

EXPERT'S PROFILE

Name of Awardee : MANUEL V. HERNANDEZ, JR., PhD
Area of Expertise : Mechanical Engineering
Inclusive Dates of Contract as BSP Awardee : Short-Term Program
31 March 2014 – June 2014
Host Institution : DOST-MIRDC

EDUCATIONAL BACKGROUND

PhD in Mechanical Engineering, University of Florida, USA, 1983
MS in Mechanical Engineering, University of Florida, USA, 1979
BS in Mechanical Engineering, University of the Philippines, 1975

PROFESSIONAL EXPERIENCE

Professorial Lecturer
Research Associate
Department of Mechanical Engineering
UP Diliman

1976-2005 **Instructor to Full Professor of Mechanical Engineering**
Department of Mechanical Engineering
UP Diliman

Consultant
ACME Tools Co., Baltimore Spice Corp., MK Screens,
Malakas Steel Mill and ARGO Steel Fabrication

Vice President for Engineering & Special Projects
Steel Asia Mfg. Corp., Modern Bar Mill

1992-94 **Engineering and R&D Head**
MK Screens

Vice President for Engineering and Maintenance
H.M. Montenegro Group of Companies

1984-87 **Chair**, Department of Mechanical Engineering
UP Diliman

February 1987 **Consultant**
Tariff Commission

1985-86 **Member, Nuclear Safety Advisory Board**
Philippine Atomic Energy Commission

1983-86 **Member, Committee on Research and Publication**
UP College of Engineering

1984 **Project Manager**, Design, Fabrication, Installation and Testing of
Electrical/Electronic/Mechanical Systems Supporting the Audio Visual Equipment
Department of Agriculture

1982 **Member, Project Team of a Professor/Consultant**
Designing an Instrument Holder for one of the NASA Space Shuttle Payloads
University of Florida

1977-1978 **Project Engineer/Manager**
Jamar Industrial Company

1977 **Consultant**
Ostrea Mineral Laboratories

1976-78 **Technical Consultant**
Industrial Test Masters Inc.

1977-78 **Project Team Member**
Mini Hydro Plant Development Project
NWRCP

1975-76 **Maintenance Manager**
Toilet Soap Department
Procter & Gamble Phil. Mfg. Co.

TO BE ACCOMPLISHED AS BS AWARDEE :

1. Consultation for the refinement/improvement of Advance Transport Projects, e.g. Automated Guide-Way Transit (AGT), Road Train, Railway Train;
2. Consultation for the engineering design of the following equipment:
 - a. Aseptic Packaging and Clean Room
 - b. Blender
 - c. Hammer Mill
 - d. Centrifuge
 - e. Form Fill Seal Machine
 - f. Extruder
 - g. Granulator
3. Consultation for the engineering design of the following:
 - a. Continuous stabilized brown rice treatment equipment
 - b. Combine harvester
4. Consultation of further improvement for the establishment of the Finite Element Analysis (FEAL) Design Center; and
5. Lecture series in mechanical engineering topic Gear Design and Motor Sizing.