

## **2<sup>nd</sup> CEA RESEARCH COLLOQUIUM**

### **(By: Engr. Alma V. Tanguangco)**

The CEA conducted the 2<sup>nd</sup> Research Colloquium last December 7, 2020 via Google Meet. The activity was stated at 8: 00 a.m. with an invocation led by Engr. Reynaldo Gomez Jr. followed by the audio visual presentation of the Philippine National Anthem. Dr. Robin B. Dimla, Director for Research and Development Services Office, delivered the opening remarks. Then, Engr. Jun Flores, Dean of the College of Engineering and Architecture shared an inspiring message. While, Engr. May C. Layson, moderator of the event, stated the House Rules, Colloquium Mechanics and Awards Criteria. The panel of experts was introduced by Engr. Armie C. Tolentino, CEA Research Coordinator. The panel of the event includes: Engr. Patrick Sta. Maria (ME Specialist), Arch. Harold Magpayo (Architecture Specialist) and Dr. Aileen de Leon (Information Technology Specialist).

There were eighteen (18) papers presented during the event. These were as follows:

1. THE INVISIBLE CITY: "Reimagining Urban Cemeteries for Sustainable Future"  
Ariel R. Guiao, Chinica G. Parungao, Jonathan P. Temporada, Jerone T. Aga
2. SHELTER: A Gentrifying Container Living for ISF in City of San Fernando Pampanga  
Yenzie Y. Cruz, Darriel M. Manansala, Brayon L. Martin, Jerone T. Aga
3. MAGALANG MEDICAL SPECIALIST: A Bio-climatic Architecture in a Level 3 Hospital Specialized in Heart Diseases  
M. Jimenez, C.E.Santos, G.Olete, Darlene Cunanan
4. Proposed Design of a Transportable Foldable Bridge  
Joshua Renz S. Rosendo, Sherine Apple B. Hernandez, Zyra R. Guevarra, Alfie P. Dimitui, Keith Gabriel T. Dela Peña, Renz Gian S. Cruz, Jeremy L. Salas, Miriam B. Villanueva
5. Proposed Solar Powered Water Pumping System in Concepcion, Lubao, Pampanga  
Lourder Mae L. Arceo, Cyrille Kayser M. Carlos, Jianne Karla G Cayanan, Jonna May B. Mandap, Lorenz Jejomar A. Manio, Decee Romina M. Santillan, Marcus Daniel M. Yalung, Miriam B. Villanueva
6. ALUMINUM AND PHENOLIC FORMWORK: AN INNOVATION IN FORMWORK SYSTEM  
Joana Marie B. Caliwag, Jermaine P. Aquino, Jayson M. Bequillo, John Michael C. Dizon, Mikee G. Ocampo, And Micka S. Pineda, Inla Diana C. Salonga
7. Development of a Tile Made from Waste Rubber Tires that Generates Electricity from Human Footsteps  
Vince Piolo D. David, Lance Juther T. Bernardo, John Roy D. Anicete, Jerwin Kyle G. Pacheco, Rona D. Mendoza, Christine V. Morales, Miriam B. Villanueva
8. Investigation of Tires and Plastic (TAP) Tiles

Lawrence P. Acovera, Jean P. De Jesus, Leslie Y. Manabat, Constantino B. Mandap Jr., Jerico M. Mendoza, and Karen Joy M. Valencia

9. Modifying and Evaluating a 2HP Rotary Phase Converter for AC Machinery Laboratory Purposes  
Geriel C. Gonzales, Blessed B. Peña, RJay L. Manalo, Kristian Al S. Sanchez, Armie C. Tolentino, Melchor S. Henson
- 10.3 Phase Squirrel Cage Induction Motor Torque and Speed Performance Graph by Capacitor Bank Calculator  
Nicole Anne B. Ballesteros, Engel Justine O. Castillo, Carl David P. Cariño, Remy Gerry D. Puno, Melchor S. Henson, Genesis C. Tiria
11. Evaluation of the Reversible Motion Gear of a Swing Set for Generator  
Aldrian V. Balagtas, Patrick Dennis R. Bartolome, Edward Christian Q. Santos, Janeniel M. Yco, Armie C. Tolentino, Melchor S. Henson, Patrick Sta. Maria
12. Solar Power for Auxiliary loads of Bantay Dagat Boat in Sta. Tereza 2nd Lubao, Pampanga  
Lorenz P. Panlaqui, Jave M. Siniligan, John Paul J. Teodoro, Patrick A. Quiroz, Jerald D. Talana, Melchor S. Henson, Marty G. Alfonso
13. Design and Development of Crop Water Stress Index (CWSI) Meter for Zea Mays L.  
Michael Angelo S. Adriano, Rafael C. Aquino, Christian Jello T. Barrion, Allein Franz C. Constantino, Jillmer M. Daquiz, Acer M. Laguinto, Mark James B. Layson, May C. Layson
14. Development of Advance Power Supply System trainer with android application based Wireless waveform display  
Christine Joy T. Barnacha, Kristhan De Jesus, Justin D. Escoto, John Lloyd S. Espiso, Joyce Camille D. Fauni, Rogileen Anne S. Simbulan and Allan James M. Yco
15. Android-Based Application for Monitoring of Automated Indoor Lowpressure Aeroponics System for Lycopersicum Esculentum (Philippine Tomato)  
Ervin Patrick U. Cui, Mariella O. Dela Cruz, Aira Cannille C. Lalic, Jonalyn V. Napili, Jan M. Sampang, Nika Mae P. Tongol
16. The Development of Raspberry Pi-Based Lane Departure and Forward Collision Warning Systems using Image Processing with OpenCV: An Experimental Research  
Charito S. Amio, Gianne Paula T. Armas, Paul Berie S. Casupanan, Bryan Mico M. De Jesus, Kaironiza A. Manda, Calvin Louie J. Nunag, Jayvee C. Sawal, Christian C. Pineda
17. Product Development of Bond Paper through Value Engineering: "A paper made of Kan Grass"  
Thea Del Mercado, Reynalyn Basa, Jagger Sison, Jena Mae Lumanlan, Jocel Mae Tan, Cedrick Jinn dela Cruz
18. Unpowered Mechanical Gate  
Jerome S. Mariano, Jordun Hill S. Ronquillo, Christine T. Barinque, Karen S. Coronel, Joanne Irish W. David, Normalyn D. Leonardo, Angel Mae A. Maricho, Jeffrey A. Carreon, Raymart M. Mata, John Christian I. Punu

After the presentation of all the papers, Awarding of Certificates of Recognition and special award followed. The Best Presenter was awarded to Renz Joshua S. Rosendo who presented their research paper entitled “Proposed Design of a Transportable Foldable Bridge” and the best research paper was bestowed to the “Design and Development of Crop Water Stress Index (CWSI) Meter for Zea Mays L presented by Mark James B. Layson. The program ended with Closing Remarks by Engr. Dorothy Joy Tongol, CEA Research Coordinator.

### Highlights of the 2<sup>nd</sup> CEA RESEARCH COLLOQUIUM



Presentation of Research Papers:



Panel Experts giving recommendations:



Attendees of the Event:

