

EXPERT'S PROFILE

Name of Grantee : **Dr. Ginno L. Andres**
Area of Expertise : Tribology Mechanical Eng'g & Environmental Eng'g
Inclusive Date of Contract as BSP Awardee : Short-Term Program
: 15 July - 12 October 2016 (90 days)
Host Institution : Isabela State University
Batangas State University
E-mail Address : ginnoandres@gmail.com



EDUCATIONAL BACKGROUND

- **Doctor of Engineering**, 2015, Ritsumeikan University, Shiga, Japan
- **Master of Engineering**, 2011, Ritsumeikan University, Shiga, Japan
- **BS Mechanical Engineering**, 2008, Polytechnic University of the Philippines

WORK EXPERIENCES

- 2015 – present **Combustion Laboratory, Ritsumeikan University, Shiga, Japan**
Research Associate
- 2015 - present **Tahibana Electric Corporation, Shiga, Japan**
Production Staff
- 2011 - 2015 **Combustion Laboratory, Ritsumeikan University, Shiga, Japan**
Research Assistant
- 2013 - 2014 **Tanah Process Ltd., Osaka, Japan**
Research & Business Apprentice
- 2012 - 2014 **Japan Ministry of Environment Grant**
Multi-company collaboration Research Assistant
- 2006 **MD Juan Enterprises Inc., Philippines**
Production Planning & Inventory Control

To be Accomplished as a BSP Awardee

Isabela State University

1. Lecture and seminars to faculty members, researchers, students, and/or to the general public:
 - Capacitive deionization (CDI) research
 - Current researches on tribology
 - Data analysis such as capacitance, Ion adsorption, desorption
 - Energy calculation
2. Conduct workshop on :
 - Experimental set-up used in CDI as a tribology research
 - Activated charcoal manufacturing
 - Electrode fabrication
 - CDI assembly and instruments calibration
 - Capacitive deionization process
3. Assist the current faculty in mentoring:
 - MS students conducting research in science and engineering
4. Prepare research grant (with assistance from faculty members) proposal/s for possible funding from the DOST and other funding institutions on:
 - Insights on a proposed project on the Mechatronic Laboratory of ISU.
 - visualizing and creating a state-of-the-art ISU Mechatronic Laboratory
 - Design of a fully automated portable water purification system
5. Conduct collaborative research on "A Water Purification System based on the Capacitive Deionization Technique (CDI)" and provide technical assistance to faculty, staff, and students in writing scientific manuscripts for possible submissions to ISI-indexed journals. A CDI set-up will be brought from Japan, series of experiments will be performed and written report will be submitted based on the results.

6. Science outreach activities
Energy (Aluminum air battery fabrication)

UP Baguio

7. Assist to faculty members in the preparation of research grant proposal/s for possible funding from the DOST and other funding institutions on:
 - Assessment of water quality resources in CALABARZON
 - Production of biohydrogen from indigenous cellulosic material by dark fermentation
 - Fabrication of battery cathode material based on by product of paper making industry lignin
 - Preparation of PV Am/PSf composite hollow fibers by flue gas applications
8. Conduct workshop on :
 - Generation of carbon materials for fuel cells and capacitive deionization
 - Fabrication of cells and modules for energy experiments
 - General techniques for material science researches
9. Assistance to projects:
 - DOST-funded PCIEERD "Tactical Operative Amphibious Drive (TOAD)"
 - BatSU funded project "Solar-Powered Isotropic Generator of Acoustic Wave (SIGAW)"