

EXPERT'S PROFILE



Name of Grantee : Dr. Richard D. Alorro
Area of Expertise : Geo-environmental Engineering
Inclusive Date of Contract as BSP Awardee : Short-Term Program
Phase I 10 – 15 December 2015 (5 days)
Phase II 03 Jan – 05 Feb 2016 (35 days)
Host Institution : University of Santo Tomas (UST)
E-mail Address : Richard.Alorro@curtin.edu.au

EDUCATIONAL BACKGROUND

- **Ph.D. in Engineering**, 2006, Hokkaido University, Japan
- **Post Grad Diploma in Sustainability Science**, 2008, Hokkaido University, Japan
- **Master of Engineering**, 2007, Hokkaido University, Japan
- **BS IN Metallurgical Engineering**, 2002, Mindanao State University – IIT (MSU-IIT)

WORK EXPERIENCES

- 2013 – Present **Western Australian School of Mines, Curtin University, West Australia**
University Lecturer
- 2011 - 2013 **Toyota Tsusho Corporation, Nagoya City, Japan**
Metallurgist
- 2010 - 2011 **Graduate School of Engineering, Hokkaido University, Japan**
Postdoctoral Researcher
- 2004 - 2005 **Global Steel Philippines Incorporated, Iligan City, Philippines**
Quality Control Engineer
- 2002 - 2004 **College of Engineering, MSU - IIT**
Associate Lecturer

TO BE ACCOMPLISHED AS A BSP AWARDEE

1. Course structure between Chemical Engineering (ChE) and Metallurgy (Introduction to Metallurgical Processes) with relevant materials uploaded on UST Blackboard System
2. Completion of the course with students grades
3. Preliminary data and literature review materials on heavy and toxic metal sequestration; sensors design and fabrication of prototype
4. Research proposals on the following: (1) "Heavy and Toxic Metal Sequestration Using Mechanochemical Techniques", (2) "Development of Biomass Derived from Philippine Plants and Its Application in Precious Metal Recovery" (mechanochemistry, environmental remediation, extractive metallurgy, biomass), and "Design and (3) Development of Hg and Cd sensors for environmental scanning in mining and e-waste disposal sites"
5. research manuscript (Application of Biomass in the Recovery of Precious Metals from Aqueous Solution: A Review) for publication
6. Seminar/lecture on *Mechanochemical Techniques in Recycling and Waste Treatment/Rare Earths and Critical Metals/Mining and Metallurgical Engineering Education in Australia*

7. Phase 1 of Seminar-Workshop on Improved Delivery of Metallurgy in the Chemical Engineering curriculum in cooperation with the Philippine Institute of Chemical Engineers – Metro Manila Academe Chapter (PIChe – MMAC)
8. Explore collaboration with CHED, DOST, Philippine Chamber of Mines, SMEP, PAHRODF and Australia Awards