



JAMES ROY P LESIDAN

MS Applied Physics-Candidate

jamesroy.lesidan@vsu.edu.ph / james_lesidan@dlsu.edu.ph

ORCID: <https://orcid.org/0009-0001-6689-4065>

RESEARCH INTERESTS AND ACTIVITIES

- Physics
- Remote sensing/LIDAR
- Air Quality Monitoring Systems
- Environmental Benefits Mapping and Analysis Program (BenMap-CE)
- Agricultural and Biosystems Engineering

PUBLICATIONS

Journal Article

- 1) **Estimating Health and Economic Benefits from PM2.5 Reduction in Fishery-Based Communities: A Sector-Specific Approach to Sustainable Air Quality Management in the Philippines** [DOI: <https://doi.org/10.3390/su17031316>]
- 2) **Portable analogue-based electronic moisture meter for root-crop chips** [DOI: <https://doi.org/10.17221/15/2025-RAE>]

Conference Proceedings

- 1) **Correlation Between Nutrient Concentration and Leaf Optical Attenuation Coefficient of Brassica Rapa (Pechay) as Measured by Time-Domain Optical Coherence Tomography System** [DOI: <https://doi.org/10.3390/engproc2025087062>]
- 2) **Development of Crop Reflectance Sensor for Precision Agriculture** [DOI: <https://doi.org/10.3390/ecsa-11-20404>]
- 3) **Algal Organic Matter Fluorescence Analysis of Chlorella sp. for Biomass Estimation** [DOI: <https://doi.org/10.3390/ecsa-10-16220>]
- 4) **Transmittance Properties of Healthy and Infected Coffee Robusta Leaves with Coffee Leaf Miner (CLM) Pests** [DOI: <https://doi.org/10.3390/ASEC2023-15235>]

TRAININGS/WORKSHOPS/WEBINARS/SEMINARS

- **2nd Biophysics Symposium in partnership with the University of San Carlos-Cebu.** Theme: "Diving Into the Future: Forwarding the Boundaries for Biomedical Research through Local Biomaterials", Participant, via Zoom, 07/07/2023
- **Applications of GEMS and Remote Sensing Data for Air Pollution Monitoring**, Participant, via Microsoft Teams, 06/19-23/2023
- **Trends and Approaches in Analytical Sciences (TAAS) IV "NMR Spectroscopy: Structure Elucidation and Beyond"**, Participant, DLSU-Central Instrumentation Facility via Zoom, 06/24/2022
- **Introduction to Metrology & Verification of Common Laboratory Instruments**, Participant, DOST-VIII RSTL, Department of Physics, Visca, Baybay City, Leyte, 06/21-22/2022
- **Webinar - ANSYS Multiphysics: Full Suite of Electronics Analysis**, Participant, CAD-IT Consultants via Zoom, 04/20/2022
- **White Noise Analysis and its Applications**, Facilitator, Department of Physics via Zoom, 04/07/2022
- **Physics App & Teaching Technologies**, Facilitator, Department of Physics via Zoom, 02/22/2022
- **Microrheology and Microfluidics**, Facilitator, Department of Physics via Zoom, 02/20/2022
- **Trends in Soft Matter Research and Its Applications**, Facilitator, Department of Physics via Zoom, 02/04/2022
- **Orientation-Seminar on Outcomes-Based Education (OBE) Course Syllabus**, Participant, VSU-ODIE via Zoom, 01/21/2022
- **Virtual E-learning Tutorial in Mathematics**, Facilitator/Presenter, Department of Physics via Zoom, 11/29/2021, 12/01, 03, 06/2021
- **CPD Webinar Series for ABES: "Updates on CPD Implementing Guidelines"**, Participant, CPD Council of ABE, Professional Regulation Commission (PRC) via Zoom, 11/16/2021
- **Patent Search Lecture**, Participant, Office of the Director for Innovation, TBI VSU via Zoom, 11/16/2021
- **Extension Training-Workshop: Developing Extension Proposal**, Participant, OVPREI, VSU via Zoom, Visca, Baybay City, Leyte, 11/08-12/2021 Description: Demonstration on Extension Proposal Writing.
- **Seminar/Lecture on Intellectual Property Awareness and Commercialization of Technologies**, Participant, Office of the Director for Innovation, TBI VSU via Zoom, 11/04/2021
- **23rd SPVM National Physics Conference: CONVIRTUALISATION**, Participant/Member, 10/16,23,30/2021

- **Echo-Webinar on the TIEC-CHED Flexible Learning Foundation Virtual Conference**, Participant, VSU-CHED livestreamed via VSU Workplace:Academic Staff at VSU, 03/15-16/2021
- **ScienceDirect Articles and Journals: Choosing the Right One for Your Research**, Participant, DOST-PCIEERD via Elsevier, 01/29/2021
- **Food Security Challenges and Opportunities Under the New Normal (A Webinar in Commemoration of 9 Years of PCAARRD Excellence)**, Participant, DOST (PCAARRD) via Facebook Live, 06/30/2020
- **Science and Technology Teaching Conference (Webinar)**, Participant, Carl E. Balita Review Center in collaboration with DOST-STII via Zoom, 06/22/2020
- **Creating Mobile App for Science and Mathematics Instruction using MIT App Inventor**, Participant, Department of Mathematics and Physics, Visayas State University via Zoom, 04/12/2020
- **Training-Workshop on Non-Parametric Tests and Correlation Analysis**, Participant, Visayas Socio-Economic Research and Data Analytics Center (VISERDAC), Department of Economics, Visayas State University, Visca, Baybay City, Leyte, 05/03/2019
- **30th Philippine Agricultural Engineering Week, 16th International Agricultural Engineering Conference and Exhibition and the 69th PSABE Annual National Convention**, Participant/Member, PSABE, SMX Convention Center, Bacolod City, Negros Occidental 04/21-27/2019
- **Training-Workshop on Data Management and Parametric Analysis**, Participant, Visayas Socio-Economic Research and Data Analytics Center (VISERDAC), Department of Economics, Visayas State University, Visca, Baybay City, Leyte, 04/12/2019

RESEARCH/FIELD EXPERIENCE

Research Fellow, EaRTH Laboratory
De La Salle University, Manila, Philippines

Department of Environment and Natural Resources (DENR) Region VIII
Forest Extension Officer, BCWERC, Tacloban City Philippines
Monitoring & Evaluation and interview for sustainability mechanisms of Mangrove and Beach Forest Development Project (MBDF)

TEACHING EXPERIENCE

- **Visayas State University**, Baybay City, Philippines
Instructor I, Department of Physics
- **Visayas State University**, Baybay City, Philippines
Instructor (Substitute & Part-time), Department of Mathematics and Physics

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics Engineers (IEEE) Graduate Student Member	<i>Present</i>
Philippine Society of Agricultural and Biosystems Engineers (PSABE) ,	<i>2016 – Present</i>
Samahang Pisika ng Visayas at Mindanao (SPVM)	<i>2018 – Present</i>

EDUCATION

MS Applied Physics, Candidate
De La Salle University Manila
DOST-ASTHRDP NSC Scholar

Soil Science, w/ units
Visayas State University - Main
Units earned: *9 units (1st Sem., SY 19-20)*

BS Agricultural Engineering, Undergraduate
Visayas State University - Main

REFERENCES

References available upon request