



# 2024 IRICEEA

INTERNATIONAL RESEARCH  
AND INNOVATION CONFERENCE  
ON EDUCATION, ENGINEERING,  
AND AGRICULTURE

*"The Future of Sustainable Development:  
Advancements in Education, Engineering, and Agriculture"*



**La Union Convention Center  
San Fernando City, La Union, Philippines  
December 2-4, 2024**

ORGANIZED BY:



IN PARTNERSHIP WITH:







# About the Conference

Organized by the Don Mariano Marcos Memorial State University (Philippines), in partnership with Udon Thani Rajabhat University (Thailand), Van Lang University (Vietnam), Alabama Agricultural and Mechanical University (USA), Institut Teknologi Sepuluh Nopember (Indonesia), Lucian Blaga University of Sibiu (Romania), Universitas Kristen Indonesia (Indonesia), Universitas Tunas Pembangunan Surakarta (Indonesia), University of Liberal Arts Bangladesh (Bangladesh), Department of Science and Technology - Regional Office 1 (La Union), Ilocos Consortium of Industry, Energy, and Emerging Technology Research and Development (La Union), Department of Agriculture - Regional Office 1 (La Union), Department of Education - Regional Office 1 (La Union), Department of Trade and Industry - Regional Office 1 (La Union), Technical Education and Skills Development Authority - Regional Office 1 (La Union), University of Northern Philippines (Ilocos Sur), Pangasinan State University, WCC Aeronautical and Technological College (Pangasinan), President Ramon Magsaysay State University (Zambales), Mountain Province State University, University of Eastern Philippines (Northern Samar), Central Mindanao University (Bukidnon), Apayao State College, Cagayan State University, Dr. Emilio B. Espinosa, Sr. Memorial State College of Agriculture and Technology (Masbate), Ilocos Sur Polytechnic State College, Kalinga State University, Laguna State Polytechnic University, Mariano Marcos State University (Ilocos Norte), National Teachers College (Metro Manila), Nueva Vizcaya State University, Occidental Mindoro State College, Pampanga State Agricultural University, Samar State University, Tarlac Agricultural University, University of Antique (Antique), University of Southeastern Philippines (Davao del Sur), the **International Research and Innovation Conference on Education, Engineering, and Agriculture (IRICEEA)** aims to bring together experts from the fields of education, engineering, and agriculture to share their knowledge and experiences, and discuss innovative ideas and solutions to current challenges. This international conference focuses on the intersection of these three fields and explores how advancement in education, engineering, and agriculture can be integrated to achieve creative innovations, foresight, and futures thinking that support the UN Sustainable Development Goals. As a research and innovation platform, IRICEEA facilitates professional discourse and provides opportunities for creating new networks among international researchers and scholars across disciplinary borders.

## Conference Objectives:

- Explore the latest trends and innovations in education, engineering, and agriculture that support the UN Sustainable Development Goals
- Discuss the challenges and opportunities in integrating these fields for sustainable development, foresight, and futures thinking
- Provide participants with models as well as practical examples and case studies from around the world that demonstrate successful research and academic collaboration
- Facilitate networking among participants and create a platform for the exchange of ideas, sharing of expertise, and learning experiences

In IRICEEA 2024, additional partner institutions will be introduced to the **SINAG Consortium: ASEAN+ Network for Sustainable Development Goals, Innovation, and Futures Thinking**, launched last December 3, 2023. SINAG is an international association designed to capacitate the consortium/network members in promoting innovations, futures and foresight thinking and SDG initiatives which adopts the UN Framework for Sustainable University that consists of four (4) core areas: (i) Teaching and Research, (ii) Administration and Governance, (iii) People and Society, and (iv) Environment and Governance.



# Conference Program

DAY 1 | December 2, 2024 | Monday | Morning

Venue:

La Union Convention Center  
San Fernando City, La Union, Philippines

Attire: Filipiniana / Modern Filipiniana

Opening Program		
7:30-8:00	Welcome Performance	<b>BIBAK-Bago Organization</b> DMMMSU North La Union Campus
8:01-8:30	Registration	
8:31-8:50	Invocation National Anthem ASEAN Hymn	<b>MLUC Cultural Unit</b>
8:51-9:00	Welcome Message	<b>Hon. Raphaelle Veronica Ortega-David</b> Governor, Province of La Union
9:01-9:15	Opening Remarks	<b>Dr. Jaime I. Manuel, Jr.</b> President, DMMMSU
9:16-9:20	Acknowledgment of Speakers, Institutional Partners, Guests, Participants, and Sponsors	<b>Dr. Jomar L. Aban</b> Director for Research and Extension Publications and IEC Materials Development, DMMMSU
9:21-9:25	Overview of the Conference	<b>Prof. Victoria N. Malaya</b> Director for Innovation and Technology Commercialization, DMMMSU
9:26-9:30	Intermission Number	<b>MLUC Cultural Unit</b>
9:31-9:40	Introduction of the Keynote Speaker	<b>Dr. Angelina T. Gonzales</b> Vice President for Research, Development, and Innovation, DMMMSU
9:41-10:00	Keynote Speech: "Future Pathways towards Sustainable Development"	<b>Professor Dr. Jude William R. Genilo</b> Pro Vice Chancellor, University of Liberal Arts Bangladesh
10:01-10:15	Open Forum	
10:16-10:20	Awarding of Certificate of Appreciation to Professor Dr. Jude William R. Genilo	
10:21-10:25	Introduction of New International and Local Partners of the SINAG Consortium	<b>Dr. Jesus Rafael B. Jarata</b> Director for International Affairs, DMMMSU
10:26-10:30	Message from International Partner	<b>Assistant Professor Dr. Khanisara Thanyasunthornsakun</b> President, Udon Thani Rajabhat University
10:31-10:35	Message from Local Partner	<b>Dr. Raymond Patrick V. Guico</b> President, WCC - Aeronautical and Technological College
10:36-11:05	MOA Signing with New Local and International Partners	
11:06-11:15	Photo Opportunity	<b>All Participants</b>
11:16-12:00	Opening of Exhibits	<b>Asso. Prof. Emerita D. Galiste</b> Director for Extension, DMMMSU
12:01-13:00	Lunch Break	



**DAY 1 | December 2, 2024 | Monday | Afternoon**

*Venue:*

**La Union Convention Center  
San Fernando City, La Union, Philippines**

### Plenary Sessions

13:01-13:25	Topic: "Three Pivotal Concepts for Crafting Sustainable Innovation: Endogenous Technology, Bricolage, and Institutional Brokerage"	<b>Dr. Hanns Rolland Yemadje</b> <i>Catalyste+</i> <i>Quebec, Canada</i>
13:26-13:50	Topic: "3D Scanning and Printing Challenges in the World of Manufacture"	<b>Dikky Antonius Hutauruk, ST., MSc.</b> <i>Universitas Kristen Indonesia</i> <i>Jakarta, Indonesia</i>
13:51-14:15	Topic: "Omics Approaches in Research"	<b>Dr. Peter James Gann</b> <i>Mariano Marcos State University</i> <i>Ilocos Norte, Philippines</i>
14:16- 14:40	Topic: "Knowledge Triangle for Food Innovation by Harnessing the Tradition and Assuring Sustainability KNOWinFOOD"	<b>Dr. Mihai Ognean</b> <i>Lucian Blaga University of Sibiu</i> <i>Sibiu, Romania</i>
14:41-14:55	Intermission Number Health Break	<b>MLUC Cultural Unit</b>
14:56-15:20	Topic: "Functional Genomics Meets Classical Genetics; Insights into Reproductive-Stage Drought Tolerance in Rice"	<b>Dr. Jeshurun Asher Tarun</b> <i>Louisiana State University</i> <i>Louisiana, USA</i>
15:21-15:55	Topic: "Logistics and Transport"	<b>Dr. Malvern Donald Gann</b> <i>J.B. Hunt Transport Services, Inc.</i> <i>Arkansas, USA</i>
15:56- 16:20	Topic: "Geopolymer Concrete as Green Building Materials"	<b>Ir. Kukuh Kurniawan Dwi Sungkono, ST., M.Eng</b> <i>Universitas Tunas Pembangunan Surakarta</i> <i>Surakarta, Indonesia</i>
16:21-16:45	Topic: "Protecting Plants, Protecting Communities: Lessons from Plant Virology to Enhance Virus Discovery and Surveillance in the Philippines"	<b>Dr. Mark Paul S. Rivarez</b> <i>National Institute of Biology</i> <i>Ljubljana, Slovenia</i>
16:46-17:45	Open Forum	
17:46-18:00	Awarding of Certificates of Appreciation to Plenary Speakers	
18:01-18:15	Health Break	
18:16-20:20	Welcome Dinner and Cultural Night <i>Networking Opportunities</i>	<i>Sponsored by the City Government of San Fernando, La Union</i>

### End of Day 1

*Masters of Ceremonies / Plenary Session Moderators:*

**Dr. Manilyn R. Cacanindin**

*College of Arts and Sciences, DMMMSU-South La Union Campus*

**Mr. Ronald B. Bustos**

*College of Arts and Sciences, DMMMSU-South La Union Campus*

# Welcome Dinner and Cultural Night "Mayor's Night"

DAY 1 | December 2, 2024 | Monday | Evening

*Venue:*

La Union Convention Center  
San Fernando City, La Union, Philippines

*Attire:* Filipiniana / Modern Filipiniana

## Program

18:16-18:45	Registration	
18:46-18:50	Prayer	
18:51-19:00	Welcome Remarks	<b>Hon. Hermenegildo A. Gualberto</b> <i>City Mayor, San Fernando City, La Union</i>
19:01-19:10	AVP	<b>City Government of San Fernando, La Union</b>
19:11-20:20	Dinner	
	Cultural Presentations	<b>DMMMSU-SLUC Cultural Unit</b>

## End of Welcome Dinner and Cultural Night ("Mayor's Night")

*Master of Ceremonies:*

**Dr. Ernesto C. Collo, Jr.**

*College of Arts and Sciences, DMMMSU-South La Union Campus*

Sponsored by the City Government of San Fernando, La Union





**DAY 2 | December 3, 2024 | Tuesday**  
*Venue per Cluster.*

**Education**

DMMMSU–Mid La Union Campus (MLUC)  
 San Fernando City, La Union, Philippines

**Engineering**

DMMMSU–Open University System (OUS)  
 San Fernando City, La Union, Philippines

**Agriculture**

La Union Convention Center (LUCC)  
 San Fernando City, La Union, Philippines

*Attire: Business*

Program		
07:30–08:30	Registration	
08:31–09:00	Prayer National Anthem Acknowledgment of Participants Introduction of Moderators, Facilitators, and Panel of Evaluators Mechanics of Presentation	
Parallel Paper Presentations		
09:01–18:30	Education Tracks:	
	Curricular and Policy Studies (A)	MLUC College of Law Room 1A
	Curricular and Policy Studies (B)	MLUC College of Law Room 1B
	Curricular and Policy Studies (C)	MLUC Administration Building AVR
	Technology and Methodology (A)	MLUC College of Graduate Studies Room 1
	Technology and Methodology (B)	MLUC College of Graduate Studies Room 2
	Human Capital and Impact	MLUC Library AVR
	Engineering Tracks:	
	Industry and Innovation	OUS Multi–Purpose Hall
	Infrastructure and Environment	OUS Library Makerspace (AM Session)
	Advanced Technologies and Materials	OUS Library Makerspace (PM Session)
	Agriculture Tracks:	
	Agricultural Products and Resources (A)	LUCC Main Hall
	Agricultural Products and Resources (B)	LUCC Long Gallery (North)
	Climate and Environmental Studies	LUCC Long Gallery (South) (AM Session)
Knowledge and Development	LUCC Long Gallery (South) (PM Session)	
Digital Poster Competition		
Digital Poster Evaluation	LUCC Main Hall	
18:31–19:30	Dinner	
End of Day 2		



**DAY 3 | December 4, 2024 | Wednesday | Morning**

*Venue:*

**La Union Convention Center  
San Fernando City, La Union, Philippines**

*Attire: Business*

**Closing Program**

8:00–8:30	Registration	
8:31–8:50	Invocation National Anthem ASEAN Hymn	
8:51–9:00	Message	<b>Dr. Eduardo C. Corpuz</b> <i>Chancellor, DMMMSU–Mid La Union Campus</i>
9:01–10:00	Awarding of Certificates to Institutional Partners, Panel of Evaluators, Moderators, Facilitators, and Participants	
10:01–10:30	Impressions	
10:31–10:45	University Briefer	<b>Institutional Partners</b>
10:46–11:30	Announcement and Awarding of Winners	
11:31–11:35	Words of Gratitude	<b>Dr. Angelina T. Gonzales</b> <i>Conference Chairperson and Vice President for Research, Development and Innovation, DMMMSU</i>
11:36–11:40	Closing Remarks	<b>Asso. Prof. Keneth G. Bayani</b> <i>Director for Research, DMMMSU</i>
11:41–12:00	Photo Opportunity	<b>All Participants</b>
12:01–13:00	Lunch Break	

**End of Conference**

*Masters of Ceremonies:*

**Ms. G-Yan D. Mamuyac**

*College of Education, DMMMSU–Mid La Union Campus*

**Dr. Oscar O. Ancheta, Jr.**

*College of Arts and Sciences, DMMMSU–Mid La Union Campus*

**Post-Conference Tour**

**13:00–17:00**

*Attire: Casual*

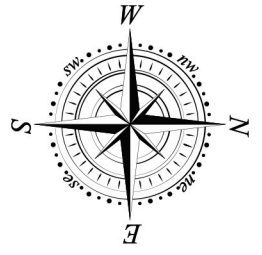
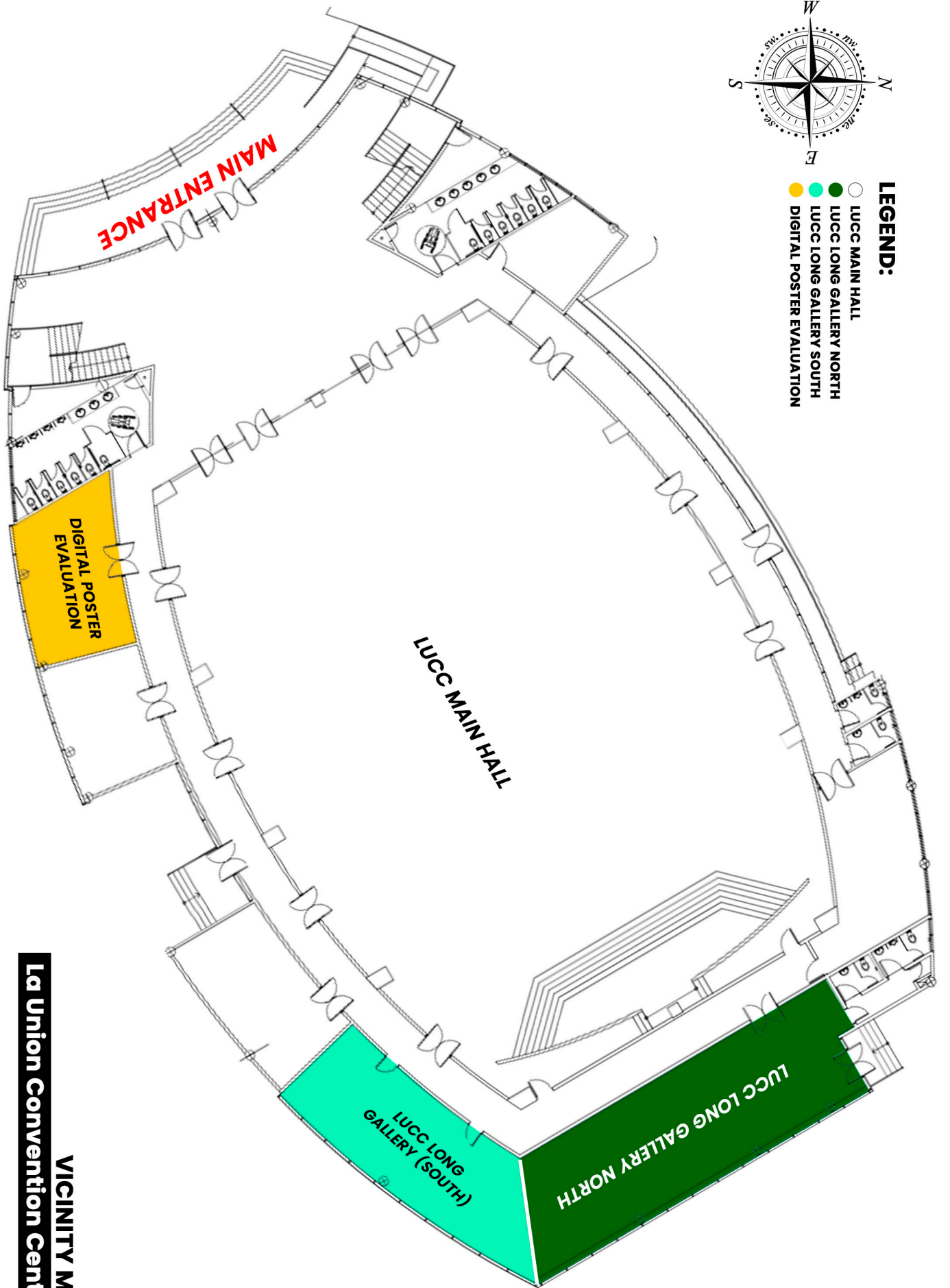
**Assembly Area:**

**La Union Convention Center**

<b>First Stop:</b> La Union Provincial Capitol			
<b>Love Market</b>	<b>Nature LUver</b>	<b>City Blush</b>	<b>Heart for Art</b>
Silver Industry, Citrus Farms	Man-made Forest, Immuki Island, San Juan Surfing	Pindangan Ruins, Macho Temple, Running Tour	Abel Weaving, Baluarte, Bato de Luna, Pottery Making
<b>Final Stop:</b> La Union Agri-Tourism Center ( <i>Pasalubong Center</i> )			

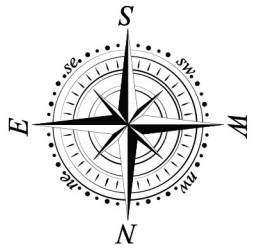
**In cooperation with the Provincial Government of La Union**





- LEGEND:**
- LUCC MAIN HALL
  - LUCC LONG GALLERY NORTH
  - LUCC LONG GALLERY SOUTH
  - DIGITAL POSTER EVALUATION

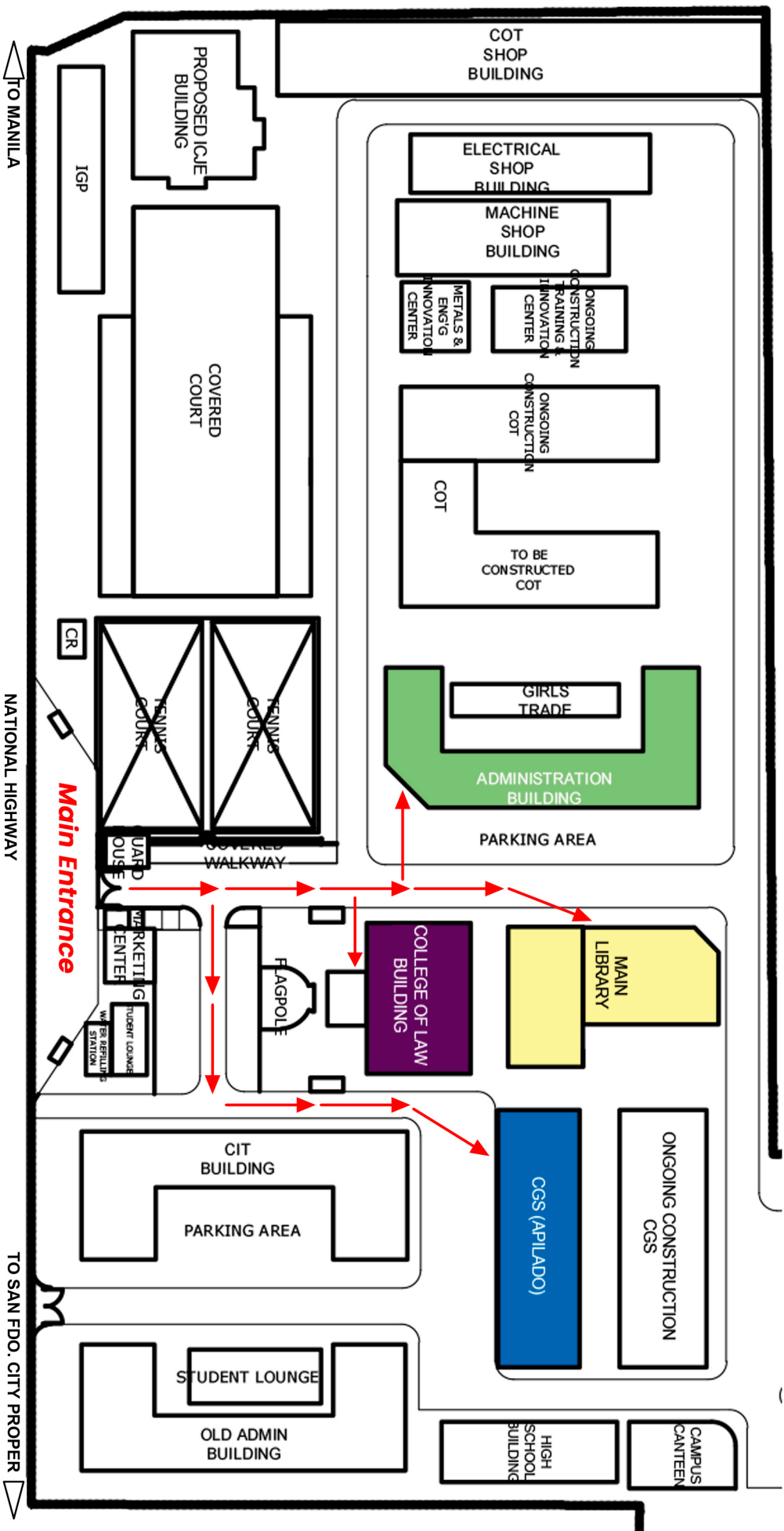
**VICINITY MAP**  
**La Union Convention Center**



**LEGEND:**

- MAIN LIBRARY
- COLLEGE OF LAW BUILDING
- ADMINISTRATION BUILDING
- COLLEGE OF GRADUATE STUDIES

**VICINITY MAP**  
**DMMSU-Mid La Union Campus (MLUC)**

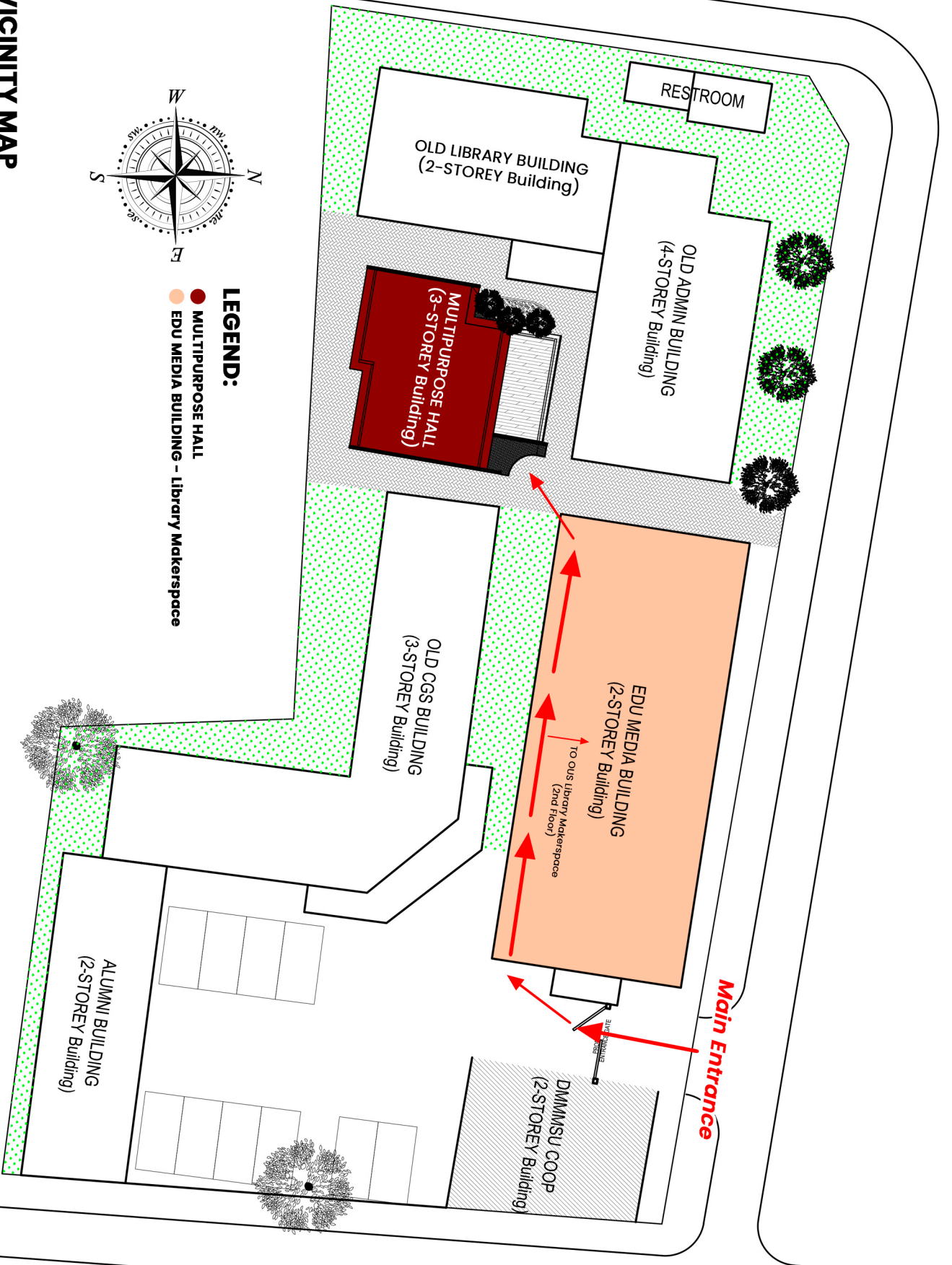


TO MANILA

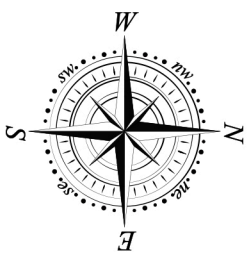
NATIONAL HIGHWAY

**Main Entrance**

TO SAN FDO. CITY PROPER



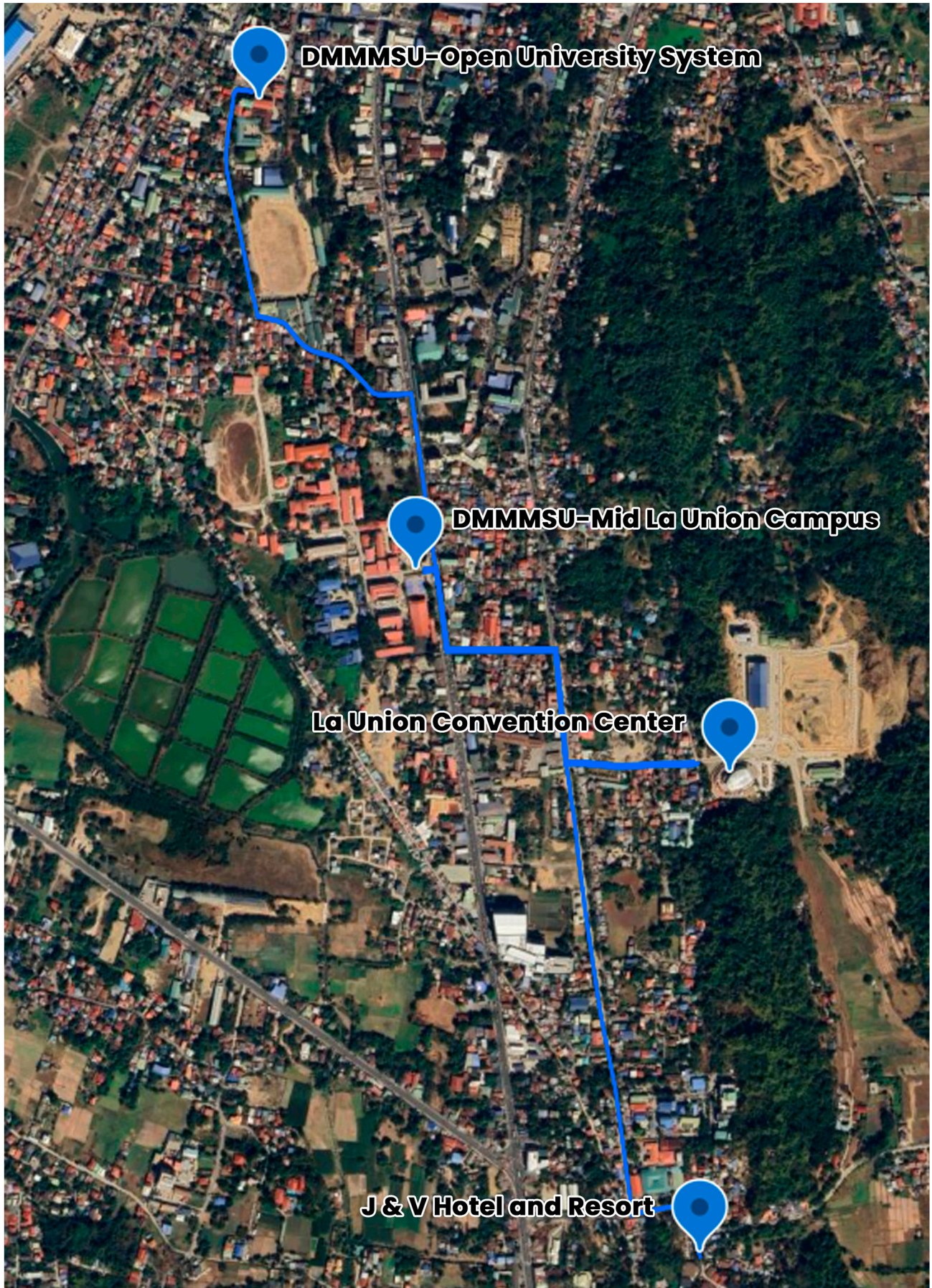
- LEGEND:**
- MULTIPURPOSE HALL
  - EDU MEDIA BUILDING - Library Makerspace



**VICINITY MAP**  
**DMMSU-Open University System (OUS)**

# LOCATION MAP

## Conference Venues





# Schedule of Presentations



# EDUCATION

## Curricular and Policy Studies – A

Venue:

College of Law Room 1A, DMMMSU Mid La Union Campus

Moderator:

**Dr. Anny Ross A. Bayan**

*Don Mariano Marcos Memorial State University*

Facilitator:

**Ms. Amparo Z. Valmores**

*Don Mariano Marcos Memorial State University*

Evaluators:

**Dr. Jun S. Camara**

*Pangasinan State University*

**Dr. Leah L. Olua**

*Department of Education – Regional Office 1*

**Dr. Hartwell Norman M. Merza**

*Don Mariano Marcos Memorial State University*

### Day 2 | December 3, 2024 | Morning

<b>07:30–08:30</b>	<b>Registration</b>
<b>08:31–09:00</b>	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
<b>Parallel Paper Presentations</b>	
<b>09:01–09:15</b>	<b>Enhancing Scientific Writing Skills in the Matatag Curriculum: A Grounded Investigation into Learners' Topic Generation</b> *Vi Briza E. Guarin, Jayson O. Madayag <i>Don Mariano Marcos Memorial State University, Philippines Graduate Studies, Don Mariano Marcos Memorial State University, Philippines</i>
<b>09:16–09:30</b>	<b>Awareness On RA 9262 of Selected Women of San Ildefonso, Bulacan</b> *Roselle D. Urbano, Edna Mae D. Cruz, Joselyna G. Quizon <i>Bulacan Agricultural State College, Philippines</i>
<b>09:31–09:45</b>	<b>Management of TES Allowance by the MPSU Tertiary Education Subsidy Grantees</b> Somerson C. Kis-ing <i>Mountain Province State University, Bontoc, Mountain Province, Philippines</i>
<b>09:46–10:00</b>	<b>Students' Attitudes and Perceived Factors Influencing the Usage of ChatGPT in English Language Learning</b> *Venessa S. Casanova, Marlyn R. Atienza <i>Occidental Mindoro State College, Philippines</i>
<b>10:01–10:30</b>	<b>Panel Q&amp;A</b>
<b>10:31–10:45</b>	<b>Health Break</b>
<b>10:46–11:00</b>	<b>Exploring the Mediating Role of Synthesis of Qualitative Data (SQD) Strategies Towards the Technological Pedagogical Content Knowledge (TPACK) and Information and Communications Technology (ICT) Attitudes of Preservice Teachers</b> Joy Therese L. Villon <i>Southern Luzon State University, Philippines</i>
<b>11:01–11:15</b>	<b>The Language Vitality Among the Different Ethnolinguistic Groups in Higher Education Institutions in Region XII: A Multiple Case Study</b> Eden Stephanie B. Bolido <i>University of Southeastern Philippines, Philippines</i>
<b>11:16–11:30</b>	<b>Prevalence and Associated Risk Factors of Mental Health Among College Students</b> *Alvin T. Dulin, Rowena R. Sto. Tomas, Catherine B. Allayban, Febe Marl G. Paat, Ethel Maureen B. Pagaddu <i>Cagayan State University, Philippines</i>



11:31-11:45	<b>A Chi-Square Statistic for Testing Equality of Distracters' Plausibility in Multiple-Choice Test Items</b> Sherwin . Balbuena <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i>
11:46-12:15	<b>Panel Q&amp;A</b>
12:16-13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16-13:30	<b>Development of Teaching and Learning Management with the Community Process of Professional Learning to Study English Reading Ability for Comprehension of Grade 10 Students Using Collaborative Strategic Reading Method</b> Watcharaboon Wiboon <i>Udon Thani Rajabhat University, Thailand</i>
13:31-13:45	<b>Gender Gap In Information Technology Course: An Input Towards the Development of a Gender-Adaptive Learning Management System</b> Joanna E. De Torres <i>Laguna State Polytechnic University, Philippines</i>
13:46-14:00	<b>Weaving Techniques and Process Among Bagobo Klata: Basis for TLE Curriculum Design</b> *Maricar A. Salva, Roanne H. Buensalida, Ellaiza L. Moñasque, Christal Joy C. Rosales <i>University of Southeastern Philippines</i>
14:01-14:15	<b>Interlinking the Cooperative and Work-Integrated Education Programs of COLA KKV vis-à-vis English Language Teaching and Learning</b> Xenia R. Emperador-Garnace <i>Khon Kaen University, Thailand</i>
14:16-14:30	<b>The Awareness and Knowledge on Artificial Intelligence (AI) Tools Among Teacher Education Students at UEP - PRMC</b> Ninalyn B. Roloyan <i>University of Eastern Philippines</i>
14:31-15:00	<b>The Creative and Critical Thinking of Intern Students in the 21<sup>st</sup> Century Competencies</b> *Pilita A. Amahan, Mary Ann Austria G. Felipe <i>Occidental Mindoro State College, Philippines</i>
15:01-15:15	<b>Panel Q&amp;A</b>
15:16-15:30	<b>Health Break</b>
15:31-15:45	<b>Board Examination Performance and Academic Performance of Civil Engineering Graduates at Mountain Province State Polytechnic College: Basis for System and Policy Formulation</b> *Rollie C. Mejia, Czarina J. Vargas <i>Mountain Province State University, Philippines</i>
15:46-16:00	<b>Semantic Awareness in Learning English: An In-Depth Analysis of Indigenous Students at Occidental Mindoro State College-Sablayan Campus in Relation to Preparedness and Difficulties</b> *Melvin M. Acas, Kathleen D. Galindez, Camille D. Ventura, Mark Weslee V. Ventura, Mark G. Leoncion, Unique Con L. Ballenas, Joselyn Romero <i>Occidental Mindoro State College, Philippines</i>
16:01-16:15	<b>Agri-Fishery Programs of Technical Education and Skills Development Authority (TESDA) Schools and Training Centers: Basis for a Sustainability Plan</b> Helen S. Aqui <i>Technical Education And Skills Development Authority - Regional Office 1, Philippines</i>
16:16-16:30	<b>Telling Tales of Taste: A Study on the Language, Imagery, and Cultural References of Street Food Vendors Around the Hinterlands of Cordillera</b> Jonnelle D. Fagsao, Edgar G. Cue, Julie Grace M. Docallas, Alvin L. Katano <i>Mountain Province State University, Philippines</i>
16:31-16:45	<b>Management of Instruction In DMMMSU Laboratory Schools</b> Jo-Mar A. Avena <i>Don Mariano Marcos Memorial State University, Philippines</i>
16:46-17:15	<b>Panel Q&amp;A</b>
<b>End of Session</b>	



# EDUCATION

## Curricular and Policy Studies – B

Venue:  
College of Law Room 1B, DMMMSU Mid La Union Campus

Moderator:  
**Mr. Christian Abella**  
Ilocos Sur Polytechnic State College

Facilitator:  
**Ms. Mary Grace Leal-Gacusan**  
Ilocos Sur Polytechnic State College

Evaluators:  
**Dr. Maria Teresa Y. Acantilado**  
Don Mariano Marcos Memorial State University  
**Mr. Rufino P. Peralta, Jr.**  
WCC- Aeronautical & Technological College  
**Dr. Joanne D. Gorospe**  
Occidental Mindoro State College

Day 2 | December 3, 2024 | Morning

07:30-08:30	<b>Registration</b>
08:31-09:00	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
<b>Parallel Paper Presentations</b>	
09:01-09:15	<b>Effectiveness of Localized Multimedia Based Instruction in Enhancing Critical Thinking Skills of Grade 4 Pupils in Social Studies</b> Sherwin B. Domingo Department of Education – Regional Office I, Philippines
09:16-09:30	<b>Correlation Between Academic Performance and Licensure Examination Results</b> Rudy T. Papsa-Ao Jr. Mountain Province State University, Philippines
09:31-09:45	<b>Investigating the Knowledge of College Students Regarding Accreditation</b> *Ma. Leonora C. Sta. Ana, Norelline S. Gabas, Herbert M. De Jesus, Julieta A. Asuncion Bulacan Agricultural State College, Philippines
09:46-10:00	<b>Improving the Science Process Skills of Grade VIII Students Through Project Science Processes Applied In Creative Experiences (SPACE)</b> Mark Joseph N. Cometa Department of Education – Regional Office I, Philippines
10:01-10:30	<b>Panel Q&amp;A</b>
10:31-10:45	<b>Health Break</b>
10:46-11:00	<b>Effectiveness of Instructional Materials of College of Computer Studies to the Student's Learning Style</b> Anna Princess L. Marita, Prince O. Andres, Ronnel A. Dela Cruz Laguna State Polytechnic University, Philippines
11:01-11:15	<b>The Whys and Hows of Teacher Turnover in the Public Academe: Basis for Teacher Retention Policy</b> Myla C. Ogaya Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines
11:16-11:30	<b>Instructional and Supervisory Competencies and Research Productivity of Master Teachers in the City Schools Division of Dasmariñas Cavite: Bases for Competency Enhancement Plan</b> Christine T. Tubog, Liza C. Costa Department of Education – Region IVA, Philippines





11:31-11:45	<b>The Use of 3/2/1 Scheme in Improving the Reading Comprehension of Grade 12 HUMSS Students</b> Rodyssa E. Pagdanganan <i>Department of Education - Regional Office I, Philippines</i>
11:46-12:15	<b>Panel Q&amp;A</b>
12:16-13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16-13:30	<b>Assessment of the Implementation of the Summer Enrichment Program (SEP) of DMMMSU-MLUC-Laboratory Elementary School</b> Oscar Jr. O. Ancheta Jr. <i>Don Mariano Marcos Memorial State University, Philippines</i>
13:31-13:45	<b>Capability Assessment of the Barangay Police in Crime Prevention: Input to an Extension Program Development of CCJE</b> *Amado G. Dawaton, Alvin T. Dulin, Daniel V. Doquilla <i>Cagayan State University, Philippines</i>
13:46-14:00	<b>Level of Satisfaction of Student Interns with the MPSPC Internship Program</b> *Jiselle Q. Bayangdan, Jevera Cawilan Domogen, Janisse G. Gas-ib <i>Mountain Province State University, Philippines</i>
14:01-14:15	<b>Gamified Bubble: Its Effect on the Problem-Solving Ability of Grade 10 Learners in Probability</b> John William B. Ponce <i>Department Of Education - Regional Office I, Philippines</i>
14:16-14:30	<b>Green Skills Practices and Strategies</b> *Loneza G. Carbonel, Abigail Quimosing-Ocay, Jay France Taclawan, Rodolfo B. Tucay, Nollie D. Jerson, Joy C. Calwing, Leo B. Roman <i>Kalinga State University, Philippines</i>
14:31-15:00	<b>Panel Q&amp;A</b>
15:01-15:15	<b>Health Break</b>
15:16-15:30	<b>Incidence of At-Risk Students in MPSPC: Profiling and Basis for Remediation</b> Obie Noe B. Madalang <i>Mountain Province State University, Philippines</i>
15:31-15:45	<b>Primary Caregivers' Involvement in the Early Childhood Care and Development Program of DSWD in the City of San Fernando, La Union</b> *Jenie V. Quiaoit, Maricel C. Pajimola <i>Don Mariano Marcos Memorial State University, Philippines</i>
15:46-16:00	<b>Learning Needs of Senior High School Cookery Students and its Implications to Instructional Resource &amp; Strategies</b> *Eva Q. Eborde, Argen Cañete, John Mark C. Cuizon, Richelle B. Fonollera, Via Rosary C. Lavador <i>University of Southeastern Philippines</i>
16:01-16:15	<b>Fortifying Survival of Overseas Filipino Worker (OFW) Returnees of Mountain Province Through the Philippine Reintegration Program</b> Joy Fraine M. Ngodcho <i>Mountain Province State University, Philippines</i>
16:16-16:30	<b>Factors of School Support in the Promotion of Mental Well-Being Among Ilokano College Students</b> *Aisha N. Sevilleja, Pascua, Lynbelle, C., Supang, Dan Melissa <i>Don Mariano Marcos Memorial State University, Philippines</i>
16:31-16:45	<b>From Plows to Pixels: Imagining the Future of Agricultural Education by 2050</b> Marissa R. Fangon <i>Don Mariano Marcos Memorial State University, Philippines</i>
16:46-17:15	<b>Panel Q&amp;A</b>
<b>End of Session</b>	



# EDUCATION

## Curricular and Policy Studies – C

Venue: Administration Building AVR, DMMMSU Mid La Union Campus

Moderator:

**Ms. Rachel Solis**

Department of Education – City Schools Division of Bacoor

Facilitator:

**Dr. Estella A. Cayabyab**

Don Mariano Marcos Memorial State University

Evaluators:

**Dr. Eduard M. Albay**

Don Mariano Marcos Memorial State University

**Mr. Danilo V. Rogayan, Jr.**

President Ramon Magsaysay State University

**Dr. Michelle M. De Jesus**

Department of Trade and Industry – Regional Office I

### Day 2 | December 3, 2024 | Morning

07:30–08:30	<b>Registration</b>
08:31–09:00	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
<b>Parallel Paper Presentations</b>	
09:01–09:15	<b>Perceived Competence in Illustrators: Input for Construction of Illustrators' Competency Assessment Tool</b> *Daryl D. Urbino, Donald A. Esposito University of Antique, Philippines
09:16–09:30	<b>Improving the Reading Level of Grade 4 Learners Through Phone Call Reading Instruction Partnership</b> Ayessa L. Cabading Department of Education – Regional Office I, Philippines
09:31–09:45	<b>Enhancing the Listening Comprehension of Grade 4 Learners Through the TQLR Technique</b> *Sinamar V. Buciao, Janet Y. Abella, Fenny I. Abadilla Department of Education – Regional Office I, Philippines
09:46–10:00	<b>Linguistic Dimension of Translating and Validating the New Mt. Prov. State Polytechnic College's (MPSPC) VMT And Core Values: A Linguistic Analysis</b> *Julie Grace M. Docallas, Jonnelle D. Fagsao, Edgar G. Cue Mountain Province State University, Philippines
10:01–10:30	<b>Panel Q&amp;A</b>
10:31–10:45	<b>Health Break</b>
10:46–11:00	<b>Challenges of Online Learning in the Laboratory Schools: A Basis for an Action Plan</b> Laura Dane R. Rafanan University of Northern Philippines
11:01–11:15	<b>Correlation Study on the Board Exam Performance of BS in Geodetic Engineering Graduates in NVSU</b> *Sarilyn R. Lopez, Efrenjoy A. Hawete Nueva Vizcaya State University, Philippines



11:16–11:30	<b>Enhancing Grammar Skills of Grade 9 Learners through Filmora–Assisted Video Instruction (FAVI)</b> Dennis A. Solis <i>Department of Education – Regional Office I, Philippines</i>
11:31–11:45	<b>Digital Pedagogy in Filipino Language Instruction: Perceptions, Practices and Challenges of Teachers in Technology Integration</b> Ailen B. Garcia <i>Occidental Mindoro State College, Philippines</i>
11:46–12:15	<b>Panel Q&amp;A</b>
12:16–13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16–13:30	<b>Integration of Scaffolded Silent Reading on Enhancing Students’ Reading Fluency and Comprehension</b> Jeany B. Arcadio <i>Department of Education – Region IV-A, Philippines</i>
13:31–13:45	<b>Teaching Strategies Guide Across Subjects for Grade 7 Students: A Means to Fill in the Gaps Created by the Challenges of Covid-19 in Education</b> *Analyn Diane P. Silverio, Mariella Alexes R. Espiritu, Precious Jessica Z. Calipjo <i>Tarlac Agricultural University, Philippines</i>
13:46–14:00	<b>Unveiling the Labyrinth of Medication Errors and the Impact on Professional Performance</b> *Georgina P. Maskay, Alfred O. Fomocao <i>Mountain Province State University, Philippines</i>
14:01–14:15	<b>Pre-Service Teachers’ Perceptions and Usage Patterns of Generative AI in Lesson Planning</b> *Ruth T. Romero, Ariel N. Fallaria, Ma. Imelda C. Rayton <i>Occidental Mindoro State College, Philippines</i>
14:16–14:30	<b>Distributed Leadership Dynamics in Implementing Technical Vocational and Livelihood Work Immersion: School Heads and Partner Institutions’ Perspectives</b> Joey V. Pardeno <i>Dr. Emilio B. Espinosa Sr. Memorial State College Of Agriculture and Technology, Philippines</i>
14:31–15:00	<b>Panel Q&amp;A</b>
15:01–15:15	<b>Health Break</b>
15:16–15:30	<b>Data-Driven Approach for Decision Making in Higher Education Institution</b> *Ghalib . Abdillah, Mahyuddin K. M. Nasution, Opim Salim Sitompul <i>Universitas Sumatera Utara, Indonesia</i>
15:31–15:45	<b>Evaluative Analysis on Children Under the Early Childhood Care and Development Program: Input for an ECCD Development Program</b> *Sharlane Gay Elaine V. Fabrigas, Oscar O. Ancheta Jr. <i>Don Mariano Marcos Memorial State University, Philippines</i>
15:46–16:00	<b>Mapping the Research Landscape: A Scoping Review of Filipino Language and Literature Studies at Occidental Mindoro State College</b> *Mary Ann G. Felipe, Arnulfo T. Villanueva <i>Occidental Mindoro State College, Philippines</i>
16:01–16:15	<b>Technology and Livelihood Education Instruction in Don Mariano Marcos Memorial State University North La Union Campus College of Education</b> *Mayeth G. Navasca, Randolph I. Navasca, Nel Bryan C. Tugelida, Necita C. Suguitan <i>Don Mariano Marcos Memorial State University, Philippines</i>
16:11–16:30	<b>Views of Multigrade Teachers on the Implementation of Classroom Structuring with Emphasis on ‘Bare Walls’</b> *John Mark S. Francisco, Julemar B. Sabellano <i>University Of Southeastern Philippines</i>



<b>16:31-16:45</b>	<b>Mother Tongue-Based Multilingual Education Instruction in DMMMSU-Laboratory Elementary Schools: Basis for a Proposed Retooling Program</b> Cedric Anthony E. Ochoco <i>Don Mariano Marcos Memorial State University, Philippines</i>
<b>16:46-17:15</b>	<b>Panel Q&amp;A</b>
<b>End of Session</b>	



# EDUCATION

## Technology and Methodology – A

Venue:

College of Graduate Studies Room 1, DMMMSU Mid La Union Campus

Moderator:

**Ms. Nikki Faith A. Bantillo**

*Dr. Emilio B. Espinosa, Sr. Memorial State College of Agriculture and Technology*

Facilitator:

**Ms. Mary Rose D. Espero**

*Don Mariano Marcos Memorial State University*

Evaluators:

**Dr. Melda M. Uychoco**

*Don Mariano Marcos Memorial State University*

**Ms. Luzlyn M. Agwilang**

*Mountain Province State University*

**Dr. Edna M. Padre**

*President Ramon Magsaysay State University*

### Day 2 | December 3, 2024 | Morning

07:3–08:30	<b>Registration</b>
08:31–09:00	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
	<b>Parallel Paper Presentations</b>
09:01–09:15	<b>Exploring Difficulties of Tëduray Learners in English Competencies Toward the Development and Validation of Culture-Based Learning Material</b> Jaime Boy U. Ngag Jr. <i>South Cotabato State College, Philippines</i>
09:16–09:30	<b>Blended Learning Approach in Mathematics Education in the Higher Education Institutions: A Metasynthesis Study</b> Barbara B. Comision <i>Cebu Technological University, Philippines</i>
09:31–09:45	<b>Market Sustainability: Online Marketing Platforms Adopted by Plantitas and Plantitos for a Blooming Business</b> *Eugine S. Dela Cruz, Perlita R. Israel <i>Aklan State University, Philippines</i>
09:46–10:00	<b>Enhancing the Conceptual Understanding of Grade 8 Students in Ancient Greek Civilization Through Virtual Realia</b> Junalyn V. Refuerzo <i>Department of Education – Regional Office I, Philippines</i>
10:01–10:30	<b>Panel Q&amp;A</b>
10:31–10:45	<b>Health Break</b>
10:46–11:00	<b>Young Minds’ Tambayan Extension Program: An Assessment</b> Necy Cesaria V. Romo, Dr. Eleuteria R. Pacpaco, Fely R. de Guzman, Wendelyn R. Talbo <i>University of Northern Philippines</i>
11:01–11:15	<b>Forecasting Student Academic Performance at a Philippine Stateuniversity Using Supervised Learning Algorithms</b> Ma. Concepcion R. Repalam <i>Manuel S. Enverga University Foundation, Philippines</i>



11:16–11:30	<p><b>Perception of Science, Technology, and Engineering (STE) Teachers and Learners on the Utilization of the Science Supplementary Learning Videos (SLV) in Masbate Province</b></p> <p><i>Nikki Faith A. Bantillo, Madilyn B. Povadora</i>  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
11:31–11:45	<p><b>Early Detection and Management of Manifestations of Cyber-Syndrome Among Philippine HEI Students and Personnel</b></p> <p><i>Wilfred C. Pagorogon, Vincent M. Clores</i>  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
11:46–12:15	<b>Panel Q&amp;A</b>
12:16–13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16–13:30	<p><b>Analysis of Various Approaches in Data Mining Using Bayesian Algorithm</b></p> <p><i>Joven A. Tolentino</i>  <i>Tarlac Agricultural University, Philippines</i></p>
13:31–13:45	<p><b>Improving Learners' Procedural Fluency in Hypothesis Testing Through Peer-Guided Study Approach</b></p> <p><i>Queeny Joyce F. Sebastian</i>  <i>Department of Education - Regional Office I, Philippines</i></p>
13:46–14:00	<p><b>Analysis and Self-Correction of Students' Errors and Misconceptions in Proving Trigonometric Identities</b></p> <p><i>Jenilyn A. Asiro</i>  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
14:01–14:15	<p><b>Earth and Life Science Rewind: Condensed Video Reviewers for the Least Mastered Skills of Earth and Life Science</b></p> <p><i>Gian Del N. Atalia</i>  <i>National Teachers College, Philippines</i></p>
14:16–14:30	<p><b>The Use of ChatGPT on Senior High School Students' Academic Writing Skills: A Mixed Method Study</b></p> <p><i>Aveliza T. Basibas</i>  <i>University of Eastern Philippines</i></p>
14:31–15:00	<b>Panel Q&amp;A</b>
15:01–15:15	<b>Health Break</b>
15:16–15:30	<p><b>Research Project Management System Using Elasticsearch Algorithm for Laguna State Polytechnic University – San Pablo City Campus</b></p> <p><i>Ronnel A. Dela Cruz</i>  <i>Laguna State Polytechnic University, Philippines</i></p>
15:31–15:45	<p><b>Practices and Strategies in Teaching English to Multilingual Learners</b></p> <p><i>Jona M. Royo</i>  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture And Technology, Philippines</i></p>
15:46–16:00	<p><b>Imaging Teacher-Student Negotiation in Literature Classes</b></p> <p><i>*Karah Cleo G. Ero, Jay Neil G. Verano</i>  <i>University of Eastern Philippines</i></p>
16:01–16:15	<p><b>Effectiveness of the Basic Education Remediation Kits on Improving the Reading Skills of Novice Readers</b></p> <p><i>Stephanie Angela V. Aguirre</i>  <i>Laguna State Polytechnic University, Philippines</i></p>



<b>16:16–16:30</b>	<b>Research Capability on Statistical Tools of Senior High School Teachers: A Basis for an Extension Program</b> *Nora A. Oredina, May Ann Rose E. Montemayor <i>Don Mariano Marcos Memorial State University, Philippines</i>
<b>16:31–17:00</b>	<b>Panel Q&amp;A</b>
<b>End of Session</b>	



# EDUCATION

## Technology and Methodology – B

Venue:

College of Graduate Studies Room 2, DMMMSU Mid La Union Campus

Moderator:

**Mr. Paolo Josef L. Blando**  
National Teachers College

Facilitator:

**Ms. Rona Lynne A. Federizo**  
National Teachers College

Evaluators:

**Dr. Epiphania B. Magwilang**  
Mountain Province State University

**Dr. Rinarose B. Budeng**  
Don Mariano Marcos Memorial State University

**Dr. Arjay Q. Gacula**  
Ilocos Sur Polytechnic State College

Day 2 | December 3, 2024 | Morning

07:30–08:30	<b>Registration</b>
08:31–09:00	<b>Prayer</b> <b>National Anthem</b> <b>Acknowledgment of Participants</b> <b>Introduction of Moderator, Facilitator, and Panel of Evaluators</b> <b>Mechanics of Presentation</b>
	<b>Parallel Paper Presentations</b>
09:01–09:15	<b>Validation and Reliability of Digital Demographics and Digital Literacy Scales in the Context of Online Learning for Math Education Students</b> Eduardo Edu Jr. C. Cornillez Eastern Visayas State University, Philippines
09:16–09:30	<b>Relationship Modeling Between Digital Literacy and Digital Competency Using Structural Equation Modeling</b> Kent G. Batulan Cebu Technological University, Philippines
09:31–09:45	<b>Improving Quantitative Data Analysis Skills of Grade 12 Learners Through Self-Help Learning Strategy Package</b> Ryan A. Cortez Department of Education – Regional Office I, Philippines
09:46–10:00	<b>Differentiated Instruction in Plane Trigonometry Class</b> Julita N. Alburan University of Eastern Philippines
10:01–10:30	<b>Panel Q&amp;A</b>
10:31–10:45	<b>Health Break</b>
10:46–11:00	<b>21<sup>st</sup> Century Learning Skills And Practices of Technology and Education Students: A Comparative Study</b> *Maria Theresa V. Forneas, Jamaica V. Garcia, Carlo L. Ventura University of Northern Philippines
11:01–11:15	<b>Responding to the Challenges of Teaching Nomenclature GF Compounds Through Generative Artificial Intelligence Instructional Material (GAIM)</b> *Jovela I. Peñaogjas, Johanne Estela Mari Cobrado, Alex Jene B. Azucena, Anna Marie N. Morilla Southern Luzon State University, Philippines





11:16-11:30	<p><b>Unveiling the 21<sup>st</sup> Century Pedagogical Implications of Dramatization and Lecture Approaches from the Lens of EFL College Students</b></p> <p>*Michael L. Estremera, John T. Gonzales  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
11:31-11:45	<p><b>Facebook Consumption Among University Students: Analyzing Motivations Through the Lens of Uses and Gratification Theory</b></p> <p>*Zahidul Islam Jobair, Sonia Akter Tuktuki  <i>Daffodil International University, Bangladesh</i></p>
11:46-12:15	<p><b>Development of Miniature Aerodrome: A Visual Teaching Aid for Pre-Solo Student Pilots</b></p> <p>*Christian Edward G. Subido, Chu, Jian Eldrin, Fernando, James Earl, Aya-ay, Rolter, Kianah S. Vincoy  <i>WCC Aeronautical and Technological College, Philippines</i></p>
12:16-13:15	<b>Panel Q&amp;A</b>
13:16-13:30	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:31-13:45	<p><b>Development of Multifunton Drafting Triangle</b></p> <p>Paulo Joy O. Buenaobra  <i>President Ramon Magsaysay State University, Philippines</i></p>
13:46-14:00	<p><b>A Hybrid Solar-Wind System for Sustainable Cellphone Charging Station and Nighttime Lighting Access Empowering Debesmscat Community</b></p> <p>Mr. Vicente E. Montajes  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
14:01-14:15	<p><b>Comparative Analysis of Mathematics Performance in Singapore and the Philippines Using K-Nearest Neighbors and Apriori Algorithm</b></p> <p>Ariel B. Mabansag  <i>Samar State University, Philippines</i></p>
14:16-14:30	<p><b>Development and Evaluation of Sensor Application Trainer</b></p> <p>Patrick Glenn P. Mobo  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
14:31-15:00	<b>Panel Q&amp;A</b>
15:01-15:15	<b>Health Break</b>
15:16-15:30	<p><b>Developmental Tasks of Intermediate Pupils: Input to an Instructional Design in MAPEH</b></p> <p>Daniel P. Ong Jr.  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
15:31-15:45	<p><b>Unlocking Question Quality: Analyzing Difficulty, Discrimination, and Distractor Effectiveness in Multiple-Choice Assessments</b></p> <p>*Lalin A. Tuguic, Jennifer Bactad, Mary Joy Garming  <i>Kalinga State University, Philippines</i></p>
15:46-16:00	<p><b>English Language Learning in the Age of Machines in a Philippine SUC Setting</b></p> <p>Arlene B. Carmen  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
16:01-16:15	<p><b>Closed Circuit Television Training Equipment</b></p> <p>*Michael Y. Cultura, Manolito F. Dela Cruz  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
16:16-16:45	<b>Panel Q&amp;A</b>
<b>End of Session</b>	



# EDUCATION

## Human Capital and Impact

Venue:

Library AVR, DMMMSU Mid La Union Campus

Moderator:

**Ms. Fye Dunaway R. Asio**  
Occidental Mindoro State College

Facilitators:

**Ms. Stiffany Lhyka D. Finez**  
Occidental Mindoro State College

Evaluators:

**Dr. James F. Ferrer**  
Technical Education and Skills Development Authority  
**Dr. Juner Windel M. Valdez**  
Department of Education - Regional Office I  
**Dr. Ernesto C. Collo, Jr.**  
Don Mariano Marcos Memorial State University

Day 2 | December 3, 2024 | Morning

07:30-08:30	<b>Registration</b>
08:31-09:00	<b>Prayer</b> <b>National Anthem</b> <b>Acknowledgment of Participants</b> <b>Introduction of Moderator, Facilitator, and Panel of Evaluators</b> <b>Mechanics of Presentation</b>
<b>Parallel Paper Presentations</b>	
09:01-09:15	<b>Lig-On Davaur: A Story of Resilience of Davao Del Sur State College</b> *Rikka Bianca . Condes, Maritess Rulona, Lou Jane Filipinas <i>Davao Del Sur State College, Philippines</i>
09:16-09:30	<b>Measuring Work Ability and Well Being of Security Personnel: Inputs to Enhancing Performance</b> *Norelline S. Gabas, Emma L. Villacorta, Anna Marie Jennifer N. Demetillo, Ma. Lourdes R. Nicolas <i>Bulacan Agricultural State College, Philippines</i>
09:31-09:45	<b>Assessment of the Potential Demand for Man Program in MPSPC</b> *Phoenix D. Tayni, Georgina P. Maskay, Susan A. Lopez <i>Mountain Province State University, Philippines</i>
09:46-10:00	<b>The Ripple Effect of Peer Pressure on the Decision-Making of Senior High School Students</b> Haidee Z. Bambalan <i>WCC Aeronautical and Technological College, Philippines</i>
10:01-10:30	<b>Panel Q&amp;A</b>
10:31-10:45	<b>Health Break</b>
10:46-11:00	<b>Translanguaging Practices and Language Identities of Prospective English Teachers</b> *Jamaica V. Garcia, Ma. Teresa Susan L. Manzano, Jenny Lou R. Taan, Mark Louie Tabunan <i>University of Northern Philippines</i>
11:01-11:15	<b>Coping Strategies Against the Impacts of African Swine Fever Virus (ASFV) In Oriental Mindoro, Philippines</b> *Russel A. Labog, William M. Ramirez <i>Mindoro State University, Philippines</i>
11:16-11:30	<b>Assessing Gender Integration, Workplace Incivility, and Career Advancement in a Public Higher Education Institution in the Philippines</b> Nimfa B. Pastrana, Artemio M. Gonzales Jr., Marciel N. Salvador <i>Occidental Mindoro State College, Philippines</i>



11:36-11:45	<b>Job Satisfaction and Performance of Faculty Members in Apayao State College: A Correlation</b> Randy A. Cabilatazan <i>Apayao State College, Philippines</i>
11:46-12:15	<b>Panel Q&amp;A</b>
12:16-13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16-13:30	<b>Extension Capability of COE Faculty: Basis for Laguna State Polytechnic University- College of Engineering Extension Capability Program</b> Josephine A. Villamin <i>Laguna State Polytechnic University, Philippines</i>
13:31-13:45	<b>Sequential-Explanatory Study of the Influence of Generational Difference of Grit Level to Faculty Performance</b> Rainalda T. Rambuyon, Jake B. Garnace <i>University of Northern Philippines</i>
13:46-14:00	<b>Academic Self-Efficacy and Academic Performance: A Correlational Analysis of Senior High School Students in Northern Samar, Philippines</b> Angela Dominique T. Lomagdong <i>University of Eastern Philippines</i>
14:01-14:15	<b>Workplace Stress Among Police Officers in the 1<sup>st</sup> District of La Union</b> Emmalyn F. Acorda, Rhenz Arvin C. Dumaguin <i>Don Mariano Marcos Memorial State University, Philippines</i>
14:16-14:30	<b>Empowering Women: Impact of Food and Services Skills Enhancement as a Livelihood Opportunity to Housewives in Barangay Cagbugna, Catubig, Northern Samar</b> Vanessa G. Lluz <i>University of Eastern Philippines</i>
14:31-15:00	<b>Panel Q&amp;A</b>
15:01-15:15	<b>Health Break</b>
15:16-15:30	<b>The Lived Experiences of School Librarians Implementing Information Literacy Programs</b> Mary Ann S. Dalan <i>Leyte Normal University, Philippines</i>
15:31-15:45	<b>Educational Institution Leadership in Indonesia: A Brief Literature Review</b> Mohammad A. Yafi <i>Universitas Tunas Pembangunan Surakarta, Indonesia</i>
15:46-16:00	<b>Understanding the Rapist's Mind</b> Veneranda P. Depayso <i>Mountain Province State University, Philippines</i>
16:01-16:15	<b>Synthesizing and Integrating Environmental Awareness and Bio-Intensive Gardening Under the Gulayan Sa Paaralan (SIBUG) Project</b> Violeta F. Collado <i>Don Mariano Marcos Memorial State University, Philippines</i>
16:16-16:45	<b>Panel Q&amp;A</b>
16:46-17:00	<b>Health Break</b>
17:01-17:15	<b>Beyond the Blackboard: A Phenomenological Inquiry of Educators' Journey on Teaching Students with Autism Spectrum Disorder (ASD) in a Province in Central Luzon</b> *Karl Christian . Reyes, Aireen B. Agustin, Alexa Kristal Benitez, Rasbelle Moicy Faye A. de Vera, Michelle Josh Esquillo, Trinity Faith A. Hoyle, Carl Jmy S. Jalandoni <i>President Ramon Magsaysay State University, Philippines</i>



<b>17:16-17:30</b>	<b>Perception of Employees on Their Implicit Social and Gender Roles vis-à-vis their Work Performance</b> Marlon F. Bravo <i>Holland America Line - UP Manila, Philippines</i>
<b>17:31-17:45</b>	<b>Private School Early Childhood Teachers' Experiences in Handling Learners with Disabilities in Inclusive Classes</b> *Wendelyn C. Bajador, Zilverña B. Velarde <i>University of Southeastern Philippines</i>
<b>17:46-18:00</b>	<b>Understanding Victimization in Intimate Partner Violence</b> Noeliza B. Baguidudol-Ayak <i>Don Mariano Marcos Memorial State University, Philippines</i>
<b>18:01-18:30</b>	<b>Panel Q&amp;A</b>
<b>18:31-19:30</b>	<b>Dinner</b>
<b>End of Session</b>	



# ENGINEERING

## Industry and Innovation

Venue:

Multi-Purpose Hall, DMMMSU Open University System

Moderator:

**Engr. Harry Allan P. Errasquin**  
Pangasinan State University

Facilitator:

**Ms. May Ann Rose E. Montemayor**  
Don Mariano Marcos Memorial State University

Evaluators:

**Dr. Armando Q. Ganal**  
Department of Science and Technology-Regional Office I  
**Engr. Allyson T. Mina**  
Ilocos Sur Polytechnic State College  
**Engr. Roy R. Flores**  
Pangasinan State University

Day 2 | December 3, 2024 | Morning

07:30–08:30	<b>Registration</b>
08:31–09:00	<b>Prayer</b> <b>National Anthem</b> <b>Acknowledgment of Participants</b> <b>Introduction of Moderator, Facilitator, and Panel of Evaluators</b> <b>Mechanics of Presentation</b>
<b>Parallel Paper Presentations</b>	
09:01–09:15	<b>Application of System Dynamics Model in Simulating “Good” and “Poor” Case Scenarios of Construction Labor Productivity Rate and Work Done Over Time</b> *Emer T. Quezon, Arthur Gonzales Ibañez Cagayan State University, Philippines
09:16–09:30	<b>Landslide Susceptibility Mapping in Tadian, Mountain Province</b> *Jenny C. Tumbaga, Jaccy L. Dumaliw, Rogie P. Lantion, Rose B. Amoy Mountain Province State University, Philippines
09:31–09:45	<b>Development of a Microcontroller-Based Automated Pest Control Spraying System</b> Bless G. Ampuan University of Eastern Philippines
09:46–10:00	<b>Comparative Study Between Conventional and Converted Electric Tricycle</b> *Michael B. Orpilla, Ian C. Pagulayan, Arthur G. Ibanez, Florentina S. Dumlao Cagayan State University, Philippines
10:01–10:30	<b>Panel Q&amp;A</b>
10:31–10:45	<b>Health Break</b>
10:46–11:00	<b>Modular Screen Printing Assembly Workstation with Integrated Water Recycling and Renewable Energy System for Sustainable Small-Scale Production</b> Michelle C. Gonzales Laguna State Polytechnic University, Philippines
11:01–11:15	<b>GIS-Based Family Profiling Database with Hazard Indicator for Preemptive Evacuation</b> Ariel R. Manuel Occidental Mindoro State College, Philippines
11:16–11:30	<b>Resource Efficient Cleaner Production Strategies for Lighthouse Cooperative’s Chicharabao Industry</b> Mary Jane C. Calagui Cagayan State University, Philippines
11:31–11:45	<b>Optimization of an Electrostatic Mist Fertigation System</b> *Teofilo Jr U. Sevilla, Roger C. Montepio, Joie D. Cataytay, Alona Jualo Che-Tangyie, Roland R. Bayron University of Southeastern Philippines



11:46–12:15	Panel Q&A
12:16–13:15	Lunch Break
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16–13:30	<p><b>Development and Performance Evaluation of Batch Type Rotary Ginger Washer</b>            *May Ann Grace N. Cabiso, Rhealyn A. Quipo, Glaizalyn B. Lictawa, Mary Hazel Joy C. Ugot, Laymar P. Umhao, Adornado C. Vergara, Noel T. Hawihao, Jr., Loraine M. Kitong, Aarolanston M. Olli, Joylyn M. Apiit, Nover D. Pintasan  <i>Nueva Vizcaya State University, Philippines</i></p>
13:31–13:45	<p><b>Transformative Approaches in Athlete Recovery: The Integration of Robotics in Soft Tissue Injury Management</b>            Maria Luisa N. Francisco  <i>Polytechnic Univeristy of the Philippines</i></p>
13:46–14:00	<p><b>Optimizing Registry of Barangay Inhabitant (RBI) System Security Features Using User's Activity Risk Monitoring With Real-Time Response</b>            *Roland Ray A. Camus, Ronnie N. Del Rosario, Mon Christopher T. Gonzales  <i>Occidental Mindoro State College, Philippines</i></p>
14:01–14:15	<p><b>Cloud-Based Faculty Association Information and Decision Support System for DMMMSU-MLUC</b>            Denver . Novencido  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
14:16–14:30	Panel Q&A
14:31–15:00	Health Break
15:06–15:15	<p><b>Optimizing Deepfake Detection Using Deep Convolutional Neural Networks for Real-Time Detection</b>            Ezekiel O. Bacungan  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
15:16–15:30	<p><b>Aircraft Antenna Signal Propagation: A Learning Tool for Airbus A320 (Wired &amp; Wireless Communication)</b>            *Sean Lester P. Suniga, Neo Thomas A. Rodriguez, Kenneth B. Cabanilla, Adrian M. Bergonia, Christian S. Cabasa  <i>WCC Aeronautical and Technological College, Philippines</i></p>
15:31–15:45	<p><b>Vinecane Fermentifier: Sugarcane Vinegar Fermentation Progress Image Classifier Using Convolutional Neural Network</b>            *Jeffrey U. Rapanut, Eusebio L. Mique Jr.  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
15:46–16:00	<p><b>Design, Innovation, and Fabrication of Multiple Pass Rubber Milling Machine</b>            *Danilo V. Espera, Amihan, SM C., Amihan, J.R D.  <i>Palawan State University, Philippines</i></p>
16:01–16:15	Panel Q&A
<b>End of Session</b>	



# ENGINEERING

## Infrastructure and Environment, Advanced Technologies and Materials

Venue:

Conference Room, DMMSU Open University System

Moderator:

**Mr. Kevin G. Querol**

Don Mariano Marcos Memorial State University

Facilitator:

**Mr. Raymund A. Sanchez**

Don Mariano Marcos Memorial State University

Evaluators:

**Engr. Ismael D. Gurtiza**

Department of Science and Technology - Regional Office I

**Engr. Leonora V. Quarte**

Commission on Higher Education

**Engr. Jonathan J. Laroza**

Department of Trade and Industry - Regional Office I

### Day 2 | December 3, 2024 | Morning

07:30-08:30	Registration
08:31-09:00	Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation
	<b>Parallel Paper Presentations</b>
	<b>Infrastructure and Environment</b>
09:01-09:15	<b>Predicting the Unseen: A Shoreline Shift Analysis and Prediction Along Mayo Bay, Davao Oriental</b> Fillmore D. Masancay University of Southeastern Philippines
09:16-09:30	<b>Integrated Assessment of Tidal and Flood Control Scenarios on Inundation Using HEC-HMS And HEC-RAS</b> *Christine B. Mata, Nathaniel R. Alibuyog, Queenie Rose P. Calaranan , Ma. Gloann Liezel P. Longboy, Irene Joy G. Aceret, Tristan Janryll A. Mata Mariano Marcos State University, Philippines
09:31-09:45	<b>Characteristics and Acceptability of Mindoro Red Clay for the Manufacturing of Clay Tiles for Salt Beds in Occidental Mindoro</b> *Mary Glen L. Caugma, Michelle D. Enriquez Occidental Mindoro State College, Philippines
09:46-10:00	<b>Savaxay: An Assessment of a Traditional Ivatan House - The Case of Teresita Nobleza House in Brgy. Raele, Itbayat, Batanes</b> Ralph S. Reyes Cagayan State University, Philippines
10:01-10:30	Panel Q&A
10:31-10:45	Health Break
10:46-11:00	<b>Project Tanaw: 3D-Printed Urban Model with Geohazard Simulations Using Geovirtual Environment and AR Projection Mapping</b> *Raven C. Tabiongan, Lhimarose A. Tanseco, Catherine Joie B. Carcellar, Ma. Yvonne S. Chui, James R. Cortel, Sonny Boy R. Llema, Jr. Samar State University, Philippines
11:01-11:15	<b>Acceptability of Densified Plastics Waste for Trench Drain Design</b> *Ken Angelo M. Vivas, Mary Glen L. Caugma, Michelle D. Enriquez, Wilson I. Madayag III, April S. Bungalso, Charmaine De Guzman-Baniaga, Adrian Paul N. Abella Occidental Mindoro State College, Philippines



<b>11:16–11:30</b>	<b>Real-Time Detection and Heat Mapping of Potential Mosquito Breeding Sites Using Drones and YOLOv7 Tiny</b> Rosanna C. Ucat <i>University of Southeastern Philippines</i>
<b>11:31–11:45</b>	<b>Assessment of Road Infrastructure Facilities, Public Transport Barriers and Challenges for Persons with Disabilities in the Province of Cagayan</b> Ralph Angelo B. Estiller <i>Cagayan State University, Philippines</i>
<b>11:46–12:15</b>	<b>Panel Q&amp;A</b>
<b>12:16–13:15</b>	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
<b>Advanced Technologies and Materials</b>	
<b>13:16–13:30</b>	<b>Utilization of Clustered Linux Servers in Tarlac Agricultural University</b> Rodel C. Ramos <i>Tarlac Agricultural University, Philippines</i>
<b>13:31–13:45</b>	<b>Precision Document Transaction Type Identifier Using Machine Learning Techniques</b> *Jay Carlou C. Sabado, Sheena I. Sapuay-Guillen <i>City Government of San Fernando, La Union, Philippines</i>
<b>13:46–14:00</b>	<b>Design and Development of Etrademo’s Product Management System: Implementing Role-Based Access Control and Seller Analytics for Sablayan Locals</b> *Edgar C. Mamalayan, Ailah Cheska F. Fernandez, Joel R. Nicdao, Mae D. Baren <i>Occidental Mindoro State College, Philippines</i>
<b>14:01–14:15</b>	<b>Instantaneous Tunneling Time Within the Theory of Time-of-Arrival Operators</b> *Dean Alvin L. Pablico, Philip Caesar M. Flores, Eric A. Galapon <i>University of Northern Philippines</i>
<b>14:16–14:30</b>	<b>Development of “FLTCOIN”: A 3D Model Aircraft Simulator With Integrated Flight Controls And Instruments</b> *Geofrey Eric R. Estrada, Niña Angelei C. Corrales, Maria Alison D. Nicolas, Jericho O. Fernandez, Frances Jamie P. Chia, Jerome Neil R. Bilog, Lakesha L. Rivera, Joey Aldrich T. Almanza, Mackenzie Nicole D. Cuaresma, Rosalie Sheryll T. Rosales <i>WCC Aeronautical and Technological College, Philippines</i>
<b>14:31–15:00</b>	<b>Panel Q&amp;A</b>
<b>15:01–15:15</b>	<b>Health Break</b>
<b>End of Session</b>	





# AGRICULTURE

## Agricultural Products and Resources – A

Venue:

La Union Convention Center Main Hall

Moderator:

**Ms. Cathy B. Pastor**

Department of Agriculture – Regional Office I

Facilitator:

**Dr. Rochelle M. Verganio**

Don Mariano Marcos Memorial State University

Evaluators:

**Engr. Ermenio A. Budeng, Jr.**

Department of Environment and Natural Resources

**Dr. Mary Ruth O. Menor**

Ilocos Sur Polytechnic State College

**Dr. Yolanda B. Angeles**

Don Mariano Marcos Memorial State University

### Day 2 | December 3, 2024 | Morning

07:30–08:30	<b>Registration</b>
08:31–09:00	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
	<b>Parallel Paper Presentations</b>
09:01–09:15	<b>Harnessing Biofertilizers from Rabbit Biowastes for Crop Application</b> *Agustin B. Lunag, Ronald M. Gapuz, Praby A. Binwag, Kathleen Mae L. Nafuran, Michelle H. Bantawan, and Agusta P. Bukkid Nueva Vizcaya State University, Philippines
09:16–09:30	<b>Development of Charcoal Briquettes from Spent Oyster Mushroom Substrate: A Potential Alternative Solid Fuel Source</b> *Roberlyn V. Cabrera, Celina Nicole P. Mendoza, Meryl Jyle M. Purca Laguna State Polytechnic University, Philippines
09:31–09:45	<b>Gibberellic Acid and Ethylene Involvement in the Potassium Nitrate-Induced Release of Floral Bud Quiescence in ‘Carabao’ Mango (<i>Mangifera indica</i> L.)</b> Ulysses P. Besas University of Southeastern Philippines
09:46–10:00	<b>Variety–Organic Fertilizer Interaction on Rice Under Rainfed Condition</b> *Delia B. Ayangwa, Ferdinand Lacuesta Ganotice, Eduardo Taclawan Bagtan, Maribel Dallapus Carino, Luzviminda Cosidon Basnic Kalinga State University, Philippines
10:01–10:30	<b>Panel Q&amp;A</b>
10:36–10:45	<b>Health Break</b>
10:46–11:00	<b>Retracing Sustainable Fishing Practices of Marine Resources in the Coastal Communities of Antique</b> Gael J. Cabigunda-Gordon University of Antique, Philippines
11:01–11:15	<b>Market Trends and Demand Analysis for Seaweed Products in Occidental Mindoro: Implications for Business Development</b> *Maria Angelica B. Sunga, Fye Dunaway R. Asio, Jason G. Ramirez Occidental Mindoro State College, Philippines



11:16–11:30	<p><b>Blooming the Single Cell Protein of Spiral Algae Towards the Development of Enriched Aqua Feeds</b>            *Maria Elena T. Caguioa, Edwin P. Rico, Sotero M. Aban  <i>Tarlac Agricultural University, Philippines</i></p>
11:31–11:45	<p><b>Assessment of Green Mussel (<i>Perna viridis</i>) Shells as a Sizing Agent for Water-Resistant Packaging Paper from Jackfruit (<i>Artocarpus heterophyllus</i>) Rind</b>            *Maria Rossa Agatha E. Medel, Ilyzza Audrey B. Baldovino, Justine D. Salofrancia  <i>Laguna State Polytechnic University, Philippines</i></p>
11:46–12:15	<b>Panel Q&amp;A</b>
12:16–13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16–13:30	<p><b>Growth Performance of Free-Range Chickens Fed with Different Ratios of Corn Sprouts and Commercial Feeds</b>            Annamay C. Punzalan  <i>President Ramon Magsaysay State University, Philippines</i></p>
13:31–13:45	<p><b>Profitability of Broiler Production on Diets Containing Ground Peanut (<i>Arachis hypogaea</i>) Shell as a Potential Alternative Feed Ingredient</b>            *Analyn M. Moniño, Roger Y. Ibañez, Jr., Primitivo D. Moniño, Jr.  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
13:46–14:00	<p><b>The Struggling Natural Sea-Salt Production in the Province of Antique, Philippines</b>            *Susan F. Atienza, Razel Mae C. Cordero, Nikka Dianne B. Francisco, Remedios T. Diano, Jhane Pauline C. Ritaga  <i>University of Antique, Philippines</i></p>
14:01–14:15	<p><b>Mapping of Iloko Basi (Sugar Cane Wine) Production in Naguilian, La Union</b>            *Jayson O. Madayag, Priscilla S. Abellera  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
14:16–14:30	<p><b>Development of Okara Based Gluten-Less Food Products</b>            *Kwonnie R. De Jesus, Danna G. Dionio, Grashielle V. Barrientos, Mary Ann C. Roque, Dixie C. Castro  <i>Occidental Mindoro State College, Philippines</i></p>
14:31–15:00	<b>Panel Q&amp;A</b>
15:01–15:15	<b>Health Break</b>
15:16–15:30	<p><b>Product Development of Underutilized Mabolo (<i>Diospyros blancoi</i>) Fruit</b>            Josefina R. Arellano  <i>University of Eastern Philippines</i></p>
15:31–15:45	<p><b>Sensory Characteristics of Muscovado Enhanced with Varying Levels of Turmeric</b>            Johny P. Alvarez  <i>Cagayan State University, Philippines</i></p>
15:46–16:00	<p><b>Development of Bucarillo Con Oyster Mushroom</b>            Maritess R. Raboy  <i>University of Northern Philippines</i></p>
16:01–16:15	<p><b>Sensory Evaluation of Apayao Black Rice (<i>Oryza sativa L.</i>) - Moringa (<i>Moringa oleifera</i>) Coffee</b>            Percival O. Corpuz, Menardo D. Villanueva, Nathaniel T. Llamelo, Leandro B. Alla  <i>Apayao State College, Philippines</i></p>
16:16–16:30	<p><b>Development of Powdered Robusta Coffee (<i>Coffea canephora</i>) Pericarp</b>            Yumiko P. Galla  <i>Department of Education - Regional Office I, Philippines</i></p>



16:31-17:00	<b>Panel Q&amp;A</b>
17:01-17:15	<b>Health Break</b>
17:16-17:30	<b>Sensory and Quality Assessment of Squash (<i>Cucurbita maxima</i>) Pulp Fried Noodles</b> Mark Gregory V. Asejo, Althea A. Manuel, Ronald A. Espada <i>Cagayan State University, Philippines</i>
17:31-17:45	<b>Consumer Demand Analysis of Ytawes Districts Dairy Market: A Review</b> Diana O. Lim, Monaliza R. Nardo, Florante G. Tagudan <i>Cagayan State University, Philippines</i>
17:46-18:00	<b>Bio-Fertilizer Inoculation Effects of Nitrogen Application on Different Phenological Stages of Corn (<i>Zea mays L.</i>)</b> Mark Allan L. Flores <i>Laguna State Polytechnic University, Philippines</i>
18:01-18:15	<b>Development of Azuela (Innovation of Pawa)</b> Marigold M. Soriano, Marigold M. Soriano, Jennifer B. Ibanez, Marygrace Vigilia, Cherrybel D. Gaspar <i>Cagayan State University, Philippines</i>
18:15-18:30	<b>Innovative Biopesticide with Bio- Nanoparticles Derived from Entomopathogenic Fungi For Citrus Rind Bored Control in Calamansi and Pomelo</b> Jonar I. Yago, Dominic Q. Cardoniga, Pepito G. Alberto, Rodney T. Cajimat, Marnellie R. Pini <i>Nueva Vizcaya State University, Philippines</i>
18:30-19:00	<b>Panel Q&amp;A</b>
19:00-20:00	<b>Dinner</b>
<b>End of Session</b>	



# AGRICULTURE

## Agricultural Products and Resources – B

Venue:  
Long Gallery (North), La Union Convention Center

Moderator:  
**Mr. Russell F. Deleña**  
Don Mariano Marcos Memorial State University

Facilitator:  
**Dr. Lichelyn M. Nasungan**  
Mountain Province State University

Evaluators:  
**Dr. Armando D. Diga**  
Ilocos Sur Polytechnic State College  
**Dr. JP Roma D. Duque**  
Provincial Government of La Union – Office of the Provincial Agriculturist  
**Dr. Agnes C. Perey**  
Tarlac Agricultural University

### Day 2 | December 3, 2024 | Morning

<b>07:30–08:30</b>	<b>Registration</b>
<b>08:31–09:00</b>	<b>Prayer National Anthem Acknowledgment of Participants Introduction of Moderator, Facilitator, and Panel of Evaluators Mechanics of Presentation</b>
	<b>Parallel Paper Presentations</b>
<b>09:01–09:15</b>	<b>Spatial Distribution and Density of Butterfly at Different Land Use Type at USEP, Mabini Davao De Oro Using Geographic Information System (GIS)</b> Lira May A. Sibongga, Vic Owen B. Baguhin, Catherine C. Quisado, Leo E. Ong University of Southeastern Philippines
<b>09:16–09:30</b>	<b>Potential of Golden Apple Snail (<i>Pomacea Canaliculata</i>) Meat in Sausage</b> Joyce D. Cuyangoan Mountain Province State University, Philippines
<b>09:31–09:45</b>	<b>Development of Sweet and Sour Black Garlic (<i>Allium sativum L.</i>) Sauce for Noodles</b> Buchard B. Cutin Mariano Marcos State University, Philippines
<b>09:46–10:00</b>	<b>Physico-Chemical Qualities, Nutrition Facts and Shelf-Life Evaluation of the Developed Cookies Flavored with Turmeric (<i>Curcuma longa</i>)</b> Christine Joy I. Ballo, Norma B. Muyot, Grashielle V. Barrientos Occidental Mindoro State College, Philippines
<b>10:01–10:30</b>	<b>Panel Q&amp;A</b>
<b>10:31–10:45</b>	<b>Health Break</b>
<b>10:46–11:00</b>	<b>Sustainable Cherry Tomato Production Through Aeroponics and Aquaponic Water Integration</b> Glaizalyn B. Lictawa Nueva Vizcaya State University, Philippines
<b>11:01–11:15</b>	<b>Antibacterial Activity of Red Ginger's Callus Compare to its Rhizomes</b> Dyah A. Widyastuti Universitas PGRI Semarang, Indonesia



11:16–11:30	<p><b>The Effects of Paragis (<i>Eleusine indica</i>) Leaf Decoction on the Growth Performance of Broilers (<i>Gallus gallus domesticus</i>)</b>            Carla M. Bagunoc  <i>Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology, Philippines</i></p>
11:31–11:45	<p><b>Market Analysis for Mushroom Bread Spread Utilizing a Diverse Range of Mushroom Varieties</b>            Wenceslao M. Paguia Jr.  <i>Occidental Mindoro State College, Philippines</i></p>
11:46–12:15	<b>Panel Q&amp;A</b>
12:16–13:15	<b>Lunch Break</b>
<b>Day 2   December 3, 2024   Afternoon</b>	
13:16–13:30	<p><b>Eco-Charcoal: Efficacy of the Leaf Litter and Rice Hull (<i>Oryza sativa</i>) as Charcoal Briquettes</b>            *Rizza Mae E. Anduyan, Sharlaine Mae A. Sanoy, Kristine Joy Labrague  <i>University of Antique, Philippines</i></p>
13:31–13:45	<p><b>Method for Producing Malunggay-Infused Squash Catsup</b>            Julieta V. Alipio  <i>Laguna State Polytechnic University, Philippines</i></p>
13:46–14:00	<p><b>Effective Microorganisms (EMS) in Organic Fertilizer Enhanced the Production of Eggplant Watered with Laundry Waste: Exploiting EMS Bioremediation and Growth Promoting Potentials</b>            Jomar L. Aban  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
14:01–14:15	<p><b>Development and Market Potential of Mushroom Loaf Bread in Siniloan, Laguna</b>            *Charmyne D. Sanglay, Wallem Acaylar Desquitado  <i>Laguna State Polytechnic University, Philippines</i></p>
14:16–14:30	<p><b>Development and Optimization of an Arduino-Based Aeroponics System with Automated pH Level Monitoring for Sustainable Crop Cultivation</b>            *Iratut Glenn A. Cruz, Crizaljay V. Villegas, Donnell V. Tongoy, Lester A. Dela Vega  <i>President Ramon Magsaysay State University, Philippines</i></p>
14:31–15:00	<b>Panel Q&amp;A</b>
15:01–15:15	<b>Health Break</b>
15:16–15:30	<p><b>Bioefficacy Testing of Indigenous Plant-Based Biopesticide Against Green Leafhopper (GLH) of Rice</b>            *Diosa G. Alasaas, Angelina T. Gonzales, Ricardo Casauay, Mayflor Compra  <i>Cagayan State University, Philippines</i></p>
15:31–15:45	<p><b>In Vitro Antimicrobial Analysis of Green Synthesized Silver Nanoparticles Using <i>Pontederia Crassipes</i> Extract Against Foodborne Pathogens</b>            *Mary Rhovian B. Bacani, Nathaniel Oswald L. Minas, Qianna Luzel Reynoso, Alyzza Pearl Y. Besarra  <i>President Ramon Magsaysay State University, Philippines</i></p>
15:46–16:00	<p><b>Flowering Habit and Production of Dragon Fruit (<i>Hylocereus polyrhizus</i>) as Affected by Daylength and Flower Induction</b>            Grace T. Sarmiento  <i>University of Eastern Philippines</i></p>
16:01–16:15	<p><b>Mycelial Growth With Nutrient Supplementation in Pure Culture and Yield, N-Analysis and Income Potential of Paddy Straw Mushroom (<i>Volvariella volvacea</i>) with Different Substrates</b>            Jayson N. Olayta  <i>Laguna State Polytechnic University, Philippines</i></p>
16:15–16:30	<p><b>Microbial Profiling of Commercial Dried Fish from Santo Tomas, La Union, Philippines</b>            Glennadi R. Rualo  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>



<b>16:30-17:00</b>	<b>Panel Q&amp;A</b>
<b>17:00-17:15</b>	<b>Health Break</b>
<b>17:15-17:30</b>	<p><b>Integrated Nutrient Management for the Three Coffee Types Intercropped with Peanut Production</b>            *Maribel L. Fernandez, Antonio C. Cabalbag, Richard T. Rosqueta, Ronel A. Collado  <i>Cagayan State University, Philippines</i></p>
<b>17:30-17:45</b>	<p><b>Biopesticides Residue and Agronomic Characteristics of Green Corn (<i>Zea mays</i>) with Different Fertilizer Materials</b>            Arvin B. Taruma  <i>Laguna State Polytechnic University, Philippines</i></p>
<b>17:45-18:00</b>	<p><b>Optimization of Maltodextrin as Bulking Agent in Mango (<i>Mangifera indica</i>) Fruit Bar</b>            Macluven T. Gonzales  <i>Cagayan State University, Philippines</i></p>
<b>18:00-18:15</b>	<p><b>Yield Performance of Promising DMMMSU-SRDI Developed Mulberry Genotypes as Affected by Distance of Planting and Pruning Heights in La Union</b>            *Jarson P. Libunao, Mario B. Sampaga., Merlita A. Dacayanan, Crestilyn A. Damasco, Anilyn V. Sagun  <i>Don Mariano Marcos Memorial State University, Philippines</i></p>
<b>18:15-18:45</b>	<b>Panel Q&amp;A</b>
<b>18:45-19:45</b>	<b>Dinner</b>
<b>End of Session</b>	



# AGRICULTURE

## Climate and Environmental Studies

Venue:  
Long Gallery (South), La Union Convention Center

Moderator:  
**Ms. Ma. Cezanne D. Dimaculangan**  
Laguna State Polytechnic University

Facilitator:  
**Dr. Maida O. Sarmiento**  
Laguna State Polytechnic University

Evaluators:  
**Dr. Brent Gregg D. Gomuad**  
Mountain Province State University  
**Dr. Cesar G. Della**  
Pangasinan State University  
**Dr. Ariel M. Alcones**  
Apayao State College

### Day 2 | December 3, 2024 | Morning

07:30-08:30	<b>Registration</b>
08:31-09:00	<b>Prayer</b> <b>National Anthem</b> <b>Acknowledgment of Participants</b> <b>Introduction of Moderator, Facilitator, and Panel of Evaluators</b> <b>Mechanics of Presentation</b>
	<b>Parallel Paper Presentations</b>
	<b>Climate and Environmental Studies</b>
09:01-09:15	<b>Beyond the Hive: A Holistic Landscape Physiology Approach to Enhancing the Health of Stingless Bees (<i>Tetragonula biroi</i>) and Sustainable Beekeeping Practices in Bacnotan, La Union</b> *Frederick A. Delavin, Nappy L. Navarra <i>University of the Philippines</i>
09:16-09:30	<b>A GIS-Based Soil-Landscape Modeling Approach for Predicting Soils in Undifferentiated Areas of the Philippines</b> *Dernie T. Olguera, Rodrigo B. Badayos, Pearl B. Sanchez, Jocelyn D. Labios, Decibel V. Faustino-Eslava <i>University of Southeastern Philippines</i>
09:31-09:45	<b>Optimizing Agricultural Sustainability: Integrating Solar-Powered Drip Irrigation in the Onion-Corn Cropping System for Climate-Resilient Farming in Magsaysay, Occidental Mindoro</b> *Mary Yole Apple Declaro-Ruedas, Emmanuel G. Ruedas <i>Occidental Mindoro State College, Philippines</i>
09:46-10:00	<b>Sustainable Urban Street Tree Landscape Through Species Diversification and Beneficial Mycorrhizal Association</b> Arjay B. Bedana <i>Kalinga State University, Philippines</i>
10:01-10:30	<b>Panel Q&amp;A</b>
10:31-10:45	<b>Health Break</b>
10:46-11:00	<b>Estimating Crop Evapotranspiration of Rice (<i>Oryza sativa L.</i>) by Normalized Difference Vegetation Index</b> *Mary Hazel Joy C. Ugot, Adornado C. Vergara, Glaizalyn B. Lictawa, May Ann Grace N. Cabiso, Laymar P. Umhao, Warren Pine <i>Nueva Vizcaya State University, Philippines</i>



<b>11:01-11:15</b>	<b>Willingness to Pay for a Restored and Protected Watershed: A Countryside Evidence</b> *Sherrie Ann C. Labid, Julie Ann M. Quilatan, and Lovely Rose A. Bolante <i>Samar State University, Philippines</i>
<b>11:16-11:30</b>	<b>Charcool Project: Assessing Market Viability and Community Support on Sustainable Agricultural Waste Management and Utilization</b> *Celeste N. Caspe, Rosalie Sheryll T. Rosales, Dannah Valerie J. Dulnuan, Roger A. Martinez, Meriam A. Solomon <i>WCC Aeronautical and Technological College, Philippines</i>
<b>11:31-11:45</b>	<b>Relationship of Deforestation and Agricultural Yield in Davao Region: An Application of Remote Sensing and Spatial Analysis</b> Mark John S. Pag-Alaman <i>University of Southeastern Philippines</i>
<b>11:46-12:15</b>	<b>Panel Q&amp;A</b>
<b>12:16-13:15</b>	<b>Lunch Break</b>
<b>End of Session</b>	





# AGRICULTURE

## Knowledge and Development

Venue:  
Long Gallery (South), La Union Convention Center

Moderator:

**Ms. Ma. Cezanne D. Dimaculangan**  
Laguna State Polytechnic University

Facilitator:

**Dr. Maida O. Sarmiento**  
Laguna State Polytechnic University

Evaluators:

**Dr. Cesar G. Della**  
Pangasinan State University  
**Dr. Brent Gregg D. Gomuad**  
Mountain Province State University  
**Dr. Ronaldo G. Orpiano**  
Occidental Mindoro State College

Day 2 | December 3, 2024 | Afternoon

### Parallel Paper Presentations

#### Knowledge and Development

13:16-13:30	<b>Impact of Bioprime Nano Fertilizer on Growth Stages of Robusta Coffee in Kalinga, Philippines: An Application Trial</b> *Jefferson A. Himson, Ernesto T. Miguel, Eduardo T. Bagtang, Bean Mead, Bernard Canapi, Dennis Macaraniag, Randy Ruma <i>Kalinga State University, Philippines</i>
13:31-13:45	<b>Assessment and Characterization of Soil Profiles in PRMSU, Botolan Campus: Basis for Agricultural Sustainability and Land Use</b> *Jocelyn B. Angeles, Marven S. Lanuza, Sidney Shaine N. Basalio, Stephanie Kaye A. Ledina, Jo-Zenia S. Merete <i>President Ramon Magsaysay State University, Philippines</i>
13:46-14:00	<b>Response of Ginger (<i>Zingiber officinale</i>) on the Duration of Irrigation</b> Genaro D. Omo <i>Don Mariano Marcos Memorial State University, Philippines</i>
14:01-14:15	<b>Assessing Glutathione's Potential in Boosting Purple Yam Yield: A Baseline Study Focusing on Root Growth</b> *Jenele Princess V. Mallari, Francis Jimmelyn Abdon, Marjorie E. Eben, Roi B. Mendigorin <i>President Ramon Magsaysay State University</i>
14:16-14:30	<b>Laying Performance of Japanese Quail Fed with Varying Levels of Ensiled Corncobs as Partial Replacement to Soybean Meal</b> *John Alvin A. Concepcion, Edmharlene U. Concepcion <i>Apayao State College, Philippines</i>
14:31-15:00	<b>Panel Q&amp;A</b>
15:01-15:15	<b>Health Break</b>
15:16-15:30	<b>Fate of the Fits: The Users Case Perspective</b> Johanna S. Mariano <i>Local Government Unit of Lupao, Nueva Ecija, Philippines</i>
15:31-15:45	<b>Project Mapulon: Mapping Agricultural Production Using Locational Optimization and Spatial Data Analytics</b> *Khylla Marie T. Lauzon, Raven C. Tabiongan, Merry Chris D. Margarico, Mari Pearl Rosario D. Alegria <i>Samar State University, Philippines</i>



15:46-16:00	<p><b>Exuviae Based DNA Extraction for Molecular Identification of the Fall Armyworm, <i>Spodoptera Frugiperda</i> (<i>Lepidoptera noctuidae</i>)</b></p> <p>*Gerald M. Duza, Barbara L. Caoili <i>Cagayan State University, Philippines</i></p>
16:01-16:15	<p><b>Assessing Farmer Knowledge and Practices in Managing Key Pests and Diseases of Sweetpotato (<i>Ipomoea batatas</i> L.) in Paniqui, Tarlac</b></p> <p>*Aira . Waje, Agnes C. Perey, Stefan Daniel B. Fuentes <i>Tarlac Agricultural University, Philippines</i></p>
16:16-16:30	<p><b>Exploring Women’s Participation in Mangrove Crab Aquaculture: The Case of Farmers’ Wives in Capalonga, Camarines Norte, Philippines</b></p> <p>John Christopher C. Nolial <i>Camarines Norte State College, Philippines</i></p>
16:31-17:00	<b>Panel Q&amp;A</b>
17:01-17:15	<b>Health Break</b>
17:16-17:30	<p><b>PSAU IP-TBM Phase II: Patent Mining on Selected ISP as an Approach in Advancing Industry-Based S&amp;T for Milkfish</b></p> <p>Divine Reine S. Aquino <i>Pampanga State Agricultural University, Philippines</i></p>
17:31-17:45	<p><b>Performance Evaluation of Agricultural Extension Workers in Providing Extension Services to Rice Farmers in Zambales, Philippines</b></p> <p>*Edwin E. Elane, Maria Excelsis M. Orden, Rocelyn M. Barroga <i>President Ramon Magsaysay State University, Philippines</i></p>
17:46-18:00	<p><b>Technology Business Incubator for Agriculture and Fishery Commodities of Pampanga State Agricultural University</b></p> <p>*Walter L. Pacunana, Divine Reine S. Aquino, Jacob Anderson C. Sanchez, Chonnie Cholla R. David, Anne Gellie T. Dimabuyu <i>Pampanga State Agricultural University, Philippines</i></p>
18:01-18:15	<p><b>Rehabilitation and Adaptability Trials of Lakatan and Saba Varieties of Banana in the Province of Cagayan</b></p> <p>*Boyet C. Pattung, Ricardo B. Casauay, Avelina T. Antonio, Lyle Gavien L. Alcomendras <i>Cagayan State University, Philippines</i></p>
18:16-18:30	<p><b>Mychorizal Fungi – A Sustainable Biofertilizer: Its Effect on Roots, Agronomic Traits and Yield of Selected Rainfed Rice (<i>Oryza sativa</i>) Genotypes</b></p> <p>*Neil Nemesio A. Baliuag, Lizette C. Agtalao, Natazzah Faith Andam, Carmina B. Wacal <i>Cagayan State University, Philippines</i></p>
18:31-19:00	<b>Panel Q&amp;A</b>
19:0-20:00	<b>Dinner</b>
<b>End of Session</b>	



# DIGITAL POSTER EVALUATION

Venue:

*La Union Convention Center Main Hall*

Facilitator:

**Engr. Rufo A. Baro**

*Don Mariano Marcos Memorial State University*

Evaluators:

**Dr. Raquel O. Salingay**

*Central Mindanao University*

**Dr. Bernardo D. Lamadrid**

*Don Mariano Marcos Memorial State University*

**Prof. Marylen D. Rodriguez**

*Don Mariano Marcos Memorial State University*

**Engr. Michelle Enriquez**

*Occidental Mindoro State College*

**Dr. Vanessa C. Badua**

*Provincial Government of La Union - Office of the Provincial Agriculturist*

**Day 2 | December 3, 2024 | Morning**

**Digital Poster Entries**

## **Evaluating Tidal Effects on Flood Inundation and the Role of Coastal Defense Structures During Extreme Weather Events**

\*Christine B. Mata, Nathaniel R. Alibuyog, Queenie Rose P. Calaranan ,  
Ma. Gloann Liezel P. Longboy, Irene Joy G. Aceret, Tristan Janryll A. Mata  
*Mariano Marcos State University, Philippines*

## **Responding to the Challenges of Teaching Nomenclature GF Compounds Through Generative Artificial Intelligence Instructional Material (GAIM)**

\*Jovela I. Peñaojas, Johanne Estela Mari Cobrado, Alex Jene B. Azucena  
Anna Marie N. Morilla  
*Southern Luzon State University, Philippines*

## **Enhancing Scientific Writing Skills in the Matatag Curriculum: A Grounded Investigation into Learners' Topic Generation**

\*Vi Briza E. Guarin, Jayson O. Madayag  
*Don Mariano Marcos Memorial State University, Philippines*

## **Effectiveness of Localized Multimedia-Based Instruction in Enhancing Critical Thinking Skills of Grade 4 Pupils in Social Studies**

Sherwin B. Domingo  
*Department of Education - Regional Office I, Philippines*

## **Incidence of At-Risk Students in MPSPC: Profiling and Basis for Remediation**

Obie Noe B. Madalang  
*Mountain Province State University, Philippines*

## **Development of A Microcontroller-Based Automated Pest Control Spraying System**

Bless G. Ampuan  
*University of Eastern Philippines,*

## **Beyond The Hive: A Holistic Landscape Physiology Approach to Enhancing the Health of Stingless Bees (*Tetragonula biroi*) and Sustainable Beekeeping Practices in Bacnotan, La Union**

\*Frederick A. Delavin, Nappy L. Navarra  
*University of the Philippines*

## **Resource Efficient Cleaner Production Strategies for Lighthouse Cooperative's Chicharabao Industry**

Mary Jane C. Calagui  
*Cagayan State University, Philippines*

## **Assessment and Characterization of Soil Profiles in PRMSU, Botolan Campus: Basis for Agricultural Sustainability and Land Use Planning**

\*Jocelyn B. Angeles, Marven S. Lanuza, Sidney Shaine N. Basalio, Stephanie Kaye A. Ledina, Jo-Zenia S. Merete  
*President Ramon Magsaysay State University, Philippines*



<p><b>Tertiary Education Subsidy (TES) Grantees' Management of Their TES Allowance</b> Somerson C. Kis-Ing <i>Mountain Province State University, Philippines</i></p>
<p><b>Development of Charcoal Briquettes From Spent Oyster Mushroom Substrate: A Potential Alternative Solid Fuel Source</b> *Roberlyn V. Cabrera, Celina Nicole P. Mendoza, Meryl Jyle M. Purca <i>Laguna State Polytechnic University, Philippines</i></p>
<p><b>Exuviae-Based DNA Extraction for Molecular Identification of the Fall Armyworm, Spodoptera Frugiperda (Lepidoptera: Noctuidae)</b> *Gerald M. Duza, Barbara L. Caoili <i>Cagayan State University, Philippines</i></p>
<p><b>Effectiveness of the Basic Education Remediation Kits on Improving the Reading Skills of Novice Readers</b> Stephanie Angela V. Aguirre <i>Laguna State Polytechnic University, Philippines</i></p>
<p><b>Market Sustainability: Online Marketing Platforms Adopted by "Plantitas" and "Plantitos" for a Blooming Business</b> *Eugine S. Dela Cruz, Perlita R. Israel <i>Aklan State University, Philippines</i></p>
<p><b>Perceived Competence of Illustrators: Input for Construction of Illustrators' Competency Assessment Tool</b> *Daryl D. Urbino, Donald A. Esposo <i>University of Antique, Philippines</i></p>
<p><b>Comparative Study Between Conventional and Converted Electric Tricycle</b> *Michael B. Orpilla, Ian C. Pagulayan, Arthur G. Ibanez, Florentina S. Dumlao <i>Cagayan State University, Philippines</i></p>
<p><b>Enhancing the Conceptual Understanding of Grade 8 Students in Ancient Greek Civilization Through Virtual Realia</b> Junalyn V. Refuerzo <i>Department of Education - Regional Office I, Philippines</i></p>
<p><b>Pre-Service Teachers' Perceptions And Usage Patterns Of Generative Ai In Lesson Planning</b> *Ruth T. Romero, Ariel N. Fallaria, Ma. Imelda C. Rayton <i>Occidental Mindoro State College, Philippines</i></p>
<p><b>PSAU IP-TBM Phase Ii: Patent Mining on Selected ISP as an Approach in Advancing Industry-Based S&amp;T for Milkfish</b> *Divine Reine S. Aquino, Walter L. Pacunana, Jacob Anderson C. Sanchez, Chonnie Cholla R. David, Anne Gellie T. Dimabuyu <i>Pampanga State Agricultural University, Philippines</i></p>
<p><b>Academic Self-Efficacy and Academic Performance: A Correlational Analysis of Senior High School Students in Northern Samar, Philippines</b> Angela Dominique T. Lomagdong <i>University of Eastern Philippines</i></p>
<p><b>The Use of ChatGPT on Senior High School Students' Academic Writing Skills: A Mixed Method Study</b> Aveliza T. Basibas <i>University of Eastern Philippines</i></p>
<p><b>Transformative Approaches In Athlete Recovery: The Integration of Robotics In Soft Tissue Injury Management</b> Maria Luisa N. Francisco <i>Polytechnic University of the Philippines</i></p>
<p><b>Physico-Chemical Qualities, Nutrition Facts and Shelf-Life Evaluation of the Developed Cookies Flavored with Turmeric (<i>Curcuma longa</i>)</b> *Christine Joy I. Ballo, Norma B. Muyot, Grashielle V. Barrientos <i>Occidental Mindoro State College, Philippines</i></p>
<p><b>Improving Learners' Procedural Fluency in Hypothesis Testing Through Peer-Guided Study Approach</b> Queeny Joyce F. Sebastian <i>Department of Education - Regional Office I, Philippines</i></p>



**Telling Tales of Taste: A Study on the Language, Imagery, and Cultural References of Street Food Vendors Around the Hinterlands of Cordillera**

\* Jonnelle D. Fagsao, Julie Grace M. Docallas, Edgar G. Cue  
*Mountain Province State University, Philippines*

**Agri-Fishery Programs of Technical Education and Skills Development Authority (TESDA) Schools and Training Centers: Basis for a Sustainability Plan**

Helen S. Aqui  
*Technical Education and Skills Development Authority Regional Office 1, Philippines*

**The Use of 3/2/1 Scheme in Improving the Reading Comprehension of Grade 12 HUMSS Students**

Rodyssa E. Pagdanganan  
*Department of Education - Regional Office 1, Philippines*

**Enhancing the Listening Comprehension of Grade Four Learners Through the TQLR Technique**

\*Sinamar V. Bucao, Janet Y. Abella, Fenny I. Abadilla  
*Department of Education - Regional Office 1, Philippines*

**Optimizing Registry Of Barangay Inhabitant (RBI) System Security Features Using User's Activity Risk Monitoring with Real-Time Response**

\*Roland Ray A. Camus, Ronnie N. Del Rosario, Mon Christopher T. Gonzales  
*Occidental Mindoro State College, Philippines*

**Technology Business Incubator for Agriculture and Fishery Commodities of Pampanga State Agricultural University**

\*Walter L. Pacunana, Divine Reine S. Aquino, Jacob Anderson C. Sanchez, Chonnie Cholla R. David, Anne Gellie T. Dimabuy  
*Pampanga State Agricultural University, Philippines*

**Project Mapulon: Mapping Agricultural Production Using Locational Optimization and Spatial Data Analytics**

\*Khyla Marie T. Lauzon, Raven C. Tabiongan, Merry Chris D. Margarico, Mari Pearl Rosario D. Alegria  
*Samar State University, Philippines*

**Real-Time Detection and Heat Mapping of Potential Mosquito Breeding Sites Using Drone and YOLOv7 Tiny**

Rosanna C. Ucat  
*University of Southeastern Philippines*

**Development of Powdered Robusta Coffee (*Coffea canephora*) Pericarp**

Yumiko P. Galla  
*Department of Education - Regional Office 1, Philippines*

**Optimization of an Electrostatic Mist Fertigation System**

\*Teofilo Jr U. Sevilla, Roger C. Montepio, Joie D. Cataytay, Alona Jualo Che-Tangyie, Roland R. Bayron  
*University of Southeastern Philippines*

**Potential of Golden Apple Snail Sausage**

Joyce D. Cuyangoan  
*Mountain Province State University, Philippines*

**Development of Sweet and Sour Black Garlic (*Allium sativum L.*) Sauce for Noodles**

Buchard B. Cutin  
*Mariano Marcos State University, Philippines*

**Traversing the Questions: Charting New Horizons in Item Exploration via Lumen X Machina**

\*Lalin A. Tuguic, Jennifer Bactad, Mary Joy Garming  
*Kalinga State University, Philippines*

**Exploring Difficulties of Tëduray Learners in English Competencies Toward the Development and Validation of Culture-Based Learning Material**

Jaime Boy U. Ngag Jr.  
*South Cotabato State College, Philippines*

**End of Poster Evaluation**



ORGANIZED BY:



IN PARTNERSHIP WITH:

