

EXPERT'S PROFILE

Name of Grantee : **BERNARDO Z. PREDICALA, PhD**
Area of Expertise : Agricultural Engineering
Inclusive Date of Contract as BSP Awardee : Short-Term engagement
Sept 18, 2018 - Jan18, 2019
Host Institution : Mariano Marcos State University
Central Luzon State University



EDUCATIONAL BACKGROUND

- **Ph.D. Biological and Agricultural Engineering**, Kansas State University (KSU), Manhattan, Kansas, USA, 2003
- **M.Eng. Agricultural and Food Engineering**, Asian Institute of Technology, Bangkok, Thailand, 1995
- **B.S. Agricultural Engineering**, (Cum Laude) University of the Philippines Los Baños, Laguna, Philippines, 1990

PROFESSIONAL EXPERIENCE

- April 2004 - present **Research Scientist – Engineering**
Prairie Swine Centre Inc. (PSC), Saskatoon, SK, Canada
- Sept 2004 - present **Adjunct Professor**
Department of Chemical and Biological Engineering
(formerly Agricultural and Bioresource Engineering),
University of Saskatchewan, Saskatoon, SK, Canada
- Aug 2010 - Jan 2011 **Visiting Assistant Professor**
Department of Biological and Agricultural Engineering,
Kansas State University, Manhattan, Kansas, U.S.A.
(Sabbatical leave from PSC)
- May 2003 – April 2004 **Post-doctoral Research Associate**
Department of Biological and Agricultural Engineering,
Kansas State University, Manhattan, KS, USA
- Jan 1999 - May 2003 **Graduate Research Assistant**
Department of Biological and Agricultural Engineering,
Kansas State University, Manhattan, KS, USA
- June 1996 - Dec 1998 **Research Associate**
Agricultural and Food Engineering Program, Asian Institute
of Technology, Bangkok, Thailand

TO BE ACCOMPLISHED AS A BSP AWARDEE

MMSU

1. Conduct short-term research study (technology testing and verification) on controlling odor using a biological treatment approach and processing swine manure into organic fertilizer
2. Develop/design small-scale and cost-effective swine waste management system using community participatory approach
3. Develop/design small-scale and cost-effective swine waste management system using community participatory approach
4. Conduct capability building activities to MMSU faculty and staff and other stakeholders

CLSU

5. Conduct capability building activities to CLSU faculty and researchers and other stakeholders.
6. Conduct short-term project combining the PED test kit with deactivating the PED virus using nanoparticles selected commercial swine farms with history of PED outbreaks