



## **Staff Profile**

**Name:** Umeh Ifeanyi. S.

**Position:** Assistant Lecturer

**Contact Address:** Department of Mechanical Engineering  
Faculty of Engineering  
University of Nigeria, Nsukka  
Enugu State.

### **Brief Biography:**

Umeh Ifeanyi joined U.N.N as a teaching staff on 23rd May, 2014. He graduated from the Cranfield University, England, with a Master's Degree (MDes, 2012) in Design and Innovation for sustainability. He also holds a Master's Degree (MEng, 1990) and Bachelor's Degree (BEng, 1985) in Mechanical/Production Engineering, both obtained from the Anambra State University of Technology (ASUTECH), Enugu.

### **Area of Specialization:**

Specializes in Mechanical Engineering Design with major interests in Rotor dynamics Machinery and Thermal Power.

**Membership of Professional Bodies:** Member the Nigerian Society of Engineers (NSE)

### **Research Archives:**

- 1.) "Exploring Efficiency Gains in Heat Engine Design and Output through Design Thinking" - (MDes Thesis work, 2011, Cranfield University).
- 2.) " Dignity through Design Innovation" - (MDes Group design project report, May 2011, Cranfield University. Sponsored by I.B.M.,Cranfield University, IVHM, Housing 21, and Boeing).
- 3.) "Investigation of Factors Affecting the Crushing Strength of Coal Briquettes" - (MEng Thesis work, 1989, Anambra State University of Technology, Enugu, Nigeria).
- 4.) "Design and Fabrication of Household Maize Sheller" - (BEng Thesis work, 1985, Anambra State University of Technology, Enugu, Nigeria)

**Current Research:**

He is presently researching efficiency improvement in power plant design and output through design thinking. The object is to establish a model of optimal states of functioning of constructional materials of practical power-devices through analytical and conceptual methods. The work intends to leverage the experience and resources embedded in some of the published works of both present and past generations of investigators in the fields of science, technology and the humanities. The immediate goal is to achieve an integrated power plant architecture that rely on self-adaptive properties of constituent materials to sustain system operation and, thereby, to eliminate the need for a separate source of energy or fuel. The long-term goal is to develop a new species of thermal power plant for effective management and utilization of the renewable energy portfolios.

**Responsibilities:**

**Courses Taught/Coordinated:** Manufacturing Technology; Workshop Practice; Mechanics of Machines, and Theory of Elasticity.

**Others:** Currently in charge of the Mechanics and Materials Laboratory, Dept. of Mechanical Engineering, U.N.N

**Work Experience:**

Prior to taking up employment with the U.N.N., Ifeanyi has had over 14 years engineering experience working with: (i) Advanced Concepts Nig. Ltd., Enugu; (ii) Afrocommerce W.A. Ltd., Lagos; (iii) Drake & Scull Nig. Ltd., Lagos; (iv) Project Development Institute (PRODA), Enugu; (v) Nigerian Bank for Commerce and Industry (NBCI), Calabar; and (vi) Blackwood Hodge Nig. Ltd., Port Harcourt. Some of his outstanding professional works includes:

1. Design, construction and installation of lube-oil blending kettles; design of pipeline/ in-line-equipment layouts and specifications for Dozy Oil Ltd, makers of Powerflow lube-oil brand, Onitsha, Anambra, state.
2. Design of pipeline/in-line-equipment layouts and specifications for Ibeto Petrochemical Ltd., makers of Espresso lube-oil brand, Nnewi, Anambra State.