

KALU, IFEANYI EMMANUEL

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Male

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9TH May 1984

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Nigerian

EDUCATION AND ACADEMIC QUALIFICATIONS

- ✚ University of Pretoria, Pretoria, South Africa Jan. 2016-Till Date
Ph.D. in Mechanics
- ✚ Copenhagen Business School, Denmark Jan. 2018- Feb. 2018
Coursera Certificate on Identifying Social Entrepreneurship Opportunities
- ✚ African University of Science and Technology (AUST), Nigeria Jan. 2012-May 2013
MSc. Materials Science and Engineering (**Distinction - 3.88 out of 4.0**)
- ✚ Nigerian Institute of Management (Chartered) July 2007-May 2008
Proficiency Certificate in Management
- ✚ Federal University of Technology, Owerri (FUTO), Nigeria Nov 2001-Mar. 2007
B.Eng. (Hons) Polymer and Textile Engineering (**Second Class Upper - 4.21 out of 5.0**)
- ✚ Command Secondary School, Ipaja, Lagos, Nigeria Sept. 1994-July 2000
Senior School National Examination Council Certificate (NECO)

WORK EXPERIENCE

- ✚ **University of Pretoria, Pretoria, South Africa**
Doctoral Research Scholar Feb. 2016 – Till date
Embarking on research within the field of computational mechanics and failure analysis of engineering structures at the Centre for Asset Integrity Management.
Currently working on failure analysis of boiler tubes use in power generation plants – An ESKOM Project. Running series of simulations and analyses using ANSYS and MATLAB to develop a holistic framework to prevent unplanned outages and support maintenance decisions of coal-fired power plants as a result of localized thinning of the tubes while in use.
- ✚ **Sheda Science and Technology Complex (SHESTCO), Sheda, FCT, Nigeria**
Assistant Research Fellow Aug. 2015 – Till date (On Study Leave)
Carrying out research to enhance the performance of engineering materials; focusing on polymers and composites. Research was done on the effective management of used tyres.

Mechanical and structural characterization of materials for various applications using the SEM, Nano-indenter, Surface profiler and Instron Testing machine. Performed a research work on mechanical property measurements of oil shale cuttings by instrumented indentation testing.

✚ **Mateng Nigeria Limited, Abeokuta, Nigeria**

Project and Operations Manager Oct. 2013 – July 2015

Monitored and facilitated the timely execution of projects handled by the company. Executed the procurement and installation of laboratory equipment for the entire faculty of engineering at Kwara State University worth about 4 million USD.

Managed the production lines of the firm, producing ceramic water filters, clay and concrete bricks, compressed earth blocks and other sustainable building materials.

Planned and organized the work flow for the different arms of the company.

✚ **African University of Science and Technology (AUST), Abuja, Nigeria**

Multifunctional Materials Researcher June 2012 - May 2013

Learnt research methodologies, technical writing and presentations skills.

Collaborative reviewing of papers and research involving multifunctional materials.

✚ **Oceanic Bank (Now Eco bank Nigeria) Plc, Ohafia Branch, Abia State, Nigeria**

Retail Banking Officer (Jan. 2009 – July 2011). Head, Marketing (July 2011 – Jan 2012)

Risk asset creation and liability generation for the bank. We built the branch asset base from zero to over 2.5 million USD.

Marketed the bank's products and services.

Supervised the marketing staff and coordinated the branch's total asset base.

✚ **Business and Engineering Skills Training Centre, Potiskum, Yobe State, Nigeria**

Instructor March 2007 – Jan. 2008

Taught post-secondary vocational students fundamental concepts of General Science.

✚ **Industrial Training at Double Diamond Plastics Industrial Ltd, Aba, Abia State.**

Quality Control Inspector and Maintenance Engineer (in-training) June – Nov. 2005

Conducted quality control inspection on products of the company.

Gained hands-on experience on extrusion, blow mold and injection mold machines.

Trouble shot mechanical faults that occur during the use of the machines.

SPECIALIZED TRAININGS AND WORKSHOPS

- ✚ Leadership Skills for Junior Managers (December 2009)
- ✚ Oceanic Bank Officer Development Program (July – August 2010)
- ✚ Conflict Resolution and Peace Building (Jan and July 2012)
- ✚ Materials for Energy Workshop by Pan African School of Materials (November 2015)
- ✚ Eskom Power Plant Engineering Institute (EPPEI) 3rd Student Workshop (July 2016)

AWARDS AND HONOURS

- ✚ University of Pretoria Commonwealth Doctoral Scholarship (2016 - 2018)
- ✚ Best Overall CGPA in Materials Science and Engineering (M.Sc.), AUST, 2012/2013
- ✚ Full M.Sc. Scholarship Award by the African Development Bank/African University of Science and Technology, 2012/2013 Academic Session
- ✚ 2nd Best at Oceanic Leadership Academy, Set 84 (July - August 2010)
- ✚ Top Three in Polymer and Textile Engineering Department, FUTO (2005/2006)

TECHNICAL PROFICIENCIES AND ATTRIBUTES

- ✚ Proficient in the use of Microsoft Office Suit: Microsoft Word, Excel and Power Point
- ✚ Working knowledge of engineering modeling & analysis soft wares: ANSYS, ABAQUS, MATLAB, materials selection tool - Granta Cambridge Engineering Selector (CES) EduPack, and characterization tools (Electro-mechanical & Nano-indentation Systems).
- ✚ Good knowledge of design codes (ASME BPVC Section VIII) and fitness-for-service codes (API 579-1/ASME FFS-1) for pressurized vessels
- ✚ Excellent organizational and time management skills to meet demanding deadlines.
- ✚ Excellent verbal and written communication skills.
- ✚ Self-motivated, with keen sense of ownership and urgency to deliver on projects.

PROFESSIONAL MEMBERSHIP

- ✚ Nigeria Institute of Management (Chartered) – Grad. Mem. No: 227661
- ✚ Materials Research Society (MRS) – Mem. ID: 11033583
- ✚ Materials Science and Technology Society of Nigeria (MSN) – Mem. No: P/1262

INTERESTS

Reading, traveling, watching documentaries, surfing the internet and giving motivational talks.

REFEREES

I will provide these on request.