

EXPERT'S PROFILE



Name of Grantee : **DR. VENA PEARL A. BONGOLAN**

Area of Expertise : Applied Mathematics

Inclusive Date of Contract as BSP Awardee : June 30, 2008 – July 29, 2008`
Short-Term Program

Host Institution : University of the Philippines Los Baños

Email Address : bongven@iit.edu

EDUCATIONAL BACKGROUND

- Ph.D. in applied Mathematics, Illinois Institute of Technology, 2005
- MS in Mathematics, University of Illinois at Urbana-Champaign, 1987
- BS in Applied Mathematics *cum laude*, University of the Philippines Los Baños, 1979

WORK EXPERIENCE

- **2007 - Present** **Adjunct Professor**, Ellis College, New York Institute of Technology, New York, U.S.A.
- **2006 – 2007** **Assistant Professor of Mathematics**, Shawnee State University
- **2001 – 2005** **Research and Teaching Assistant**, Department of Applied Mathematics, Illinois Institute of Technology
- **1979 –1982** **Instructor**, University of the Philippines System.

To be accomplished as BSP Awardee:

- To collaborate with researchers in mathematics, physics, computer science, oceanography and environmental sciences on the application of Navier-Stokes Equation.
- To suggest research topics for doctoral and MS students on the following applications:
 - a. Modeling and simulating drug delivery to the brain and photo-transduction (applications of boundary noise).
 - b. Modeling and simulating diffusion on a 2-manifold, which has applications in the Morris-Lecar neural model (an exit-time problem), and simulating a growing cell.
 - c. Stochastics in blood flow, which models the formation of thrombin.