

EXPERT'S PROFILE

Name of Grantee : **SERGIO C. CAPAREDA, PhD**
Area of Expertise : Agricultural Engineering
Inclusive Dates of Contract as BSP Awardee : Short-Term Program
Phase 1: 21 June – 08 July 2014
Phase 2: 01 December – 15 January 2015
Phase 3: 15 May – 20 June 2015
Host Institution : Mariano Marcos State University
University of the Philippines Diliman
University of the Philippines Los Baños

EDUCATIONAL BACKGROUND

PhD in Agricultural Engineering, Texas A&M University, College Station, TX, 1990
Master of Engineering in Energy Technology, Asian Institute of Technology,
Thailand, 1985
BS in Agricultural Engineering, University of the Philippines Los Baños, 1982

PROFESSIONAL EXPERIENCE

ACADEMIC

September 2011 – present **Associate Professor**
Texas A&M University
TX, USA

2011-13 **Adjunct/Affiliate Faculty**
Mariano Marcos State University
Batac, Ilocos Norte

2005 – August 2011 **Assistant Professor**
2003-05 **Visiting Research Scientist**
Department of Biological and Agricultural Engineering
Texas A&M University
TX, USA

1997-2004 **Associate Professor**
1990-96 **Assistant Professor**
1982-90 **Instructor**
University of the Philippines
Los Baños, Laguna

ADMINISTRATIVE

2000-03 **Director**, Institute of Agricultural Engineering
Program Manager, Agricultural Mechanization Development Program
1998-2000 **Division Head**, Agricultural Machinery
1996-97 **Department Head**, Engineering Science Department
1990-96 **Department Head**, Department of Agricultural Machinery
University of the Philippines
Los Baños, Laguna

TO BE ACCOMPLISHED AS BS AWARDEE

Mariano Marcos State University

1. Inception and consultative meetings on MMSU's existing programs on energy self-sufficiency and review of the provisions on the existing agreements between MMSU and TAMU;
2. Identification of areas for specific agreements between MMSU and TAMU;
3. Conduct lecture/seminar/workshop series on piloting work on the following topics:
 - a. Gasification for power generation;
 - b. Gasification/pyrolysis for transport fuel production;
 - c. Design of biomass gasification system for power; and
4. Design and fabrication of gasifier

University of the Philippines Diliman

1. Conduct seminar/lecture series on the following topics to the Department of Chemical Engineering:
 - a. Thermal conversions on torrefaction, pyrolysis, and gasification; and
 - b. Life cycle analysis and economics of biofuels; and
2. Consultation with faculty, staff, and graduate students of the UP Department of Chemical Engineering for the identification of R&D activities for Engineering Research and Development for Technology (ERDT)

University of the Philippines Los Baños

1. Conduct seminar/lecture series on the following topics to the Department of Chemical Engineering:
 - a. Thermal conversions on torrefaction, pyrolysis, gasification and combustion;
 - b. Downstream processing involved in thermal conversion technologies;
2. Development of R&D program/s on thermal conversion and downstream processing; and
3. Consultation with faculty, staff, and graduate students of the Department of Chemical Engineering for the identification of R&D activities for Engineering Research and Development for Technology (ERDT)