**EXPERT'S PROFILE**

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| **Name of Grantee** | : **Dr. Roland Long-gat Barbosa** |
| Area of Expertise | : Surface Chemistry & Materials Science |
| Inclusive Date of Contract | : Short-Term Program |
| as BSP Awardee | : P1: 23 June – 23 July 2017<br>P2: 10 December – 10 January 2017<br>P3: 15 May – 13 June 2018 |
| Host Institution | : Institute of Chemistry – UP Diliman |
| E-mail Address | : roland.barbosa@lamar.edu |

**EDUCATIONAL BACKGROUND**

- **PhD in Chemistry,** 2007, University of Houston, USA
- **MS in Chemistry,** 2002, UP Diliman
- **Bachelor of Science in Chemistry,** 1999, UP Diliman

**WORK EXPERIENCES**

- 2017 — **Lamar University**
  Assistant Professor
- 2014 – 2015 — **Washington StateUniversity**
  Postdoctoral Research Associate
- 2012-2014 — **Universite Libre de Bruxelles**
  Postdoctoral Research Associate
- 2011 – 2012 — **Centre National dela Recherche Scientifique**
  Postdoctoral Research Associate
- 2007 -2011 — **Fisk University, Nashville, USA**
  Research Associate
- 2002-2006 — **University of Houston**
  Teaching and Research Assistant

**To be Accomplished as a BSP Awardee:**

1. Establish a collaborative research initiative on the use of renewable resources as sources of catalytic materials for sustainable energy through training workshop and mentoring
2. Conduct lectures, seminar to graduate and senior undergraduate students on Metal Oxalates as Precursor for Fischer Tropsch Catalysts"
3. Preparation of research proposal and grant (with Prof. Payawan) on "Catalytic Marerials from Rice Husks for Sustainable Energy Production

4. Involvement/consultancy in laboratory research activities in connection with the host's existing PCIEERD research project on "Synthesis of TiO2-Conducting polymer Nanospheres for the photocatalytic and photoelectrocatalytic degradation of organic pollutants"

5. Preparation and Characterization of SiC, SiO2, and graphene quantum dots (to be accomplished partly in UPD, and Lamar University)

6. Formation of catalysts (Co, FeOx, metal alloys) and incorporation onto rice husk-derived SiC, SiO2, and graphene, with subsequent catalytic testing (to be done partly in UPD and in Lamar University)

7. Writing of manuscript for publication