCE INSTITUTE**

**DOCTOR OF PHILOSOPHY (MARINE SCIENCE)**

**As of Second Semester, AY 2019-2020**

***Danica Linda Ortiz Mancenido***

B.S. Applied Physics; University of the Philippines, Diliman; 2008; M.S. Physics;  
University of the Philippines, Diliman; 2010

Dissertation Title           “Assessment of the Prevalence of Submarine Groundwater  
Discharge (SGD) in the Lingayen Gulf”

Adviser                         Dr. Fernando P. Siringan, Research Professor, Marine  
Science Institute, College of Science, National Science  
Complex, University of the Philippines, Diliman, Quezon  
City

**INSTITUTE OF BIOLOGY**

**DOCTOR OF PHILOSOPHY (BIOLOGY)**

**As of Midyear 2021**

***Erika Marie Reyes Alvero Bascos***

B.S., M.S. Biology; University of the Philippines, Diliman; 2006, 2010

Dissertation Title      "*Rafflesia consueloae*: Taxonomy, Vegetative Development, Molecular Detection of Host Infection, and Scent Profiling"

Adviser                      Dr. Lillian Jennifer V. Rodriguez, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**CANDIDATES FOR GRADUATION**  
**NATIONAL INSTITUTE OF PHYSICS**  
**MASTER OF SCIENCE (PHYSICS)**

**As of First Semester, AY 2020-2021**

***Jonalds Lat Tacneng***

B.S. Applied Physics; University of the Philippines, Diliman; 2012

Thesis Title "Reduced Time Formation of Pb-added (Bi,Pb)<sub>2</sub>Sr<sub>2</sub>Ca<sub>3</sub>Cu<sub>4</sub>O<sub>12+δ</sub> Phase via Conventional Solid State Reaction"

Adviser Dr. Roland V. Sarmago, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Midyear 2021**

***John Adrian Borillo Baybay***

B.S. Physics; University of the Philippines, Diliman; 2019

Master's Thesis "Charged Induced Superradiance from Non-linear Scalar Fields"

Adviser Dr. Michael Francis Ian G. Vega II, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Reginald Christian S. Bernardo, Assistant Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***John De Leon Celestial***

B.S. Physics; University of the Philippines, Diliman; 2019

Master's Thesis "Reissner-Nordström Black Holes in Horndeski Theories"

Adviser Dr. Michael Francis Ian G. Vega II, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Reginald Christian S. Bernardo, Assistant Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Mykhal Gideoni Lim Mangada***

B.S. Applied Physics; University of the Philippines, Los Baños; 2014

Master's Thesis "Image Classification with a Tensor Network-based Machine Learning Algorithm"

Adviser Dr. Francis Norman C. Paraan, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Christopher Gerard Redillas Sevilla***

B.S. Applied Physics; University of the Philippines, Diliman; 2019

Master's Thesis "Resonance in Coupled Driven Damped Harmonic Oscillators with Fluctuating Mass"

Adviser Dr. Jose Perico H. Esguerra, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Apolinario Miguel Isagan Tan***

B.S. Applied Physics; University of the Philippines, Diliman; 2017

Master's Thesis "Quantum Fisher Information and Entanglement in an XY Dimer"

Adviser Dr. Francis Norman C. Paraan, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***Kristen Joyce Rino Cervantes***

B.S. Physics; University of the Philippines, Diliman; 2019

Master's Thesis "Information Flow in Wireless Sensor Networks"

Adviser Dr. Giovanni A. Tapang, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Geronimo Allan Jerome Gabo Acosta***

B.S. Physics; University of the Philippines, Diliman; 2017

***Adrielle Theresa De Lara Cusi***

B.S. Applied Physics; University of the Philippines, Diliman; 2020

Thesis Title "Emergence of Scaled Brownian Motion Due to Elastic Probe-to-probe Collisions"

Adviser Dr. Caesar A. Saloma, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Klarence Anne Matammu Feri***

B.S. Chemistry; University of the Philippines, Diliman; 2018

Thesis Title "Anisotropic Specific Heat of Finite Lipkin-Meshkov-Glick Spin System"

Adviser Dr. Cristine DLR. Villagonzalo, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Sean Julian Cruz Fortuna***

B.S. Physics; University of the Philippines, Diliman; 2017

***Rian Fritz Delmoro Jalandoni***

B.S. Applied Physics; University of the Philippines, Diliman; 2020

Thesis Title "Numerical Analysis of Cancer Growth on a Spherical Surface and 3D Continuous Space"

Adviser Dr. Johnrob Y. Bantang, Associate Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Christian Loer Teringtering Llemit***

B.S. Applied Physics; University of the Philippines, Diliman; 2020

Thesis Title "Structural, Electronic, and Magnetic Properties of Iron-related Defects in Wurtzite ZnO: an Approach from First Principles Calculations"

Adviser Dr. Roland V. Sarmago, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Pierce Nathan Tamayo Lopez***

B.S. Physics; University of the Philippines, Baguio; 2018

Thesis Title "Investigating Criticality in the Avalanches of a Stochastic Self-Propagating Star Formation Model"

Adviser Dr. Reinabelle C. Reyes, Associate Professor, National Institute of Physics, College of Science, National Science

Complex, University of the Philippines, Diliman, Quezon City

***Micholo Lanz Billones Medrana***

B.S. Applied Physics; University of the Philippines, Diliman; 2017

Thesis Title "Entropy and Sentiment-Based Methods for Survey Analysis"

Adviser Dr. May T. Lim, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Lemuel John Foronda Sese***

B.S. Physics; Mapua University; 2018

Thesis Title "Recurrence and Decoherence Phenomena of a Qubit Immersed in an  $N$ -qubit Environment"

Adviser Dr. Eric A. Galapon, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City



## **BACHELOR OF SCIENCE IN APPLIED PHYSICS**

### **As of Second Semester, 2020-2021**

***Tristan S. De Guzman***

Undergraduate Thesis “Classifying Physics Articles by Their Abstracts with Recurrent Neural Networks”  
Adviser Francis Norman C. Paraan, Ph.D.

### **As of First Semester, 2021-2022**

#### ***(Instrumentation Physics)***

***Averell M. Aquino***

Undergraduate Thesis “Simulating the Terahertz (THz) Emission of a Low Temperature Gallium Arsenide (LT-GaAs) Photoconductive (PCA) Antenna Using the Drude-Lorentz Model of Carrier Transport”  
Co-Adviser Elmer S. Estacio, Ph.D.  
Co-Adviser Alexander E. De Los Reyes, Ph.D.

***Maria Tisha C. Bagasala***

Undergraduate Thesis “Dynamics of Brain Neurons Using a One-Dimensional Probabilistic Cellular Automata Model”  
Adviser Johnrob Y. Bantang, Ph.D.

***Giselle S. Reyes***

Undergraduate Thesis “Effect of Citrate Seed Layers on Morphological and Optical Properties of Zinc Oxide Microrods Grown Via Two-Step Hydrothermal Method”  
Adviser Roland V. Sarmago, Ph.D.

### **As of Second Semester, 2021-2022**

#### ***(Instrumentation Physics)***

***Leon Sergio C. Dela Cruz***

***Magna Cum Laude***

Undergraduate Thesis “Particle Separation in Brownian Transport Through a Confined Periodic Spherical Channel via Perpendicular Forcing”  
Adviser Ronald S. Banzon, Ph.D.

- Renee Calista B. Fernandez***      ***Magna Cum Laude***  
Undergraduate Thesis      “Applications of Wavelet-Based Signal Denoising on  
Astronomical and Medical Time Series Data”  
Adviser      Reinabelle C. Reyes, Ph.D.
- Elmo Domino R. Jose***      ***Cum Laude***  
Undergraduate Thesis      “Evaluating Geospatial Efficiency of Facilities Through  
Dirichlet Tessellation Areas and Centroid Proximity  
Analysis”  
Adviser      May T. Lim, Ph.D.
- Chae Ann V. Malipol***      ***Cum Laude***  
Undergraduate Thesis      “Smartphone-Based Macro Photography for Measuring the  
Size Distribution of Sand Grains”  
Adviser      Maricor N. Soriano, Ph.D.
- Beatriz D. Movido***      ***Magna Cum Laude***  
Undergraduate Thesis      “Using Network Analysis to Assess and Plan for the  
Robustness of the Meralco Power Grid”  
Adviser      Caesar A. Saloma, Ph.D.
- Adriana Marie T. Salvador***      ***Cum Laude***  
Undergraduate Thesis      “Stochastic Resetting in Backtracked RNA Polymerases:  
A Generalization”  
Adviser      Jose Perico H. Esguerra, Ph.D.
- Jerico Miguel T. Rangel***      ***Magna Cum Laude***  
Undergraduate Thesis      “Qiskit Implementation of the 3-Body Ising Model for  
Alternating Coupling Constant Chains”  
Adviser      Cristine DLR. Villagonzalo, Ph.D.
- Richelle Jade L. Tuquero***      ***Magna Cum Laude***  
Undergraduate Thesis      “Influence of Harmonic Confinement and Contact  
Interaction in an Atom-Cavity System”  
Adviser      Jayson G. Cosme, Ph.D.

## **BACHELOR OF SCIENCE IN PHYSICS**

### **As of Midyear, 2021**

#### ***Gabrielle Melissa D. Alhambra***

Undergraduate Thesis “Boomerang Photon Orbits Around Spherically Symmetric Black Holes”  
Adviser Michael Francis Ian G. Vega II, Ph.D.

### **As of First Semester, 2021-2022**

#### ***Stephanie Anne M. Vergara***

Undergraduate Thesis “Investigating the Effects on the Intensity of Varying Distances of a Two- Mirror Segmented Telescope System”  
Adviser Giovanni A. Tapang, Ph.D.

### **As of Second Semester, 2021-2022**

#### ***Ian Angelo T. Aragoza***

#### ***Magna Cum Laude***

Undergraduate Thesis “Mapping Poverty in the Philippines Using Public Geospatial Data Sets”  
Adviser Reinabelle C. Reyes Ph.D.

#### ***Julliana Maxine I. Ching***

#### ***Cum Laude***

Undergraduate Thesis “Multi-Frequency Fringe Projection Profilometry: Virtual and Real-World Three-Dimensional Imaging”  
Adviser Ritz Ann P. Aguilar, Ph.D.

#### ***Earl John B. Crusina***

#### ***Summa Cum Laude***

Undergraduate Thesis “Scale-Free Network in 2D Polar Coordinate System Generated via Random Geometric Network Algorithm Modified by Task Fragmentation Model”  
Adviser Johnrob Y. Bantang, Ph.D.

#### ***Sean Patrick G. Dela Cruz***

#### ***Summa Cum Laude***

Undergraduate Thesis “Power Law Distributed Resetting Times for the Ising Model”  
Adviser Jose Perico H. Esguerra, Ph.D.



***Carl Terence S. Valdellon***

***Summa Cum Laude***

Undergraduate Thesis

“Nature-Inspired Optimization of Power Allocation among Light-Emitting Diodes for Uniform Illumination”

Adviser

Giovanni A. Tapang, Ph.D.

***Jesus Miguel A. Yulo II***

***Summa Cum Laude***

Undergraduate Thesis

“Dynamics and Strange Attractors of Stellar Pulsation in One-Zone Models of Long-Period Variable Stars”

Adviser

Michael Francis Ian G. Vega II, Ph.D.

**NATIONAL INSTITUTE OF MOLECULAR  
BIOLOGY AND BIOTECHNOLOGY**

**MASTER OF SCIENCE  
(MOLECULAR BIOLOGY AND BIOTECHNOLOGY)**

**As of Midyear 2021**

***Shela Marie Llenaresas Algodon***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman; 2015

Master's Thesis "Characterization of the Effects of SNPS in the MEG3 IncRNA on its Tumor Suppressive Function"

Adviser Dr. Reynaldo L. Garcia, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Gwynne Micah Salanga Ritua***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman; 2017

Master's Thesis "Investigation of the Type I-F CRISPR-Cas Systems in *Vibrio* spp.: Variations on a Theme."

Adviser Dr. Ron Leonard Dy, Assistant Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Aileen Geobee Go Uy***

B.S. Medical Technology; University of Santo Tomas; 2010

Master's Thesis "Investigations on the Effect of KRAS Mutational Status on Differential Sorting of RNA Cargo into Exosomes"

Adviser Dr. Reynaldo L. Garcia, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***J-Ann Marie Tiamson Lego***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman;  
2017

Master's Thesis "Investigations on the MicroRNA-mediated Regulation of the Long Non-coding RNA HULC in Colorectal Cancer Cells"

Adviser Dr. Reynaldo L. Garcia, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Owen Tito Orbase Mallapre***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman;  
2018

Thesis Title "Computational Analysis of the Effects of Hsp40 Mutations on Hsp70 Function"

Adviser Dr. Neil Andrew D. Bascos, Associate Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Weand Serencio Ybañez***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman;  
2019

Master's Thesis "Probing the Functional Role of Kruppel-like Factor 9 (KLF9) in the Link Between Circadian Disruption and Breast Cancer"

Adviser Dr. Pia D. Bagamasbad, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Joshua Miguel Cristobal Danac***

B.S. Molecular Biology and Biotechnology; University of the Philippines, Diliman; 2019

Thesis Title "Functional Characterization of the Novel, Non-hotspot BRAF S720L Mutation Identified in Filipino Young-onset Colorectal Cancer Patients"

Adviser Dr. Reynaldo L. Garcia, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Charles John Talip Uy***

B.S. Life Sciences; Ateneo de Manila University; 2015

Thesis Title "Functional characterization of the novel PIK3CA mutants N114S and Codon 111 deletion identified from Filipino colorectal cancer patients"

Adviser Dr. Reynaldo L. Garcia, Professor, National Institute of Molecular Biology and Biotechnology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City



**BACHELOR OF SCIENCE IN MOLECULAR**  
**BIOLOGY AND BIOTECHNOLOGY**

**As of Second Semester, 2020-2021**

***Hans Emmanuel H. Monroy***

Undergraduate Thesis “DNA Barcoding and Phylogenetic Tree Analysis of 6 Freshwater Green algae samples using *rbcL* and *tufA* Gene loci”

Adviser Wilberto D. Monotilla, Ph.D.

Co-Adviser Libertine Rose Sanchez, Ph.D.

**As of Second Semester, 2021-2022**

***Abigail Mary Claire F. Ablang***      ***Cum Laude***

Undergraduate Thesis “Preliminary Investigations on miRSNPs in the PIK3CA 3’UTR of Filipino Young-Onset Colorectal Cancer Patients”

Adviser Reynaldo L. Garcia, Ph.D., M.Phil. (*cantab*)

***Sophia Marie A. Abulencia***      ***Magna Cum Laude***

Undergraduate Thesis “*In silico* Analysis of the T-cell Immunogenicity of the Nucleocapsid Protein in SARS-CoV-2 Variants”

Adviser Denise Mirano Bascos, Ph.D.

***Jasmine Abigail S. Acla***      ***Cum Laude***

Undergraduate Thesis “Computational Investigations of SARS-CoV-2 Spike Protein Interactions with Integrin  $\alpha v\beta 8$ ”

Adviser Neil Andrew D. Bascos, Ph.D.

***John Rafael F. Ambag***      ***Summa Cum Laude***

Undergraduate Thesis “Preliminary Investigations on the Effects of miRSNPs Found in the *PTEN* 3’-UTR of Filipino Young-Onset Colorectal Cancer Patients”

Adviser Reynaldo L. Garcia, Ph.D., M.Phil. (*cantab*)

***Aleq Adrienne R. Andresan***      ***Magna Cum Laude***

Undergraduate Thesis “Tracking the Emergence and Evolution of SARS-CoV-2 in Region X and Region XIII”

Adviser Cynthia Palmes-Saloma, Ph.D.

**Caitlin Bridgette G. Castro**

Undergraduate Thesis “*In Silico* Identification and Analysis of NBS-LRR genes from Abaca (*Musa textilis* Née var. Tangongon)”  
Adviser Vermando M. Aquino, Ph.D.

**Andrei Phillip L. David**

***Summa Cum Laude***

Undergraduate Thesis “Functional Characterization of the Novel RRAS R78W and E63D Mutants Identified in Filipino Young-Onset Colorectal Cancer Patients”  
Adviser Reynaldo L. Garcia, Ph.D., M.Phil. (*cantab*)

**Christian Jayrold S. Dela Cruz**

***Magna Cum Laude***

Undergraduate Thesis “Detection of Virulence and Avirulence- Related Genes in *Ralstonia solanacearum* 10154 Isolate”  
Adviser Ma. Anita M. Bautista, Ph.D.

**Marco Angelo C. Dildig**

***Magna Cum Laude***

Undergraduate Thesis “*De novo* Genome Assembly of a Streptomyces Isolate from the Philippines and Genome Mining of Biosynthetic Gene Clusters for Natural Product Discovery”  
Adviser Ron Leonard V. Dy, Ph.D.

**Lyonel James A. Dimaapi**

***Magna Cum Laude***

Undergraduate Thesis “*In silico* Screening for Novel Lead-Like Compounds as Potential Androgen Receptor Antagonists”  
Adviser Pia D. Bagamasbad, Ph.D.

**Albert Neil G. Dulay**

***Magna Cum Laude***

Undergraduate Thesis “Computational Investigations of SARS-CoV-2 Spike Protein Interactions with Integrin  $\alpha\text{v}\beta\text{6}$ ”  
Adviser Neil Andrew D. Bascos, Ph.D.

**Aaron James C. Feliciano**

***Cum Laude***

Undergraduate Thesis “16S rRNA-Based Metagenomic Analysis of Microbial Communities in the Guts of the Diamondback moth, *Plutella xylostella* L., and the Wood-Feeding Termite, *Microcerotermes* sp.”  
Adviser Ma. Anita M. Bautista, Ph.D.

**Lance Harvey L. Go**

***Magna Cum Laude***

Undergraduate Thesis “Functional Characterization of the Novel E-Cigarette-Upregulated lncRNA AC010336.4 (VALT1)”  
Adviser Reynaldo L. Garcia, Ph.D., M.Phil. (*cantab*)

- Rachael Mikaela R. Lao** *Magna Cum Laude*  
Undergraduate Thesis “*In silico* Modeling and Docking of Putative TIR-Binding Proteins Hen1 and p115 in the Tardigrade *Mesobiotus philippinicus*”  
Adviser Denise Mirano Bascos, Ph.D.
- Brian Cedric N. Licayan** *Cum Laude*  
Undergraduate Thesis “Cell-Free Synthesis of Bacteriocin from *Chromobacterium* sp.”  
Adviser Jose Enrico H. Lazaro, Ph.D.
- Regine Marie S. Mallorca** *Cum Laude*  
Undergraduate Thesis “Stabilization of the *Plasmodium falciparum* Merozoite Surface Protein 1 Block 2 MAD20 Allelic Variant”  
Adviser Denise Mirano Bascos, Ph.D.
- Leila Marie A. Mancera** *Cum Laude*  
Undergraduate Thesis “Comparative Genome Analysis of *Vibrio vulnificus* Isolates from the Philippine Shrimp Pathogenomics Program”  
Adviser Cynthia Palmes-Saloma, Ph.D.
- Alessandria Maeve M. Ocampo** *Magna Cum Laude*  
Undergraduate Thesis “Deciphering the Role of *ERRF1* in the Glucocorticoid Therapy Paradox in Breast Cancer”  
Adviser Pia D. Bagamasbad, Ph.D.
- Rhaena Ellyse A. Pablo** *Cum Laude*  
Undergraduate Thesis “Comparative Genomics Analysis of Evolution of Betalain Pigmentation in the Plant Order Caryophyllales”  
Adviser Jose Ramon G. Planta, Ph.D.
- Beatrice Gabrielle T. Panlaqui** *Cum Laude*  
Undergraduate Thesis “Protein Modeling and *in silico* Characterization of Two Putative TIR-Binding Proteins in the Limnoterrestrial Tardigrade *Mesobiotus philippinicus*”  
Adviser Denise Mirano-Bascos, Ph.D.
- Irene S. Rivera** *Cum Laude*  
Undergraduate Thesis “An Investigation on Prophages and Lytic Phages of Philippine *Ralstonia solanacearum* Strains”  
Adviser Ron Leonard V. Dy, Ph.D.

***Andrew Benedict P. Rodriguez***      ***Magna Cum Laude***

Undergraduate Thesis      “A Meta-analysis and Validation of Acute and Chronic  
Stress-Regulated Transcripts in Rodent Hippocampus”  
Adviser      Pia D. Bagamasbad, Ph.D.

***Aira Gabrielle C. So***

Undergraduate Thesis      “Identification and Analysis of a Putative Hybrid  
iPKS/NRPS Biosynthetic Gene Cluster in *Lysinibacillus* sp.  
M3 Using a Genome Mining Approach”  
Adviser      Jose Enrico H. Lazaro, Ph.D.

**INSTITUTE OF MATHEMATICS**

**MASTER OF SCIENCE**  
**(APPLIED MATHEMATICS - INSTRUMENTATION)**

**As of Midyear 2021**

***Yancee Hernandez Olave***

B.S. Applied Mathematics; University of the Philippines, Los Baños; 2015  
Master's Thesis “Optimal Control of a Chikungunya Model in the Philippine Setting”  
Adviser Dr. Aurelio A. de los Reyes V, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City  
Co-Adviser Dr. Victoria May P. Mendoza, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Vanessa Mae Cea Romero***

B.S. Applied Mathematics; University of the Philippines, Los Baños; 2016  
Master's Thesis “Modelling Dengue Transmission with Time Delays”  
Adviser Dr. Aurelio A. de los Reyes V, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***Deza Alipat Amistas***

B.S. Applied Mathematics; University of the Philippines, Visayas; 2019  
Master's Thesis “Incidence Independent and Weakly Reversible Decompositions of Chemical Reaction Networks”  
Adviser Dr. Ralph John L. de la Cruz, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Gertrude Thea Marie Santiago Reyes***

B.S. Mathematics; University of the Philippines, Baguio; 2016

Master's Thesis "On the Minimum Capital Requirement of a Philippine Bank Using Advanced Measurement Approach"

Adviser Dr. Jose Maria L. Escaner IV, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Erika Antonette Tan Enriquez***

B.S. Mathematics; University of the Philippines, Diliman; 2019

Thesis Title "Philippine Eagle Optimization Algorithm"

Adviser Dr. Arriane Crystal T. Velasco, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Jemar Ebalin Laag***

B.S. Mathematics; University of the Philippines, Los Baños; 2016

Thesis Title "Matrix Representation of Martingale Measures with Quantized Marginals"

Adviser Dr. Daryl Allen B. Saddi, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Clyd Marvin Soliveres Tito***

B.S. Mathematics; De La Salle University; 2012

Thesis Title "Estimation of Credit Rating Migration through Transition Matrices"

Co-Adviser Dr. Jose Maria L. Escaner IV, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Polly W. Sy, Professor Emeritus, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## **MASTER OF SCIENCE (MATHEMATICS)**

### **As of Midyear 2021**

#### ***Renato Lorenzo Antonio Letaba Añel III***

B.S. Mathematics; University of the Philippines, Diliman;

Master's Thesis "On Some Families of Elliptic Curves Associated with Polygonal Numbers"

Adviser Dr. Jerome T. Dimabayao, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

#### ***Michael Christian Matias Baysauli***

B.S. Mathematics; University of the Philippines, Diliman; 2016

Master's Thesis "On Negacyclic Codes Over  $Z_4$ "

Adviser Dr. Lilibeth D. Valdez, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### **As of First Semester, AY 2021-2022**

#### ***Jehan Ramos Abbas***

B.S. Mathematics; Mindanao State University; 2017

Master's Thesis "Uncertainty Principle for Compact Self-Adjoint Operators"

Adviser Dr. Louie John D. Vallejo, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

#### ***Clint Harry Gemoto Angeles***

B.S. Mathematics; University of the Philippines, Diliman; 2012

Master's Thesis " $\Sigma$ -Unitary Groups and  $\Sigma$ -Unitary Lie Algebras over the Integers"

Adviser Dr. Jose Maria P. Balmaceda, Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Clarisson Rizzie P. Canlubo, Assistant Professor, Institute of Mathematical Sciences and Physics, College of Arts and Sciences, University of the Philippines Los Baños College, Laguna

***Jomarson Atacador Florendo***

B.S. Mathematics; University of the Philippines, Diliman; 2019

Master's Thesis "Kleptography on the NTRU Public Key Cryptosystem"

Adviser Dr. Julius M. Basilla, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Marc Aaron Flores Julian***

B.S. Applied Physics; University of the Philippines, Manila; 2017

Master's Thesis "Color Confinement and Liang's Potential Energy Function on a GUT over  $SU(5)$ "

Co-Adviser Dr. Dennis T. Leyson, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Clarisson Rizzie P. Canlubo, Assistant Professor, Institute of Mathematical Sciences and Physics, College of Arts and Sciences, University of the Philippines Los Baños College, Laguna

***Sofia Anne Requidan Pineda***

B.S. Mathematics; University of the Philippines, Diliman; 2019

Master's Thesis "Kid-RSA in Algebraic Number Fields"

Adviser Dr. Julius M. Basilla, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Hazel Joy Gonzales Shi***

B.S. Management Engineering; Ateneo de Manila University; 2013

Master's Thesis "The Parity of Andrews'  $(4k, k)$ -Singular Overpartitions"

Adviser Dr. Victor Manuel R. Aricheta, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Raymond Louis Sariola Tañedo***

B.S. Applied Mathematics; Polytechnic University of the Philippines; 2019

Master's Thesis "The Products of Involutions in a Matrix Centralizer"

Adviser Dr. Ralph John L. de la Cruz, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City



**As of Second Semester, AY 2021-2022**

***John Mel Tapnio Dacaymat***

B.S. Mathematics; University of the Philippines, Diliman; 2019

Thesis Title                   “Diameter of Some Families of Quotient-complete, Arc-transitive Cayley Graphs”

Co-Adviser                   Dr. Maria Carmen V. Amarra, Associate Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser                   Dr. Joseph Ray Clarence G. Damasco, Assistant Professor, Institute of Mathematics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**MASTER OF ARTS (MATHEMATICS)**

**As of First Semester, AY 2021-2022**

***Jose Amante III Bongao Buenafe***

B.S. Education in Mathematics; University of the Philippines, Diliman; 2010

***Rafael Amalia Duarte***

B.S. Mathematics; Polytechnic University of the Philippines; 2016

**As of Second Semester, AY 2021-2022**

***Edward Rabino Apatan***

B.S. Mathematics; Philippine Normal University; 2012

***Art Nico Benedict Dela Cruz Caguicla***

B.S. Mining Engineering; University of the Philippines, Diliman; 2016

**PROFESSIONAL MASTERS IN APPLIED MATHEMATICS**

**As of Second Semester, AY 2021-2022**

***Pia Marie Crisostomo Salvador***

B.S. Business Administration; University of the Philippines, Diliman; 2015

## **BACHELOR OF SCIENCE IN MATHEMATICS**

### **As of Second Semester, 2020-2021**

***Marichelle Basilio***

Undergraduate Thesis “Principle of Restricted Choice in Bridge Play”  
Adviser Fredegusto Guido P. David, Ph.D.

***John Alfred V. Paragas***

Undergraduate Thesis “On the Whale Optimization Algorithm”  
Adviser Arriane Crystal T. Velasco, Ph.D.

### **As of First Semester, 2021-2022**

***Natasha Dominique R. Garcia***

Undergraduate Thesis “Premium Calculation for a Pension-and-Term Insurance”  
Adviser Jose Maria L. Escaner IV, Ph.D.

***Saeeda Fathma G. Isidro***

Undergraduate Thesis “Dimension of an Algebraic Set as Defined by the Hilbert  
Polynomial of its Vanishing Ideal”  
Adviser Jose Maria P. Balmaceda, Ph.D.

***James Wolfgang B. Llanza***

Undergraduate Thesis “On the Well-Posedness of a Nonlinear Elliptic Boundary  
Value Problem with Mixed Boundary Conditions”  
Adviser Bituin C. Cabarrubias, Ph.D.

***Marielle Alexandra C. Torrefiel***

Undergraduate Thesis “Time Series Analysis of Philippine Population”  
Adviser Daryl Allen B. Saddi, Ph.D.

### **As of Second Semester, 2021-2022**

***Christopher M. Billedo***

Undergraduate Thesis “Convexity of Cheby-shev Sets in Hilbert Spaces”  
Adviser Louie John D. Vallejo, Ph.D.

**Peter John M. Burgos**  
Undergraduate Thesis  
Co-Adviser  
Co-Adviser

**Summa Cum Laude**  
“On Umbral Methods of Integration”  
Polly W. Sy, Ph.D., D.Sc.  
Olive R. Cawiding, M.Sc.

**Ivan Rev A. Carvajal**  
Undergraduate Thesis  
  
Adviser

**Magna Cum Laude**  
“On the Existence, Uniqueness, and Stability of the Weak Solutions of Some Classes of Boundary Value Problems”  
Bituin C. Cabarrubias, Ph.D.

**Kyrho M. Corum**  
Undergraduate Thesis  
  
Adviser

**Cum Laude**  
“Optimization of Storm Surge Barrier Closure Applied to the Venice Lagoon”  
Arrienne Crystal T. Velasco, Ph.D.

**Madelyn Esther C. Cruz**  
Undergraduate Thesis  
  
Adviser

**Summa Cum Laude**  
“Mathematical Analysis Used in EEGs and Other Extensions”  
Carlene P.C. Pilar-Arceo, Ph.D.

**Margaret Esther C. Cruz**  
Undergraduate Thesis  
  
Adviser

**Summa Cum Laude**  
“Application of the Coloring-Book Approach in Finding the Coordination Sequences for Some Uniform Tilings”  
Manuel Joseph C. Loquias, Dr. math.

**Rhoda Mae T. Cuevas**  
Undergraduate Thesis  
  
Adviser

**Cum Laude**  
“Using Hamacher Operator in Fuzzy Set Theory for Insurance Pricing and Reserves”  
Jose Maria L. Escaner IV, Ph.D.

**John Timothy U. Daclag**  
Undergraduate Thesis  
  
Adviser

**Cum Laude**  
“Where Do Broken Hearts Go: Modelling Stress Cardiomyopathy”  
Jose Maria L. Escaner IV, Ph.D.

**Jericho R. Galura**  
Undergraduate Thesis  
  
Adviser

**Magna Cum Laude**  
“European Rainbow Option Pricing Using the Expected Rates of Return on Two Assets”  
Jose Maria L. Escaner IV, Ph.D.

**Jessa P. Gemperoso**  
Undergraduate Thesis  
  
Adviser

**Summa Cum Laude**  
“On the Calculation of Aggregate Claims Distribution Function Using Panjer Recursion”  
Lu Kevin S. Ong, Ph.D.

- Darlan Lloyd A. Grageda III**      **Cum Laude**  
Undergraduate Thesis      “Autoregressive Integrated Moving Average Models Versus A Probabilistic Approach on Modelling the Smooth Love Potion Cryptocurrency Price”  
Adviser      Jasmin-Mae S. Luy, Ph.D.
- Veronica Hillary R. Guevara**      **Magna Cum Laude**  
Undergraduate Thesis      “On the  $Un$  and  $L2$  Quantizations of Some Probability Measures”  
Adviser      Daryl Allen B. Saddi, Ph.D.
- Queennie Mae B. Lazo**      **Magna Cum Laude**  
Undergraduate Thesis      “On the Determination of the Common Set of Weights in a Preferential Voting System”  
Adviser      Ramon Inigo D. Marfil, Ph.D.
- Cedric John L. Ligutan**      **Summa Cum Laude**  
Undergraduate Thesis      “Construction of Closed Twisted Curves in  $\mathbb{R}^m$ ”  
Adviser      Dennis T. Leyson, Ph.D.
- Lynette C. Manlapas**      **Magna Cum Laude**  
Undergraduate Thesis      “Constructing Euclidean and Hermitian LCD Codes”  
Adviser      Lucky Galvez, Ph.D.
- Troy Vinzenz A. Manuel**      **Magna Cum Laude**  
Undergraduate Thesis      “On the Construction of Linear Complementary Dual (LCD) Codes over  $\mathbb{F}_q + v\mathbb{F}_q + v^2\mathbb{F}_q + \dots + v^{m-1}\mathbb{F}_q$ ”  
Adviser      Lucky Galvez, Ph.D.
- Ricci Mae D. Margallo**  
Undergraduate Thesis      “Ritz Values of Weighted Shift Matrices”  
Adviser      Paul Reine Kennett L. Dela Rosa, Ph.D.
- Gwyneth M. Martinez**      **Magna Cum Laude**  
Undergraduate Thesis      “Matrix Representation of Martingale Measures Derived from the Quantization of Uniformly and U-Quadratically Distributed Marginals”  
Adviser      Daryl Allen B. Saddi, Ph.D.
- Dwight Anthony B. Palma**      **Magna Cum Laude**  
Undergraduate Thesis      “Mathematical Modeling and Optimal Control of HIV/AIDS in the Philippines”  
Co-Adviser      Arriane Crystal Velasco, Ph.D.  
Co-Adviser      Thomas Herald Vergara, M.Sc.

***Patrisha C. Paris***

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“Forecasting Philippine Mortality Rates Using the Lee-Carter Model”

Jose Maria L. Escaner IV, Ph.D.

***Joshua Aaron S. Punzalan***

Undergraduate Thesis

Adviser

***Cum Laude***

“On the Chromatic Number of the Zero Divisor Graph  $\Gamma(\mathbb{Z}_m \times \mathbb{Z}_n)$ ”

Rovin B. Santos, Ph.D.

***Francis Benedict R. Tamio***

Undergraduate Thesis

Adviser

“Spoof Odd Perfect Numbers and Dittmer’s Algorithm”

Victor Manuel R. Aricheta, Ph.D.

***Florence Carl A. Tilano***

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“The Fama and French Five Factor Model Applied to Philippine Common Stocks from 2013 to 2020”

Jasmin-Mae S. Luy, Ph.D.

***Christine Ann L. Tongol***

Undergraduate Thesis

Co-Adviser

Co-Adviser

***Cum Laude***

“Mathematical modeling of COVID-19 Dynamics with Information-Dependent Vaccination in the Philippines”

Olive R. Cawiding, M.Sc.

Rey Audie S. Escosio, M.Sc.

***Vince Jan F. Torres***

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“The Minimum Number of Monominos in a Deficient Tiling of a Class of Rectangles with T-tetrominos”

Louie John D. Vallejo, Ph.D.

***Shawn Christian P. Tuason***

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“Prime-Free Regions in Imaginary Quadratic Fields of Class Number One”

Victor Manuel R. Aricheta, Ph.D.

***Raina Lee Y. Visitacion***

Undergraduate Thesis

Co-Adviser

Co-Adviser

***Summa Cum Laude***

“Optimal Control Strategies Applied to a Mathematical Model for the Epidemiology of Diabetes”

Arriane Crystal Velasco, Ph.D.

Thomas Herald Vergara, M.Sc.

***Steven John H. Wang***

Undergraduate Thesis

Adviser

***Summa Cum Laude***

“On the Curvature of Torus Curves and Their Projections”

Dennis T. Leyson, Ph.D.

***Jes Indira L. Zafe***

Undergraduate Thesis

“Using the Yager Operator in Fuzzy Set Theory for Insurance Pricing”

Adviser

Jose Maria L. Escaner IV, Ph.D.



## MATERIALS SCIENCE AND ENGINEERING PROGRAM

### MASTER OF SCIENCE (MATERIALS SCIENCE AND ENGINEERING)

#### As of Midyear 2021

##### ***Mylenne San Carlos Manrique***

B.S. Applied Physics; University of the Philippines, Diliman; 2016

Master's Thesis "Fluence-dependent Raman Scattering of Vertically-aligned Silicon Nanowire Arrays"

Adviser Dr. Armando S. Somintac, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

##### ***Kim Marie Degayo Sisican***

B.S. Chemistry; University of the Philippines, Diliman; 2016

Master's Thesis "Coordination Modulated Synthesis and Surface Functionalization of MIL-88B(Fe) Nanoparticles"

Adviser Dr. Marlon T. Conato, Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

#### As of Second Semester, AY 2021-2022

##### ***Mia Angela Nuneza Judicpa***

B.S. Chemistry; University of the Philippines, Visayas; 2015

Thesis Title "Polythiophene-modified Titanium Dioxide (TiO<sub>2</sub>) Nanotubes for the Photoelectrochemical Detection of Organic Pollutants"

Adviser Dr. Allan Christopher C. Yago, Associate Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

##### ***Enrico Daniel Recto Legaspi***

B.S. Chemistry; University of the Philippines, Diliman; 2019

Thesis Title "One-pot Synthesis of Copper(I) Oxide-Gold Nanocomposites for Use as Surface-Enhanced Raman Spectroscopy (SERS) Substrates"

Adviser Dr. Michelle D. Regulacio, Associate Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**MARINE SCIENCE INSTITUTE**

**MASTER OF SCIENCE (MARINE SCIENCE)**

**As of First Semester, AY 2021-2022**

***Raffi Rakim Isah***

B.S. Chemistry; University of the Philippines, Diliman; 2015

Master's Thesis "Carbonate Chemistry Dynamics on the Bolinao Reef Flat"  
Adviser Dr. Maria Lourdes San Diego-McGlone, Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Albebson Landicho Lim***

B.S. Biology; University of the Philippines, Los Baños; 2014

Master's Thesis "Isolation and Characterization of a Putative Novel Species of *Winogradskyella* from a turrid, *Turris babylonica*"  
Adviser Dr. Cecilia G. Conaco, Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City  
Co-Adviser Dr. Gisela P. Concepcion, Professor Emeritus, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Patrick Arnigo Cordillo***

B.S. Biology; Polytechnic University of the Philippines; 2012

Thesis Title "Species Identification and Population Structure of Sardines along the Northern Coast of Mindanao using Body Shape Geometric Morphometrics"  
Adviser Dr. Ma. Josefa R. Pante, Research Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Aiko (Love) Bacunawa Del Rosario***

B.S. Applied Physics; University of the Philippines, Diliman; 2015

Thesis Title "Spatiotemporal Variations of Eddies around the Philippines"

Adviser Dr. Cesar L. Villanoy, Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Charmaine Bantog Mendoza***

B.S. Biology; Polytechnic University of the Philippines; 2012

Thesis Title "Isolation and Characterization of Bioactive Conopeptides from *Conus tessulatus*"

Adviser Dr. Lilibeth A. Salvador-Reyes, Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**PROFESSIONAL MASTERS IN TROPICAL  
MARINE ECOSYSTEMS MANAGEMENT**

**As of Second Trimester, AY 2021-2022**

***Maria Ella Hisarza Baria Aquino***

B.S. Biology; University of the Philippines, Los Baños; 2004

***Archie Faburada Espinosa***

BS in Aquatic Biology; Western Philippines University; 2009

***Luzviminda Rosario,***

A.B. English; Isabela State University, Echague Campus; 2007

***Josephine Uy Sta Maria***

BS in Biology; Cagayan State University; 2008

**NATIONAL INSTITUTE OF GEOLOGICAL SCIENCES**

**MASTER OF SCIENCE (GEOLOGY)**

**As of Midyear 2021**

***Ma. Isabella Gaité Hermo***

B.S. Geology; University of the Philippines, Diliman; 2015

Master's Thesis "Mineralization of the quartz-fragment-rich-breccia (QBX) from the Didipio Breccia Complex, Nueva Vizcaya, Philippines"

Adviser Dr. Maria Ines Rosana D. Balangue-Tarriela, Associate Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***Sheinna May Dacalos Claro***

B.S. Geology; University of the Philippines, Diliman; 2016

Thesis Title "Characterization of Coastal Sediments in Relation to Potential Washover Deposits from Extreme Wave Events in Zamboanga Del Sur, Philippines"

Adviser Dr. Noelynna T. Ramos, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Allan Gil S. Fernando, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## As of Second Semester, AY 2021-2022

### ***Ma. Criselda Batislaong Baldago***

B.S. Geology; University of the Philippines, Diliman; 2016

Thesis Title "Temporal Evolution of Diffuse CO<sub>2</sub> Degassing of Taal Volcano in Relation to Large Tectonic Earthquakes"

Adviser Dr. Alfredo Mahar Francisco A. Lagmay, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Carlo A. Arcilla, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Jesley Mei Abiño Dycoco***

B.S. Geology; University of the Philippines, Diliman; 2018

Thesis Title "Melt Generation in the Oceanic Lithosphere: Implications from the Crustal Section and Associated Mafic Intrusions of the Palawan Ophiolite"

Adviser Dr. Betchaida D. Payot, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Regina Martha Gabest Lumongsod***

B.S. Geology; University of the Philippines, Diliman; 2017

Thesis Title "Geologic and Geomorphic Controls on Sinkhole Characteristics in Cebu City, Philippines"

Adviser Dr. Noelynna T. Ramos, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Bryan Jimenez Marfito***

B.S. Geology; University of the Philippines, Diliman; 2014

Thesis Title "Tectonic Geomorphology of the Philippine Fault in Surigao Strait"

Adviser Dr. Mario A. Aurelio, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**BACHELOR OF SCIENCE IN GEOLOGY**

**As of Second Semester, 2020-2021**

***Stephanie Faith I. Peñarubia***

**As of Midyear, 2021**

***Loeb Delfonz D. Daya***

***Philip J. Kawi***

***Carlo Gerrico C. Maximo***

***Miguel Joven E. Villanueva*                      *Magna Cum Laude***

**As of First Semester, 2021-2022**

***Andreo Luiz V. Agbayani***

***Berlyn D. Eleazar***

**As of Second Semester, 2021-2022**

***Mikhaila Megan T. Fernando***

***Maarja C. Mallari***

***Rev Dexter S. Nayo***

***Frances Myrvi D. Almoradie*                      *Cum Laude***

Undergraduate Thesis                      “Determining the Carbon Dioxide Dynamics of Laguna de Bay Through its pCO<sub>2</sub> Levels”

Adviser    Carlo A. Arcilla, Ph.D.

***Jema Beatrix B. Antonio***

Undergraduate Thesis                      “Crystal Size Distribution of *Plagioclase Phenocrysts* of the 1969 Mt. Tabaro Lava Flow: Quantification of Crystallization History Through Textural Parameters”

Adviser    Maria Ines Rosana Balangue-Tarriela, Ph.D.

***John Kenneth B. Badillo*    *Cum Laude***

Undergraduate Thesis                      “Inventory of the 13-15 September 2018 Typhoon Mangkhut-Induced Landslides in Northern Itogon, Benguet, Philippines”

Adviser    Sandra G. Catane, Ph.D.

***Christian John C. Bañaria***

Undergraduate Thesis “Geomorphological Classification of Cinder Cones of the Ragang Volcanic Field, Central Mindanao, Philippines”  
Adviser Sandra G. Catane, Ph.D.

***Jim Paulo M. Bautista***

***Cum Laude***

Undergraduate Thesis “Characterizing the Fluvial Geomorphology and Channel Migration Patterns of the Lower Abra River, Philippines Through Remote Sensing and GIS Analyses”  
Adviser Noelynna T. Ramos, D.Sc.

***Rachelle B. Belmoro***

***Cum Laude***

Undergraduate Thesis “Geochemistry of Rare Earth Elements in Laterites Derived from Ultramafic Rocks of the Zambales Ophiolite Complex”  
Adviser Carlo A. Arcilla, Ph.D.

***Hannah Yvette P. Bumanglag***

***Magna Cum Laude***

Undergraduate Thesis “Geochemical Variability of the Volcanic Rocks in the Batanes Group of Islands: Implications for the Tectonomagmatic Evolution of the Babuyan Segment, Luzon Arc”  
Adviser Betchaida D. Payot, Ph.D.

***Danella Trina S. Callosa***

***Cum Laude***

Undergraduate Thesis “Ore Mineralogy and Mineral Chemistry of the East-West-Trending Masarita Vein in the Masara Gold District, Eastern Mindanao, Philippines”  
Adviser Jillian Aira Gabo-Ratio, *D.Eng*

***Editha Rose B. Chavez***

***Cum Laude***

Undergraduate Thesis “Constraining Petrological Signatures of an Arc Magma: Clues from Clinopyroxenes of Mt. Pinatubo Xenoliths”  
Adviser Betchaida D. Payot, Ph.D.

***Jester F. Cleope***

***Cum Laude***

Undergraduate Thesis “Petrographic and Paleontological Examination of Limestones in Tanay and Baras, Rizal Province”  
Adviser Allan Gil S. Fernando, Ph.D.

***Coleen Ann M. Crisostomo***

***Cum Laude***

Undergraduate Thesis “Mineralogical and Geochemical Characterization of Black Sands in La Union, Philippines”  
Adviser Carlo A. Arcilla, Ph.D.



- Dann Ysrael D. Crobalde** *Cum Laude*  
Undergraduate Thesis “Determining the Relationship of the Mw 6.6, 24 July 2021 Batangas Earthquake to Succeeding Earthquakes Using Coulomb Stress Transfer Modelling”  
Adviser Mario A. Aurelio, Ph.D.
- Hannagene Cleofe S. Dacillo** *Cum Laude*  
Undergraduate Thesis “Ore Mineralogy and Paragenesis of the 114 Vein in the Acupan Epithermal Deposit, Baguio Mineral District, Philippines”  
Adviser Jillian Aira S. Gabo-Ratio, *D.Eng*
- Chelsy O. De Asis**  
Undergraduate Thesis “Influence of Land Cover Change on Landslide Susceptibility Zonation in Benguet using GIS Techniques and Frequency Ratio Approach”  
Adviser Alfredo Mahar Francisco A. Lagmay, Ph.D.
- Jakob F. Decena**  
Undergraduate Thesis “Foraminiferal Assemblage of the Tubbataha Reefs Natural Park”  
Adviser Allan Gil S. Fernando, Ph.D.
- Dahnna Marie S. Desoy** *Cum Laude*  
Undergraduate Thesis “Tectonomagmatic Discrimination of Altered Igneous Rocks in Didipio, Nueva Vizcaya using Whole Rock Geochemistry”  
Adviser Maria Ines Rosana Balangue-Tarriela, Ph.D.
- Koreen G. Dorado**  
Undergraduate Thesis “Grain Size and Morphology of 2020 Taal Volcano Tephra: Implications on Transport Processes”  
Adviser Maria Ines Rosana Balangue-Tarriela, Ph.D.
- Chelsea M. Espinosa** *Cum Laude*  
Undergraduate Thesis “Downcore Benthic Foraminifera Distribution in the Gulf of Thailand”  
Adviser Allan Gil S. Fernando, Ph.D.
- Anton Jose N. Fernandez**  
Undergraduate Thesis “Benthic Foraminifera Distribution in the Surface Sediments of Gulf of Thailand”  
Adviser Allan Gil S. Fernando, Ph.D.

- Christian Dominic C. Gallego***      ***Cum Laude***  
Undergraduate Thesis      “Importance of Structures in the Volcanic-Sedimentary Terranes of Southern Negros”  
Adviser      Mario A. Aurelio, Ph.D.
- Ayhin H. Itorma***      ***Cum Laude***  
Undergraduate Thesis      “Morphological Analysis of San Pablo Maars in Laguna using Polymorph-2D”  
Adviser      Noelynna T. Ramos, D.Sc.
- Nikka Joy C. Macasa***      ***Cum Laude***  
Undergraduate Thesis      “Coastal Vulnerability Assessment of Samar to Climate Change Impacts using Google Earth Engine and GIS Techniques”  
Adviser      Carlos Primo C. David, Ph.D.
- Hannah Sophia N. Manuel***      ***Cum Laude***  
Undergraduate Thesis      “Petrography and Geochemistry of the Mafic Dikes in Southern Mankayan, Benguet”  
Adviser      Jillian Aira S. Gabo-Ratio, D.Eng.
- Maria Dulce L. Marilla***      ***Cum Laude***  
Undergraduate Thesis      “Structural Analysis of Southern Mindanao Terranes Associated with the 2019 Cotabato Earthquake Sequence”  
Adviser      Mario A. Aurelio, Ph.D.
- Angela Nicole S. Masongsong***  
Undergraduate Thesis      “Petrographic and Sedimentological Analyses of Ceramics, Earthenware, and Raw Materials from Bohol, Philippines”  
Adviser      Allan Gil S. Fernando, Ph.D.
- Reign B. Megino***  
Undergraduate Thesis      “Petrography and Geochemistry of Diabase Dikes in Malabeg, Cabangan Massif, Zambales Ophiolite Complex”  
Adviser      Jillian Aira S. Gabo-Ratio, D.Eng.
- John Patrick S. Naing***  
Undergraduate Thesis      “Structures Derived from Seismic Profiles of Northwest Panay”  
Adviser      Mario A. Aurelio, Ph.D.

**Emilio F. Pajares**

Undergraduate Thesis

Adviser

**Cum Laude**

“Delineating Continental-Oceanic Terranes of Northwest Mindoro from Gravity and Magnetic Data: Insights on the Tectonic Structure and Deformation of the Northern PCB-PMB Collision Zone”

Leo T. Armada, Ph.D.

**Fern Rose A. Peregrino**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“How are Arc Picrites Formed? Constraints from “panayites” of Panay Island”

Betchaida D. Payot, Ph.D.

**Felicia Eira B. Reyes**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“Estimating the Groundwater Recharge of a Critical Tropical Watershed in the Philippines: A Case Study of Pinacanauan de Tuguegarao Watershed, Cagayan”

Sandra G. Catane, Ph.D.

Jayson Gabriel D. Pinza, MSc.

**Dennis Christian M. Rivera**

Undergraduate Thesis

Adviser

**Cum Laude**

“Characterization of the Vesicle Size Distribution of the 1969 Mt. Tabaro Lava Flows: Implication to Surface Degassing and Textural Modifications”

Maria Ines Rosana Balangue-Tarriela, Ph.D.

**Layla Gabrielle B. Sevilla**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“Influence of the COVID-19 Pandemic on the Water Clarity of Aquaculture Areas in the Philippines”

Carlos Primo C. David, Ph.D.

**Clarice A. Tinio**

Undergraduate Thesis

Adviser

**Cum Laude**

“Stress Changes Along the Locked and Creeping Sections of the Philippine Fault in Leyte Caused by Nearby Large Magnitude Earthquakes”

Mario A. Aurelio, Ph.D.

**Tiffany Ashley F. Uy**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“Estimating the Carbon Flux Potential of the Manleluag Hyperalkaline Springs in Mangataram, Pangasinan”

Carlo A. Arcilla, Ph.D.

# INSTITUTE OF ENVIRONMENTAL SCIENCE AND METEOROLOGY

## MASTER OF SCIENCE (ENVIRONMENTAL SCIENCE)

### As of First Semester, AY 2020-2021

#### ***Jay Alvarina Ejares***

B.S. Biology; University of San Carlos; 2012; M.S. Environmental Science ;  
University of San Carlos; 2017

### As of Midyear 2021

#### ***Hazel Marice Ortiz Chua***

B.S. Biology; University of the Philippines, Los Baños; 2011

Master's Thesis "Morpho-Physiological Responses, Secondary Metabolite Profiles and Antioxidant Activity of *Origanum vulgare* L. Exposed to Varying Nitrogen Levels"

Adviser Dr. Juliana Janet M. Puzon, Associate Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Rene N. Rollon, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

#### ***Manuel Justin Galang Custado***

B.S. Chemistry; University of the Philippines, Diliman; 2015

Master's Thesis "Spatial and Temporal Assessment of the Influence of Runoff on Philippine Coastal Productivity using Gridded Datasets"

Adviser Dr. Carlos Primo C. David, Professor, National Institute of Geological Sciences, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Benjamin M. Vallejo Jr., Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## As of First Semester, AY 2021-2022

### ***Kimberly Salazar Beltran Benjamin***

B.S. Biology; University of the Philippines, Baguio; 2001; M.S. Biology; University of the Philippines, Diliman; 2007

### ***Jose Mari Lucero Jimenez***

B.S. Industrial Engineering; De La Salle University; 1992; M.A. Religious Education; De La Salle University; 2009

## As of Second Semester, AY 2021-2022

### ***Jamaica Ann Aranas Caras***

B.S. Biology; University of the Philippines, Los Baños; 2014

Thesis Title “Antibiotic Resistance and Virulence Factors in the Marine Environment: Cetaceans as Sentinels”

Co-Adviser Dr. Marie Christine M. Obusan, Associate Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Lemnuel V. Aragones, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Russel Christine Bordaje Corcino***

B.S. Biology; University of the Philippines, Diliman; 2017

Thesis Title “Modelling Potential Distribution of Jellyfish (Scyphomedusae, Cubomedusae) in Monsoon- Influenced Coastal Waters Using Citizen Science Data”

Adviser Dr. Lemnuel V. Aragones, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***John Claude Renan Balaibo Salluta***

B.S. Biology; Southern Luzon State University; 2016

Thesis Title "Macroinvertebrate Assemblages and Functional Traits in Ashfall-Impacted Littoral Zones of Lake Taal After the Taal Volcano Eruption in January 2020"

Adviser Dr. Francis S. Magbanua, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Jonathan Carlo A. Briones, Assistant Professor, Department of Biological Sciences, College of Science, University of Santo Tomas, España Blvd., Manila

**DIPLOMA IN ENVIRONMENTAL SCIENCE**

**As of First Semester, AY 2012-2013**

***Angelo Senin Bugarin***

B.S. Chemistry; Polytechnic University of the Philippines; 2008

**As of Second Semester, AY 2017-2018**

***Alyssa Jose Santos De Ocampo***

B.S. Biology; University of the Philippines, Manila; 2015

## **MASTER OF SCIENCE (METEOROLOGY)**

### **As of Midyear 2021**

#### ***Alyssa Dawn Macion Castillo***

B.S. Physics; Western Mindanao State University; 2016

Master's Thesis "Atmosphere and Ocean Responses to Tropical Cyclone Hato (Isang) and Pakhar (Jolina) as Observed and Simulated by Coupled Model"

Adviser Dr. Olivia C. Cabrera, Associate Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

#### ***Shivherley Benedict Feland Tanate Dolores***

B.S.,M.S. Physics; University of Northern Philippines; 2013, 2015

Master's Thesis "Influence of Rainfall to Cropping Season of Rice in the Philippines"

Adviser Dr. Gay Jane P. Perez, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Nathaniel R. Alibuyog, Professor and Dean, College of Engineering, Mariano Marcos State University, Batac, Ilocos Norte

#### ***Krishna Escalante Santos***

B.S. Astronomy; Rizal Technological University; 2019

Master's Thesis "Characterizing the Transport and Meteorological Factors in Leading to the 2019 Southeast Asian Transboundary Haze in the Southern Philippines"

Adviser Dr. Mylene G. Cayetano, Associate Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City



## **As of First Semester, AY 2021-2022**

### ***Kevin Christopher Bolima Cordoviz***

B Secondary Education; University of the Philippines, Diliman; 2012

Thesis Title "Influence of the West Pacific Subtropical High on Landfalling Winter Tropical Cyclones in the Philippines"

Adviser Dr. Gerry Bagtasa, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Arby Salamillas Lagman***

B.S. Environmental Science; Manuel S. Enverga University Foundation; 2017

Master's Thesis "The Transport Process and Deposition of Ashfall Over CALABARZON and National Capital Region During the January 2020 Eruption of Taal Volcano, Philippines"

Adviser Dr. Mylene G. Cayetano, Associate Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Kimberly Alla Manauis***

B.S. Applied Physics; University of the Philippines, Los Baños; 2018

Master's Thesis "Performance of Vegetation Index- Temperature-based Drought Indices in Detecting Agricultural Drought in the Philippines"

Adviser Dr. Gay Jane P. Perez, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## **As of Second Semester, AY 2021-2022**

### ***Joanne Mae Bautista Adelino***

B.S. Applied Physics; University of the Philippines, Diliman; 2020

Thesis Title "Rapidly Weakening Tropical Cyclones: Analysis and Impacts in the Philippines"

Adviser Dr. Gerry Bagtasa, Professor, Institute of Environmental Science and Meteorology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Crizzia Mielle Mariano De Castro***

B.S. Applied Physics; University of the Philippines, Diliman; 2020

Thesis Title           “Hyperspectral Unmixing as an Analog Forecasting  
Method During Strong Monsoon Events in the Philippines”

Adviser                 Dr. Gerry Bagtasa, Professor, Institute of Environmental  
Science and Meteorology, College of Science, National  
Science Complex, University of the Philippines, Diliman,  
Quezon City

Co-Adviser            Dr. May T. Lim, Professor, National Institute of Physics,  
College of Science, National Science Complex, University  
of the Philippines, Diliman, Quezon City

**INSTITUTE OF CHEMISTRY**  
**MASTER OF SCIENCE (CHEMISTRY)**

**As of Midyear, 2021**

***Carl Rogel Villaluz Inocentes***

B.S. Chemistry; University of the Philippines, Diliman; 2012

Master's Thesis "Synthesis and Biological Activity Evaluation of a Marine Natural Product-Inspired Peptide"

Adviser Dr. Lilibeth A. Salvador-Reyes, Professor, Marine Science Institute, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Aaron Joseph Lucero Villaraza, Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Windol Charls Cape Santos***

B.S. Chemistry; University of the Philippines, Diliman; 2016

Master's Thesis "Replica-Exchange Molecular Dynamics of Protein Disulfide Isomerase-Assisted Folding of a Conotoxin"

Adviser Dr. Ricky B. Nellas, Associate Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of First Semester, AY 2021-2022**

***Frances Abygail Francisco Genio***

B.S. Chemistry; University of the Philippines, Diliman; 2017

Master's Thesis "Design and Synthesis of Low Molecular Weight Bis-Urea Molecules as Rheology Modifiers"

Adviser Dr. Monissa C. Paderes, Assistant Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Jonathan Viray Paz***

B.S. Chemistry; University of the Philippines, Los Baños; 2011

Master's Thesis      Method Validation of QuEChERS and HPLC-MS/MS in the Determination and Quantification of Neonicotinoid Residues from Local Market Basket Samples Bittergourd, Cabbage, and Eggplant"

Adviser      Dr. Lilibeth Dela Cruz Coo, Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Seemster, AY 2021-2022**

***Rajelle Deala Hernandez***

B.S. Chemistry; University of the Philippines, Diliman; 2015

Thesis Title      "Synthesis of Rotenone Derivatives and Evaluation of Their Cytotoxicity and Anticancer Properties"

Adviser      Dr. Monissa C. Paderes, Assistant Professor, Institute of Chemistry, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## **BACHELOR OF SCIENCE IN CHEMISTRY**

### **As of Second Semester, 2019-2020**

***Janina Eloise R. Alviar***

Undergraduate Thesis “TEMPO Mediated Esterification of Methyl- $\alpha$ -D-glucopyranoside”  
Adviser Medel Manuel L. Zulueta, Ph.D.

### **As of Midyear 2021**

***Llednew Marie C. Garcia***

Undergraduate Thesis “Synthesis of Silver Nanoparticles Using 3-Dodecyl-1-Methyl-1H-Imidazol-3-ium Citrate”  
Adviser Susan D. Arco, Ph.D.

### **As of First Semester, 2021-2022**

***Roselle E. Palencia***

Undergraduate Thesis “Design and Synthesis of Urea-based Low Molecular Weight Compounds as Rheology Modifiers for Surfactants”  
Adviser Monissa C. Paderes, Ph.D.

***Angelica Nicole M. Tang***

Undergraduate Thesis “Optimization of Synthesis of Anthracene-Functionalized Diaminohexane for Light-Induced [4+4] Cycloaddition”  
Adviser Monissa C. Paderes, Ph.D.  
Co-Adviser Giovanni A. Tapang, Ph.D.

### **As of Second Semester, 2021-2022**

***Teodoro C. Agudilla, Jr.***

***Cum Laude***

Undergraduate Thesis “Evaluating the Arsenic Concentrations in Laguna Lake and its Tributaries Through Statistical Analysis”  
Adviser Maria Pythias B. Espino, Ph.D.

***Danielle Ann B. Alejandro***

Undergraduate Thesis “Metabolic Profiling of Disease-Specific Top-Tier Plants”  
Adviser Irene M. Villaseñor, Ph.D.

**Jay Sam D. Andos**

Undergraduate Thesis “Evaluation of the Cyclooxygenase (COX) Enzyme Inhibition Activities of Extracts from *Averrhoa carambola* L. Leaf and *Planchonella nitida* Dub. Bark”  
Adviser Evangeline C. Amor, Ph.D.

**Laurice Gabrielle F. Angeles**

Undergraduate Thesis “HMG-CoA Reductase Inhibitory Activity of *Sandoricum koetjape* Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.

**Glendale D. Boholano**

**Cum Laude**

Undergraduate Thesis “Synthesis and Structure-Property-Performance Relationships of Fe-Based Metal Organic Framework as Cathode Material for Rechargeable Lithium-ion Batteries”  
Adviser Marlon T. Conato, Ph.D.

**Christopher Gene R. Calibo**

**Magna Cum Laude**

Undergraduate Thesis “Synthesis and Characterization of Curcumin Analogs as Potential ACE2 Inhibitors”  
Adviser Monissa C. Paderes, Ph.D.

**Ma. Juliana R. Callangan**

**Magna Cum Laude**

Undergraduate Thesis “Synthesis and *In Silico* Evaluation of *O*-alkylated BCE Truncated Deguelin Analogs as Potential Hsp90 C-Terminal Inhibitors”  
Adviser Monissa C. Paderes, Ph.D.  
Co-Adviser Ricky B. Nellas, Ph.D.

**Janrick G. Cayetano**

**Summa Cum Laude**

Undergraduate Thesis “Synthesis and pH-Dependent Gelation Studies of Phenyl Bis-Urea Hydrogelators”  
Adviser Monissa C. Paderes, Ph.D.

**April Mae V. Dacula**

Undergraduate Thesis “Cellulose Dissolution in Binary Ionic Liquids for the Fabrication of Silver-Regenerated Cellulose Composites”  
Adviser Susan D. Arco, Ph.D.

**Neikoll Aleja S. Del Mundo**

**Cum Laude**

Undergraduate Thesis “Cyclooxygenase (COX) Inhibitory Activity of *Calamus Merrillii* Becc. and *Livistona Rotundifolia* (Lam.) Mart. Leaf Extracts”  
Adviser Evangeline C. Amor, Ph.D.

- Maxine T. Dimaano** *Cum Laude*  
Undergraduate Thesis “Adsorption of Methylene Blue in Aqueous Solution by MIL-88b(Fe) and MIL-101(Fe) Metal-Organic Frameworks”  
Adviser Marlon T. Conato, Ph.D.
- Izabelle A. Dolores** *Cum Laude*  
Undergraduate Thesis “1-Dodecyl-3-methyl-1*H*-imidazol-3-ium Ionic Liquid Derivatives as Potential Dual Reductant Systems for Gold Nanoparticle Synthesis”  
Adviser Susan D. Arco, Ph.D.
- Francis Angelo N. Dominguez** *Magna Cum Laude*  
Undergraduate Thesis “Electrochemically Reduced Graphene Oxide as Glassy Carbon Electrode Modifier for the Electrochemical Detection of Fenitrothion”  
Adviser Allan Christopher C. Yago, Ph.D.
- Arianna Francesca P. Dumlao** *Cum Laude*  
Undergraduate Thesis “Spatio-Temporal Variabilities of Ions as Determinants of Algal Growth in Laguna De Bay”  
Adviser Maria Pythias B. Espino, Ph.D.
- Stephanie Alyzza S. Fadri** *Cum Laude*  
Undergraduate Thesis “Angiotensin-Converting Enzyme (ACE) Inhibitory Activity of *Pseudelephantopus spicatus* (Juss. ex Aubl.) C.F. Baker Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.
- Jomari C. Fernando** *Magna Cum Laude*  
Undergraduate Thesis “*In silico* and *in vitro* Structure-Activity Relationship Studies on the Antomicrobial Peptide Iyp1987 from *Lycosa poonaensis*”  
Adviser Aaron Joseph L. Villaraza, Ph.D., MRSC
- Bianca Emmanuelle C. Gancia** *Cum Laude*  
Undergraduate Thesis “Inhibition of Angiotensin-Converting Enzyme (ACE) by *Ficus fiskei* Elmer Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.
- Angela Mae F. Gascon** *Magna Cum Laude*  
Undergraduate Thesis “HMG-CoA Reductase Inhibitory Activity of *Calamus merrillii* Stem Extracts”  
Adviser Christine C. Hernandez, Ph.D.

***Beatrice Angela D. Gomez***

Undergraduate Thesis “Structure Analysis and Ion Exchange of Sodalite (SOD) Synthesized from Kaolin Clay Material”  
Adviser Marlon T. Conato, Ph.D.

***Claire F. Grecia***

***Magna Cum Laude***

Undergraduate Thesis “Angiotensin-Converting Enzyme (ACE) Inhibitory Activity of *Aeschynomene indica* L. Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.

***Alexandria M. Grospe***

***Magna Cum Laude***

Undergraduate Thesis “Design and Synthesis of Quercetin Derivatives as ACE2 Inhibitors Against COVID-19”  
Adviser Monissa C. Paderes, Ph.D.

***Yroi E. Ignacio***

Undergraduate Thesis “Synthesis and Structural Analysis of Mordenite-Type Zeolites and their Influence on the Engineering Properties of Concrete”  
Adviser Marlon T. Conato, Ph.D.

***Charlene Claudette F. Inao***

***Cum Laude***

Undergraduate Thesis “3-Hydroxy-3-methyl-glutaryl-coenzyme A (HMG-CoA) Reductase Inhibitory Activity of *Artocarpus blancoi* Leaves”  
Adviser Christine C. Hernandez, Ph.D.

***John Voltaire R. Jalalon***

***Cum Laude***

Undergraduate Thesis “A Green and Facile Synthetic Approach to Ag Nanoarchitectures for Catalytic Reduction of 4-Nitrophenol”  
Adviser Michelle D. Regulacio, Ph.D.

***Miguel Angel P. Juan***

***Magna Cum Laude***

Undergraduate Thesis “Angiotensin-Converting Enzyme Inhibitory Activity of *Antidesma bunius* (L.) Spreng Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.

***Kristine Anne A. Ladines***

***Cum Laude***

Undergraduate Thesis “Finding MeOH: A Comprehensive Literature Review on Methods for the Determination of Methanol in Lambanog and Alcoholic Beverages”  
Adviser Cynthia Grace C. Gregorio, Ph.D.



**Johanna Lindsay G. Lautchang** *Cum Laude*

Undergraduate Thesis “Alpha-Glucosidase Inhibitory Potential of *Myristica philippensis* Lam Leaf Extract and *Bischofia javanica* Blume Bark Extract”

Adviser Evangeline C. Amor, Ph.D.

**Pete Gabriel L. Ledesma** *Magna Cum Laude*

Undergraduate Thesis “Generation of Potential B-cell Lymphoma 2 (Bcl-2) Inhibitors from S55746 Fragments Using a Genetic Algorithm”

Adviser Ricky B. Nellas, Ph.D.

**Joshua Jener D. Lopez** *Magna Cum Laude*

Undergraduate Thesis “The Role of Glycerol-Water Mixtures in Stability and Ligand Binding of FKBP12-Rapalog-FRB Complexes”

Adviser Ricky B. Nellas, Ph.D.

**Jerrieme Lemuel A. Maderazo** *Cum Laude*

Undergraduate Thesis “*Chromolaena odorata* Linn. Extracts as a Potential Source of Angiotensin-Converting Enzyme Inhibitors”

Adviser Christine C. Hernandez, Ph.D.

**Lorenzo Angelo M. Mapalo** *Cum Laude*

Undergraduate Thesis “Conferring Color and Antibacterial Properties on Cotton Fabric Using Green-Synthesized Gold and Silver Nanoparticles”

Adviser Michelle D. Regulacio, Ph.D.

**Jethroi B. Mendoza** *Cum Laude*

Undergraduate Thesis “Comparative Analysis of the Crystal Structures of Zeolites and Selection of Candidate Zeolites for Adsorption of Cs and Sr Radionuclides”

Adviser Marlon T. Conato, Ph.D.

**Jewel Marie N. Monteverde** *Cum Laude*

Undergraduate Thesis “A Comprehensive Review of Home-Based Analytical Chemistry Experiments Implemented During the Pandemic”

Adviser Cynthia Grace C. Gregorio, Ph.D.

**Karyll Kate S. Nakagawa** *Cum Laude*

Undergraduate Thesis “Pollution Evaluation, Risk Assessment, and Source Apportionment of Heavy Metals in Philippine Waters Using Statistical Approaches”

Adviser Maria Pythias B. Espino, Ph.D.

**Claire Millicent A. Narag** *Magna Cum Laude*  
Undergraduate Thesis “Applying Trophic State Indices to Classify Eutrophication Level in Laguna Lake”  
Adviser Maria Pythias B. Espino, Ph.D.

**Jerome Jean B. Palaganas**  
Undergraduate Thesis “Cinnamon Extract Loaded Highly Aligned Electrospun Chitosan/Polyethylene Oxide Nanofibrous Scaffolds with Potential Antibacterial Wound Dressing”  
Adviser Allan Christopher C. Yago, Ph.D.

**Odeine Eindmari S. Paras**  
Undergraduate Thesis “Angiotensin-Converting Enzyme (ACE) Inhibitory Activity of *Ficus pseudopalma* Blanco Leaf Extracts”  
Adviser Christine C. Hernandez, Ph.D.

**Jacob Benjamin A. Parulan** *Magna Cum Laude*  
Undergraduate Thesis “Alpha-Glucosidase Inhibitory Activity of *Annona muricata* L. and *Donax caniniformis* (G. Forst.) K. Schum. Leaf Extracts”  
Adviser Evangeline C. Amor, Ph.D.

**Lester Dave G. Pua**  
Undergraduate Thesis “Synthesis of 1-Butyl-3-Vinylimidazolium Dicarboxylate Ionic Liquids as Supercapacitor Electrolytes”  
Adviser Susan D. Arco, Ph.D.

**Jon Loewi D. Sacote**  
Undergraduate Thesis “Cyclooxygenase Inhibitory Activity of *Premna odorata* Blanco Leaves”  
Adviser Evangeline C. Amor, Ph.D.

**Steven James C. Salvador**  
Undergraduate Thesis “In Silico and In Vitro Studies on the Anticancer Activity of C12 Derivatives of Rotenone,”  
Adviser Monissa C. Paderes, Ph.D.  
Co-Adviser Ricky B. Nellas, Ph.D.

**Kim S. Somera**  
Undergraduate Thesis “Inhibitions of 3-hydroxy-3-methylglutaryl Coenzyme A Reductase (HMGR) by *Dracontomelon edule* (Lamio) Leaf Extract”  
Adviser Christine C. Hernandez, Ph.D.

**Lara Beatrice L. Suñga**

Undergraduate Thesis

Adviser

**Cum Laude**

“HMG-CoA Reductase Inhibitory Activity of *Eucalyptus deglupta* Leaf Extracts”

Christine C. Hernandez, Ph.D.

**Carla Mae Marie E. Tan**

Undergraduate Thesis

Adviser

**Cum laude**

“Synthesis of 1-Vinylimidazolium [RVIm] Ionic Liquid Stabilizers for Magnetic Iron Oxide Nanoparticles Synthesis”

Susan D. Arco, Ph.D.

**INSTITUTE OF BIOLOGY**  
**MASTER OF SCIENCE (BIOLOGY)**

**As of Midyear 2021**

***Ericka Jane Adesna Angeles***

B Secondary Education; University of the Philippines, Diliman; 2015

Master's Thesis "Diversity of Earthworms Across an Elevational Gradient in Mt. Sawtooth and its Neighboring Highlands in the Zambales Mountain Range, Philippines"

Adviser Dr. Carmela P. Española, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Ma. Greta Tabin Jacinto***

B.S. Biology; University of the Philippines, Diliman; 2013

Master's Thesis "Diffusion Model to Describe Forest Health, Biomass and Abundance of the Palanan Forest Dynamics Plot (PFDP)"

Adviser Dr. Lillian Jennifer V. Rodriguez, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Giovanni A. Tapang, Professor, National Institute of Physics, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## MASTER OF SCIENCE (MICROBIOLOGY)

As of First Semester, AY 2021-2022

### ***Katrina Mae Burgos Balaga***

B.S. Biology; University of Southern Eastern Philippines; 2017

Master's Thesis "Understanding the Underlying Genetic Basis of Pathogen Establishment in Banana Sigatoka Disease Complex, Phylogenetic Diversity, and Fungicide Resistance of *Pseudocercospora* spp. Through Comparative Genomics"

Adviser Dr. Leilani G. Sumabat-Dacones, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Gicelle Temblon Malajacan***

B.S. Biology; University of the Philippines, Los Baños; 2015

Master's Thesis "Host-specific *Bacteroides* 16S rDNA-based Markers Reveal Sources of Fecal Pollution in Laguna Lake, Philippines"

Adviser Dr. Windell L. Rivera, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

### ***Mae Ashley Gloria Nacario***

B.S. Biology; University of the Philippines, Los Baños; 2011

Master's Thesis "DNA Fingerprinting Using BOX-A1R and (GTG)<sub>5</sub> Primers to Identify Spatial Variations of Fecal Contamination along Pasig River, Philippines"

Adviser Dr. Windell L. Rivera, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Elaine Mundo Romines***

B.S. Biology; Pamantasan ng Lungsod ng Maynila; 2017

Master's Thesis "Identification and Characterization of Secondary Metabolite Biosynthesis Gene Clusters (BGCs) from Metagenome-Assembled Genomes of Cyanobacteria with Anti-Viral Potential"

Adviser Dr. Ernelea P. Cao, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Libertine Rose S. Sanchez, Senior Lecturer, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Danica Pearl Macaraeg Untiveros***

B.S. Biology; New Era University; 2017

Master's Thesis "Comparative Metagenomics Analysis of the Bacterial Communities Found in the Inactive Re-vegetated and Active Copper Mine Tailings in Tuba, Benguet, Philippines"

Adviser Dr. Ernelea P. Cao, Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

Co-Adviser Dr. Libertine Rose S. Sanchez, Senior Lecturer, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Ren Mark De Guzman Villanueva***

B.S. Biology; Adamson University; 2014

Master's Thesis "Antibiotic Resistance Genes and Susceptibility Patterns of *Enterobacteriaceae* Isolated from Cetaceans that Stranded in the Philippines from 2017-2019"

Adviser Dr. Marie Christine M. Obusan, Associate Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

**As of Second Semester, AY 2021-2022**

***Gerald Amiel Mendoza Ballena***

B.S. Biology; University of the Philippines, Baguio; 2018

Thesis Title                    "*In silico* Assessment of Pathogenicity and Metal-resistance Potential of Phylogenetically Diverse and Morphologically Indistinguishable *Fusarium* spp."

Adviser                            Dr. Leilani G. Sumabat-Dacones, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

***Rhenz Cedrick Mabunga Cequeña***

B.S. Biology; University of Rizal System; 2019

Thesis Title                    "Detection of Putative Effectors, Virulence Genes, and Their Variations Among *Elsinoë* spp. by Comparative Genome Analyses"

Adviser                            Dr. Leilani G. Sumabat-Dacones, Assistant Professor, Institute of Biology, College of Science, National Science Complex, University of the Philippines, Diliman, Quezon City

## **BACHELOR OF SCIENCE IN BIOLOGY**

### **As of Second Semester, 2020-2021**

***Alexis Emilia D. Martin***

Undergraduate Thesis “Targeting the p53 Signaling Pathway in Senescent Cells”  
Adviser Michael C. Velarde Ph.D.

### **As of Midyear 2021**

***Cristina Gabrielle G. Gan***

Undergraduate Thesis “Assessment of Possible Horizontal Gene Transfer of Heavy Metal Resistance Genes, merA and arsB, Among Selected Archaea and Bacteria”  
Adviser Jessica F. Simbahan, Ph.D.

### **As of First Semester, 2021-2022**

***Michelle Lourdes L. Estrada***

***Cum Laude***

Undergraduate Thesis “Inferences on the Phylogeography of Fungicide Resistance in *Alternaria alternata* and *Alternaria solani* to SDHI Fungicides”  
Adviser Leilani G. Sumabat-Dacones, Ph.D.

***Angelica Mae P. Tongco***

Undergraduate Thesis “Design of a Multi-Epitope Subunit Vaccine Candidate for *Chikungunya Virus* (CHIKV) via Computational Methodology”  
Adviser Windell L. Rivera, Ph.D.

### **As of Second Semester, 2021-2022**

***Ana Gabrielle C. Alcantara***

Undergraduate Thesis “Geographic Variation of Song Vocalization in Grey-Backed Tailorbird (*Orthotomus derbianus*), White-Browed Shama (*Kittacincla luzoniensis*), Philippine Bulbul (*Hypsipetes philippinus*)”  
Adviser Carmela P. Española, Ph.D.



**Bryan C. Alpecho**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“Impact of Two Successive Typhoons on Littoral Water Quality and Plankton Communities in the Pantabangan Reservoir”

Francis S. Magbanua, Ph.D.

Mariano Roy M. Duya, Ph.D.

**Ernest Raphael P. Arceo**

Undergraduate Thesis

Adviser

**Cum Laude**

“A Meta-Analysis of Vegetation-Fish Relationship in Philippines Mangroves”

Severino G. Salmo III, Ph.D.

**Pierre Angeli P. Barbaso**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“Microbiological Quality Assessment of Water in Laguna de Bay”

Marie Christine M. Obusan, Ph.D.

Arizaldo E. Castro, MS

**Gabriel Albert Miguel O. Bautista** **Cum Laude**

Undergraduate Thesis

Adviser

“Survey of Proteins in the Cell Surface of *Leptospira* sp. for Aptamer Targets through Bioinformatics Approaches”

Windell L. Rivera, Ph.D.

**Angelo John V. Bonotan**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“Identification of Potential MAIT Cell-Activating Lactic Acid Bacteria-Derived Riboflavin Metabolites Using Molecular Docking Analysis”

Ahmad Reza F. Mazahery, Ph.D.

Francis James Gordovez, M.D., Ph.D.

**Korreine A. Buccat**

Undergraduate Thesis

Adviser

**Cum Laude**

“Assessment of Teratogenic Effects of Local water Samples on Craniofacial Cartilage Structures of zebrafish *Danio rerio* Larvae”

Lerrie Ann D.G. Ipulán-Colet, Ph.D.

**Alfonso Miguel L. Casanova** **Cum Laude**

Undergraduate Thesis

Adviser

“A Meta-Analysis on the Incidence of Acute Kidney Injury (AKI) as an Adverse Drug Reaction after Administration of Remdesivir as an Antiviral Drug in COVID-19”

Zenith Gaye A. Orozco-Bautista, Ph.D.

**Karen Leila S. Carvajal**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“*In Silico* Analysis of TGF- $\beta$ -Mediated Epithelial to Mesenchymal Transition (EMT) and its Relationship with Glycolysis in Non-Small Cell Lung Cancer (NSCLC)”

Ahmad Reza F. Mazahery, Ph.D.

Francis James Gordovez, M.D., Ph.D

**Justin Gabriel B. Chua**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“Co-Occurrence and Phylogenetic Analysis of Metal Resistance Genes and Antibiotic Resistance Genes of Bacteria Predicted to be Present in Heavy Metal Polluted River Systems”

Jessica F. Simbahan, Ph.D.

**Sean Philippe L. Chua**

Undergraduate Thesis

Adviser

**Cum Laude**

“Morphological and Molecular Characterization of *Curvularia* sp. Isolates Reported in Tomatoes, Garlic and Onion in the Philippines”

Leilani G. Sumabat-Dacones, Ph.D.

**Lea Gavrielle D. Dacayo**

Undergraduate Thesis

Adviser

**Cum Laude**

“Functional Annotation of Genes Associated with Disease Resistance in the *Coffea canephora L.* Genome”

Ernelea P. Cao, Ph.D.

**Frances Danielle A. De Leon**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“Species Assemblage and Diversity of Herpetofauna Across a Lowland Forest Landscape in Silago, Southern Leyte, Philippines”

Mariano Roy M. Duya, Ph.D.

**Skyla Dennise U. Diaz**

Undergraduate Thesis

Adviser

Co-Adviser

**Cum Laude**

“Assessment of Acoustic Indices as Proxies for Avian Species Richness in the National Science Complex, University of the Philippines Diliman”

Jelaine L. Gan, M.Sc.

Giovanni A. Tapang, Ph.D.

**Garret Royce K. Dychiao**

Undergraduate Thesis

Adviser

**Magna Cum Laude**

“Assessment of the Effects of *Ficus Psuedopalma* Blanco Methanolic Extracts on Myogenesis in C2C12 Muscle Cell Line”

Lerrie Ann D.G. Ipulan-Colet, Ph.D.

**Kris Jypson T. Esturas**

Undergraduate Thesis

Adviser

***Summa Cum Laude***

“Association of per- and Polyfluoroalkyl Substances and Bone Mineral Density in the US Population as Stratified by Sex and Phases of Age-Related Changes in Bone Mass”  
Michael C. Velarde, Ph.D.

**Daryl Gene D. Galela**

Undergraduate Thesis

Adviser

***Cum Laude***

“Gene Expression Analysis of *Dner*, *Bmper* and *Col8a1* Genes and Possible Interaction with Androgen Signaling in the Perineum Mesenchyme in Mice”  
Lerrie Ann Ipulan-Colet, Ph.D.

**Ma. Mikaela C. Jose**

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“*In Silico* Approaches on the Elucidation of the Structure of Aptamer Target Proteins on *Leptospira* sp. Cell Surface”  
Windell L. Rivera, Ph.D.

**Kyra Kim V. Justiniano**

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“Investigating Cell Signaling Pathways of Diabetes, Obesity and COVID-19 in the Context of Sugar-Sweetened Beverages Consumption in the Philippines”  
Joyce A. Ibane, Ph.D.

**Jeri E. Latorre**

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“Species Distribution Mapping and Forest Dynamics of a 2-Hectare Permanent Forest Plot in Nueva Ecija, Philippines”  
Lillian Jennifer V. Rodriguez, Ph.D.

**Celle Elijah Bernardine D. Lo**

Undergraduate Thesis

Adviser

Co-Adviser

***Magna Cum Laude***

“Meta-Analysis on the Consumption of Human, Bovine and Goat Milk in the Modulation of the Gut Microbiota in the Context of Colorectal Cancer”  
Joyce A. Ibane, Ph.D.  
Alysa G. Estopace, M.Sc.

**Jeanny Mae B. Magana**

Undergraduate Thesis

Adviser

***Magna Cum Laude***

“Distribution of Nitrogen Fixation Genes in Endophytic Bacterial Genomes”  
Jessica F. Simbahan, Ph.D.

**Ivy E. Mendoza**

Undergraduate Thesis

“Drought-Tolerant Gene Homologs of Plants Present in Selected Plant-Associated and Non-Plant-Associated *Bacillus* Species”

Adviser

Jessica F. Simbahan, Ph.D.

**Lorraine Mikaela Nabong**

**Cum Laude**

Undergraduate Thesis

“Multi-Locus Phylogenetic and Diversity Analysis of Global *Aspergillus fumigatus* Isolates from Different Environments and Fungal Lifestyles”

Adviser

Leilani G. Sumabat-Dacones, Ph.D.

**Joshua B. Naval**

**Magna Cum Laude**

Undergraduate Thesis

“Assessment of Synonymous and Nonsynonymous Mutations on the Surface Glycoprotein (gp120) Gene of HIV-1”

Adviser

Ian Kendrick C. Fontanilla, Ph.D.

**Danica L. Ongray**

**Magna Cum Laude**

Undergraduate Thesis

“*In silico* Analysis of the Antimicrobial Activity of 2,4-diacetylphloroglucinol Against *Staphylococcus aureus*”

Adviser

Gil M. Penuliar, Ph.D.

Co-Adviser

Jann Eldy L. Daquioag, MSc.

**Mikhaela Ronn G. Paclibar**

**Magna Cum Laude**

Undergraduate Thesis

“*In silico* Analysis of Differential Gene Expression Profiles of Select Breast Cancer Cell Lines Treated with Various Chemotherapy Drugs”

Adviser

Michael C. Velarde, Ph.D.

**Sophia Mae P. Perez**

**Cum Laude**

Undergraduate Thesis

“Investigating the Cultural, Morphological, Phylogenetic Diversity, and Biosynthetic Gene Clusters in *Colletotrichum gloeosporioides*”

Adviser

Leilani G. Sumabat-Dacones, Ph.D.

**Angelica Maria Noelle F. Riñosa** **Cum Laude**

Undergraduate Thesis

“MAT1-1 and Mat1-2 Idiomorphs in *Aspergillus fumigatus* Isolates and their Association with Mating and Meiosis Genes”

Adviser

Leilani G. Sumabat-Dacones, Ph.D.

***Arielle Maria Victoria F. Riñosa* Cum Laude**

Undergraduate Thesis “Data Analysis on the mRNA Expression of Intestinal Amino Acid Transporter *slc7a9* in *Oreochromis mossambicus* in Response”  
Adviser Zenith Gaye A. Orozco-Bautista, Ph.D.

***Jeanuelle S. Ruiz* Cum Laude**

Undergraduate Thesis “Differential Expression Meta-Analysis of Biofilm-Associated Genes in *Staphylococcus aureus*”  
Adviser Gil M. Penuliar, Ph.D.

***Effie Mae S. Sabaot* Magna Cum Laude**

Undergraduate Thesis “Embryotoxic and Teratogenic Assessment of Metro Manila Water Samples on Zebrafish *Danio rerio* Embryo and Larvae”  
Adviser Lerrie Ann Ipulan-Colet, Ph.D.

***Jedidiah John U. Salbibia* Cum Laude**

Undergraduate Thesis “*In silico* Determination of the Inhibitory Activity of Capuramycin and its Analogues against the MraY of *Neisseria gonorrhoeae*”  
Adviser Gil M. Penuliar, Ph.D.  
Co-Adviser Ma. Socorro Edden P. Subejano, MSc.

***Maria Gabriella Adrienne B. Silao* Cum Laude**

Undergraduate Thesis “Serum and Peritoneal Interleukin-6 Levels in Stages I and II vs. III and IV of Endometriosis: A Meta-Analysis”  
Adviser Zenith Gaye Orozco-Bautista, Ph.D.

***Sean F. Sta. Maria* Cum Laude**

Undergraduate Thesis “Mitochondrial Q-Cycle Network Analysis using Monte Carlo Methods”  
Adviser Michael C. Velarde, Ph.D.

***Juris Justin M. Tovera* Magna Cum Laude**

Undergraduate Thesis “Antibiotic Resistance in the Philippines from the Perspectives of Animal Rearing and Fish Farming: A systematic Review and Meta-Analysis”  
Adviser Joyce A. Ibana, Ph.D.

**Patricia Irhene V. Trajano**

***Magna Cum Laude***

Undergraduate Thesis

“Effect of *Garcinia binucao* Crude Leaf Extracts on Skeletal Muscle C2C12 Myoblast Proliferation and Differentiation”

Adviser

Lerrie Ann Ipulan-Colet, Ph.D.

**Nicole C. Valdez**

***Magna Cum Laude***

Undergraduate Thesis

“Molecular Docking Simulation Analysis of Flavonoids and Estrogen Receptors in Breast Cancer”

Adviser

Ahmad Rezy F. Mazahery, Ph.D.

Co-Adviser

Javier Lozano, Ph.D.

**Arianne Gail D. Yaneza**

***Magna Cum Laude***

Undergraduate Thesis

“Identifying the Underlying Genetic Link Between Environmental and Clinical Populations of *Aspergillus fumigatus* with Resistance to Antifungal Drugs”

Adviser

Leilani G. Sumabat-Dacones, Ph.D.

## **THE STUDENT AWARDS**

### **Leticia Shahani Award**

The **Leticia Shahani Award** is a recognition for students with excellent undergraduate theses or research papers. The awardees, who are recommended by their respective Institutes, receive a Certificate of Recognition and a cash prize of P10,000.00, which is funded by a donation made by the late Senator Shahani in 1999. This was instituted during the term of Dean Danilo M. Yanga.

### **CS Excellence Award**

The **CS Excellence Award** is given to students who garnered the highest Cumulative Weighted Average Grade (CWAG) in their respective degree, or otherwise satisfied other criteria, upon the recommendation of their respective Institutes. The awardees receive a Certification of Recognition and a cash prize of P10,000.00 each. This was instituted during the term of Dean Rhodora V. Azanza from funds made available by Senator Joker P. Arroyo.

### **Excellence in B.S. Studies**

This award is given to the B.S. graduate of the College who garnered the highest Cumulative Weighted Average Grade (CWAG).

### **Dr. Edgardo D. Gomez Award**

The **Dr. Edgardo D. Gomez Award** is given to a Ph.D. graduate with an outstanding scholastic record and who has the most number of papers published or accepted for publication in ISI journals. The publications must be related to the student's dissertation and have been published during his/her residency in the College. The Award is in honor of Dr. Edgardo D. Gomez of the Marine Science Institute, for his lifelong dedication and service to UP and for his example of excellence in scientific research, teaching and science administration. The awardee receives a Certificate of Recognition and a cash prize of P20,000 from an anonymous donor.

### **Most Outstanding Graduate (M.S. and Ph.D.)**

The awardee is chosen among the nominees from the Institutes by the Committee on Academic Affairs of the College. The student must have demonstrated academic excellence and the ability to do research. For the Most Outstanding M.S. Graduate, a part of his/her thesis must have been published in a refereed journal or presented in a conference. For the Most Outstanding Ph.D. Graduate, publication in a peer-reviewed journal is required.

**SUMMA CUM LAUDE GRADUATES**

|             |  |   |
|-------------|--|---|
| <u>2021</u> | CARMELA MARIA P. BERBA<br>STEPHANIE NICOLE O. GO<br>GABRIELLE MARIE L. CHUNGUNCO<br>KATE ALLISON S. CO   | BIOLOGY<br>APPLIED PHYSICS<br>MBB*<br>MBB*  |
| <u>2020</u> | BEATRICE HOPE G. REYES<br>RYAN KENDRICK U. LIM<br>CHLOE B. BORROMEIO   | BIOLOGY<br>MBB*<br>MBB*   |
| 2019        | ERIKA ANTONETTE T. ENRIQUEZ<br>JAMIE CHRISTINE B. LIM<br>JERIELLE V. MALONZO<br>SETHRIC ANDRE S. MESOZA<br>ELOISE P. MISA<br>EXEQUIEL KIM ISAAC L. SALVADOR<br>JOSEPH NEOS C. CRUZ<br>JOSHUA MIGUEL C. DANAC<br>SAM EZRAEL L. DELA CRUZ<br>WEAND S. YBAÑEZ<br>KARLO N. DE LEON | MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>MBB*<br>MBB*<br>MBB*<br>MBB*<br>PHYSICS |
| 2018        | ANDREA DENISE L. ONG   | MBB*  |
| 2017        | CHRISTIAN A. CARIÑO<br>PHILIP CHRISTOPHER S. CRUZ<br>ARMAN A. GHODSINIA<br>JAN PATRICK C. TAN<br>KRISTINE LARISSA B. YU<br>RYAN TIMOTHY D. YU  | CHEMISTRY<br>PHYSICS<br>MBB*<br>MBB*<br>CHEMISTRY<br>MBB*   |
| 2016        | JIAN KENZO O. LEAL<br>ISAIAH PAOLO A. LEE<br>MIGUEL RICARDO R. LEUNG<br>STEPHEN JUNE D. TIONGSON<br>DANIEL O. YOUNG  | MBB*<br>MBB*<br>MBB*<br>MATHEMATICS<br>MATHEMATICS  |
| 2015        | ARDEA M. LICUANAN<br>TIFFANY GRACE C. UY<br>DOMINIC S. ALBAO<br>JOSE LORENZO M. FERRER<br>MARTIN DANIEL C. QUI<br>KENNETH ANTHONY R. ROQUID<br>LIEZEL U. TAMON   | BIOLOGY<br>BIOLOGY<br>MBB<br>MBB<br>MBB<br>MBB<br>MBB   |
| 2014        | KENJI ROWEL Q. LIM<br>ERIC DAVID B. ORNOS<br>RALPH JOHN O. UGALINO   | MBB<br>BIOLOGY<br>CHEMISTRY   |
| 2013        | CHARLES MICHAEL T. HERRERA<br>MICHELLE ANN S. LAO<br>JANE MELISSA DE LEON LIM  | BIOLOGY<br>BIOLOGY<br>MBB*  |



|      |  |  |
|------|--|--|
|      | MELVIN FLOYD E. SEE<br>JANN ADRIEL C. SY   | MBB*<br>MBB*   |
| 2012 | MARK JASPER L. CO<br>PATRICIA MARIA GREGORIA V. MINA BIOLOGY<br>CHERRY JOY F. TUMAMPO  | MATHEMATICS<br>MBB*  |
| 2011 | MICHELLE GRACE T. ACOBA<br>CORRINA P. AZARCON<br>HERDELINE ANN M. ARDOÑA<br>DENNIS IVAN W. DIAZ<br>OHN GABRIEL P. PELIAS<br>JOANA JANE C. TAN  | MBB*<br>CHEMISTRY<br>CHEMISTRY<br>APPLIED PHYSICS<br>MATHEMATICS<br>MATHEMATICS      |
| 2010 | MIGUEL CARLOS I. GONZALEZ<br>MA. ISABELLA C. PAMINTUAN<br>FIDES ANGELI DELA CRUZ ZAULDA  | CHEMISTRY<br>MBB*<br>MBB*  |
| 2009 | JOSEPH RAY CLARENCE G. DAMASCO<br>SHYNE D. GALAPON<br>SCOTT RILEY K. ONG<br>JUAN LORENZO B. PABLO<br>ANGELO ARSENIO DE GUZMAN SANTOS<br>JOSEPH JEEBEN R. SEGUI<br>MIKHAIL P. SOLON               | MATHEMATICS<br>CHEMISTRY<br>BIOLOGY<br>MBB*<br>MATHEMATICS<br>MATHEMATICS<br>PHYSICS |
| 2008 | CHRISTINA LORA M. LEYSON<br>ANDREA FRANCESCA M. SALVADOR<br>GLAIZA LYN A. TAN  | MBB*<br>MBB*<br>MBB*   |
| 2007 | IVAN CHESTER G. CANOY<br>MIKAELA IRENE D. FUDOLIG<br>HANNAH HAZEL A. MORALES   | BIOLOGY<br>PHYSICS<br>CHEMISTRY  |
| 2006 | CHARISSA MARIE R. CARAG<br>CHRISTIAN DANVE M. CASTROVERDE<br>CARLA CHERYL A. CORDOVA<br>CHRISTINE L. HONRADO<br>KAREN KATRINA G. MANALASTAS<br>FRANCIS NORMAN C. PARAAN<br>LOUIE JOHN D. VALLEJO | MBB*<br>MBB*<br>MBB*<br>MATHEMATICS<br>MBB*<br>PHYSICS<br>MATHEMATICS                |
| 2005 | LAURO VALENTE L. ABRAHAN IV<br>NOELLE ANDREA V. FABIE<br>JUVELENE C. ITUM<br>RACHELLE C. URETA<br>CHRISTOPHER A. YOUNG   | MBB*<br>MBB*<br>MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS                            |
| 2003 | MA. CRISTINA R. BARGO  | MATHEMATICS  |
| 2002 | KAREN KATE O. DAVID  | MBB*   |
| 1998 | MAY T. LIM APPLIED   | PHYSICS  |

|      |   |   |
|------|---|---|
| 1997 | ALEX G. LIOK<br>MARC C. LLAGUNO<br>HONESTO FRANZ MAXIMILLIAN A. NUQUI   | MATHEMATICS<br>PHYSICS<br>MATHEMATICS                                       |
| 1996 | IGNATIUS GERARDO E. ZARRAGA   | CHEMISTRY   |
| 1994 | LAARNI VERA PRISKA T. BULAN<br>CHRISTIAN CALYNN T. CHENG<br>CARLO RAYMUND R. CRUZ<br>JOSE ERNIE C. LOPE<br>AGHAM BAYAN S. POSADAS | MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>MATHEMATICS<br>APPLIED PHYSICS |
| 1993 | SALVADOR EUGENIO DC. CAOILI   | MBB*  |
| 1991 | RIA MONINA GEORGINA F. APELO  | MATHEMATICS   |
| 1990 | ARLENE C. KEH   | BIOLOGY   |
| 1989 | FRANCISCO SA. SANDEJAS  | APPLIED PHYSICS   |
| 1988 | MA. CARMINA E. PEREZ<br>ALBERTO REYNALDO MELCHOR S. SANTOS-OCAMPO   | BIOLOGY<br>BIOLOGY  |
| 1987 | DENNIS MENANDRO I. MERINO   | MATHEMATICS   |
| 1986 | SUSAN D. TIUKINHOY  | BIOLOGY   |
| 1985 | LORRAINE Y. BANGAYAN<br>JADE OLIVIA SOLEDAD J. BAÑEZ<br>DINNA N. CRUZ<br>EDUARDO M. REYES III<br>SYLVIA D. SANTOS-OCAMPO          | BIOLOGY<br>BIOLOGY<br>ZOOLOGY<br>MATHEMATICS<br>BIOLOGY                     |
| 1984 | PEDRO G. NEBRES JR.   | MATHEMATICS   |

\*MOLECULAR BIOLOGY AND BIOTECHNOLOGY

## MOST OUTSTANDING PH.D. GRADUATES

|      |                                 |                |
|------|---------------------------------|----------------|
| 2021 | DAMIAN NALE DAILISAN            | PHYSICS        |
| 2020 | REGINALD CHRISTIAN S. BERNARDO  | PHYSICS        |
| 2019 | ALEXANDRA B. SANTOS-PUTUNGAN    | MSE*           |
| 2018 | FREDMOORE L. OROSCO             | BIOLOGY        |
| 2017 | MARVIN M. FLORES                | PHYSICS        |
| 2016 | JOSEPH RAPHAEL R. BUNAO         | PHYSICS        |
| 2015 | RICHARD N. MUALLIL              | MSI            |
| 2014 | RENIEL B. CABRAL                | PHYSICS        |
| 2013 | OLIVIA C. CABRERA               | MARINE SCIENCE |
| 2012 | JEFFREY C. DE VERO              | PHYSICS        |
| 2011 | ERIKA FILLE T. LEGARA           | PHYSICS        |
| 2010 | GODOFREDO S. BAUTISTA, JR.      | PHYSICS        |
| 2009 | GAY JANE P. PEREZ               | PHYSICS        |
| 2008 | JONAS P. QUILANG                | BIOLOGY        |
| 2007 | DRANREB EARL O. JUANICO         | PHYSICS        |
| 2006 | RONALD D. VILLANUEVA            | MARINE SCIENCE |
| 2005 | ELMER S. ESTACIO                | PHYSICS        |
| 2004 | ARMANDO S. SOMINTAC             | PHYSICS        |
| 2003 | MAY T. LIM                      | PHYSICS        |
| 2002 | CHRISTOPHER P. MONTEROLA        | PHYSICS        |
| 2001 | DELLA GRACE GALOPE-BACALTOS     | MARINE SCIENCE |
| 2000 | CARLO MAR Y. BLANCA             | PHYSICS        |
| 1999 | MARITINA T. CASTILLO            | MATHEMATICS    |
| 1998 | MARICOR N. SORIANO              | PHYSICS        |
| 1997 | SUSAN D. ARCO                   | CHEMISTRY      |
| 1996 | JURGENNE A. HONCULADA-PRIMAVERA | MARINE SCIENCE |
| 1995 | GISELA P. CONCEPCION            | CHEMISTRY      |
| 1994 | LEONORINA G. CADA               | CHEMISTRY      |
| 1993 | ROBERT C. ROLEDA                | PHYSICS        |
| 1992 | ERNELEA P. CAO                  | BIOLOGY        |
| 1991 | RONALD R. MATIAS                | ZOOLOGY        |
| 1990 | CAESAR A. SALOMA                | PHYSICS        |
| 1989 | IRENE M. VILLASEÑOR             | CHEMISTRY      |
| 1988 | CHERRIE B. PASCUAL              | CHEMISTRY      |
| 1987 | REBECCA S. PAREDES              | CHEMISTRY      |
| 1986 | DANILO M. YANGA                 | PHYSICS        |

\*MATERIALS SCIENCE AND ENGINEERING

## **THE COLLEGE OF SCIENCE OFFICIALS**

**GIOVANNI A. TAPANG, Ph.D.**

*Dean*

**EIZADORA T. YU, Ph.D.**

*Associate Dean for Mentoring, Academic Progress and Advancement*

**LILLIAN JENNIFER V. RODRIGUEZ, Ph.D.**

*Associate Dean for Student, Alumni and Public Affairs*

**RICKY B. NELLAS, Ph.D.**

*Associate Dean for Research, Innovation, Development and Enterprise*

**MARIAN P. ROQUE, Ph.D.**

*Associate Dean for Facilities and Resources Management*

**MA. NERISSA M. ABARA, Ph.D.**

*College of Secretary*

**VICTOR MANUEL R. ARICHETA, Ph.D.**

*Assistant College Secretary*

**JOHNROB Y. BANTANG, Ph.D.**

*Coordinator, Computational Science Research Center*

**MARIE ANTOINETTE D. VILLAFLORES, M.L.S.**

*Head Librarian, Science Library*

**HEADS OF DEGREE GRANTING**  
**INSTITUTES / PROGRAM**

**IAN KENDRICH C. FONTANILLA, Ph. D.**

*Director, Institute of Biology*

**LEN HERALD V. LIM, Ph. D.**

*Director, Institute of Chemistry*

**CHERRY L. RINGOR, Ph. D.**

*Director, Institute of Environmental Science and Meteorology*

**JOSE ERNIE LOPE, Ph. D**

*Director, Institute of Mathematics*

**ARTURO O. LLUISMA, Ph. D.**

*Acting Director, Marine Science Institute*

**MARIENETTE M. VEGA, Ph. D.**

*Coordinator, Materials Science and Engineering Program*

**NOELYNNA T. RAMOS, D.Sc.**

*Acting Director, National Institute of Geological Sciences*

**PIA D. BAGAMASBAD, Ph. D.**

*Director, National Institute of Molecular Biology and Biotechnology*

**WILSON O. GARCIA, Ph. D.**

*Director, National Institute Physics*

**HEADS OF NON-DEGREE GRANTING INSTITUTE / PROGRAM**

**ELMER S. ESTACIO, Ph. D.**

*Director, Natural Sciences Research Institute*

**RENE N. ROLLON, Ph.D.**

*Program Director, Science and Society Program*

## **College Marshals**

### **Institute of Biology**

Dr. Ahmad Reza Mazahery  
Dr. Carmela Española  
Jordan Halili  
Dr. Leilani Dacones-Sumabat  
Dr. Lerrie Ann Ipulán-Colet  
Shenna Kate Torres  
Dr. Zenith Gaye Orozco-Bautista

### **Institute of Chemistry**

Dr. Hiyas Junio  
Mark Jeffrey Diaz  
Dr. Monissa Paderes  
Patrick Lejan Danan  
Rowell Matabilas

### **National Institute of Geological Sciences**

Elisha Jane Maglalang  
Julius Pasco  
Dr. Leo Armada  
Dr. Likha Minimo

### **Institute of Environmental Science and Meteorology**

Dr. Mayzonee Ligaray

### **Marine Science Institute**

Dr. Charina Lyn Repollo  
Dr. Michael Atrigenio

### **Institute of Mathematics**

Dr. Arrienne Velasco  
Jenny Salinasan  
Prince Allan Pelayo  
Rolando Perez III

### **National Institute of Molecular Biology and Biotechnology**

Dr. Joe Planta  
Joed Balucio  
Sam Dela Cruz  
Timothy Mendoza

**National Institute of Physics**

Alexander de los Reyes

Horace Andrew Husay

Jeric Garrido

Lloyd Villanueva

Mark Jeremy Narag

Rene Principe

Sean Fortuna

**Materials Science Engineering Program**

Dr. Alfred Abella

Dr. Lean Dasallas



## PAMBANSANG AWIT

Bayang magiliw, Perlas ng Silanganan,  
Alab ng puso, sa dibdib mo'y buhay.  
Lupang Hinirang, Duyan ka ng magiting,  
Sa manlulupig, di ka pasisiil.  
Sa dagat at bundok,  
Sa simoy at sa langit mong bughaw,  
May dilag ang tula  
At awit sa paglayang minamahal.  
Ang kislap ng watawat mo'y  
Tagumpay na nagniningning,  
Ang bituin at araw niya  
Kailan pa ma'y di magdidilim.  
Lupa ng araw, ng luwalhati't pagsinta,  
Buhay ay langit sa piling mo;  
Aming ligaya, na pag may mang-aapi  
Ang mamatay ng dahil sa iyo

## U.P. NAMING MAHAL

UP naming mahal  
Pamantasang hirang  
Ang tinig naming  
Sana'y inyong dinggin  
Malayong lupain,  
Amin mang marating  
Di rin magbabago ang damdamin  
Di rin magbabago ang damdamin.

Luntian at pula  
Sagisag magpakailanman  
Ating pagdiwang  
Bulwagan ng dangal  
Humayo't itanghal  
Giting at tapang  
Mabuhay ang pag-asa ng bayan  
Mabuhay ang pag-asa ng bayan

## **ACKNOWLEDGEMENT**

Institute Marshals  
Office of the Dean  
Office of the College Secretary  
Office of the Associate Dean for Mentoring, Academic Progress and Advancement  
Office of the Associate Dean for Student, Alumni & Public Affairs  
Student, Alumni & Public Affairs (SAPA) Committee  
Office of the Associate Dean for Facilities and Resources Management  
Office of the Associate Dean for Research, Innovation, Development and Enterprise  
Science and Society Program  
College of Science Library  
Computational Science Research Center  
College of Science Administrative Staff  
Smart Communications Inc.

Cover Design by Carlo Frances H. Luayon



**COLLEGE OF SCIENCE**  
University of the Philippines  
Diliman, Quezon City

*Since 1983*