

EXPERT'S PROFILE

Name of Grantee : Dr. Elmer S. Estacio
Area of Expertise : Physics (Terahertz Optoelectronics, Semiconductors, Optical Spectroscopy)
Inclusive Date of Contract as BSP Awardee : June 2012 – June 2014
(Long-Term Program)
Host Institution : University of the Philippines- Diliman
National Institute of Physics (NIP)
Contact Number :
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EDUCATIONAL BACKGROUND

- **PhD in Physics**, University of the Philippines (UP), Diliman 2004
- **MS in Physics**, University of the Philippines (UP), Diliman
- **BS in Applied Physics**, University of the Philippines (UP), Diliman

WORK EXPERIENCES

- 2010-Present **Assistant Professor**
Research Center for the Development of Far – Infrared Region
University of Fukui
Japan
- 2008-2010 **Postdoctoral Fellow**
Japan Society for the Promotion of Science
- 2006-2008 **Postdoctoral Fellow**
Institute of Laser Engineering
- 2005-2006 **Postdoctoral Fellow**
Institute of Molecular Science (IMS)
- 2003-2004 **Researcher**
Intel-PFPI Research Grant
University of the Philippines
- 1998- 2003 **Science Research Specialist I**
(DOST-PCASTRD Research Program)
National Institute of Physics
University of the Philippines
- 1977-1998 **Design Engineer**
Micrologic Systems Inc.
Pasig City, Philippines

To Be Accomplished as a BSP Awardee

1. Conceptualize and implement the design and construction of the Terahertz-time domain spectrometer (THz-TDS) system;
2. Train students to have competency in performing THz-TDS measurements and understanding the results. Perform the THz-TDS experiments based on the ideas and locally-grown samples that have been initially discussed with professors of the Condensed Matter Physics Laboratory (CMPL);
3. Investigate THz emission and possibly THz transmission properties of grown materials and devices such as solar cells, radio frequency (RF) devices, magnetic materials, novel wide-gap nanomaterials and high T_c-superconductors;
4. Design and construct 1.55mm laser-based THz-TDS system and survey of possible collaboration with other NIP research laboratories.