

The Department of Mechatronics  
Engineering,  
Federal University Oye-Ekiti,  
P.M.B. 373, Km 3 Oye-Afao Road,  
Ekiti State, Nigeria.  
2<sup>nd</sup> of March, 2026.

The Registrar,  
First Technical University, Ibadan,  
Km 15 Lagos - Ibadan Exp, 200261,  
Ibadan, Oyo, Nigeria.

**Through:**  
The Dean,  
Faculty of Engineering and Technology.

**Through:**  
The Head,  
Department of Mechatronics Engineering,

Ma,

### **APPLICATION FOR SABBATICAL LEAVE POSITION OF READER IN MECHATRONICS ENGINEERING**

I hereby apply for the sabbatical position of Reader in the Department of Mechatronics Engineering, First Technical University, Ibadan, Oyo State, Nigeria.

I hold a PhD degree from the Department of Mechanical Engineering in the University of Ibadan (Thermo-fluids Engineering option) and I spent a year and two months at University of Leeds, as a visiting PhD researcher, between May 2013 and July 2014. The visit to the University of Leeds, United Kingdom, for my experimental work (in the Institute of Thermofluids), was sponsored by the Petroleum Technology Development Fund (PTDF). I got the Nigeria Sao Tome and Principe Joint Development Authority, Postgraduate Scholarship Award to pursue a Master's Degree in Mechanical Engineering (Thermo-Fluids Engineering option) at the University of Ibadan and I have a First Degree in Mechanical Engineering (Automotive Engineering Technology option) from the Federal University of Technology Owerri, Imo State.

I am a Council for the Regulation of Engineering in Nigeria (COREN) registered Engineer and a corporate member of the Nigeria Society of Engineers. I have about fifteen (15) years lecturing experience of which I have spent over two (2) years in the position of a Reader in the Department of Mechatronics Engineering, Federal University Oye-Ekiti, Nigeria. I have taught general Engineering courses, core Mechanical Engineering and Mechatronics Engineering courses in my lecturing career, I have been involved in curriculum review and development at postgraduate and undergraduate levels and I am actively involved in supervision of students at the undergraduate and postgraduate (MEng and PhD) levels. I have supervised one (1) MPhil, seven (7) Master's students and a large number of undergraduate students. I currently have five (5) PhD students under my supervision and three (3) of them are in advanced stages of their research. I have served in various national and university positions. Above all, I am passionate about impacting knowledge through teaching and research.

My research is in the area of Thermo-Fluids, Automation, Artificial Intelligence and Machine Learning, and Mechatronics System Design, with focus on the development of smart

biomedical, agricultural, renewable and sustainable systems. My research teams are into the development of Mechatronics Engineering Systems for agricultural, renewable energy and biomedical applications leveraging Artificial Intelligence. My team and I are currently working on a grant backed project titled “Development of Six–Stroke Compression Ignition Engine with Carbon Dioxide Emission Trap”. This grant was awarded by TETFund National Research Fund Intervention with grant number: TETF/ES/DR&D-CE/NRF2021/SETI/PAE/00126/VOL.1. The worth of the grant is: NGN 10,825,170.00. My research team comprises of postgraduate (PhD and MSc.), undergraduate students and professional colleagues. I also have currently over fifty (50) articles published and accepted for publication. Twenty (20) of these articles are Scopus Index/Web of Science indexed while most of the rest are in University-based journals. Quite a number of my manuscripts are under review in refereed journals.

As Head of Department of Mechanical Engineering, Landmark University, my students emerged winners in a national engineering competition organized by the Committee of Deans of Engineering and Technology (CODET) with the exhibition of an innovative hydroponics and fertigation system developed by my students under my leadership in the department. As the Head of Department of Mechatronics Engineering, Federal University Oye-Ekiti (FUOYE), I facilitated the establishment of an Innovation Hub for Mechatronics Engineering. Students meet there on weekly basis to brainstorm and proffer innovative solutions to local and national problems. I facilitated ‘Tech. Hangout 2025’, sponsored by Ekiti State Ministry of Innovation, Science and Digital Economy, in conjunction with the Federal University Oye-Ekiti, Ekiti State, Nigeria. The Honourable Commissioner of the Ministry of Innovation visited the Mechatronics Hub during the event. I am current a member of the Local Organizing Committee (LOC) for a Workshop and Exhibition event being jointly organized by the Association of Nigerian Inventors (ANI) and the Federal University Oye-Ekiti. This event held between the 26<sup>th</sup> and 28<sup>th</sup> of October, 2025. Innovators where given the platform to exhibit their inventions and those with viable ones were linked to incubators and accelerators.

I am the Deputy Director of Quality Assurance, FUOYE, a Technical Committee member of Standards Organisation of Nigeria (SON), Member, Petroleum Technology Development Fund (PTDF) Selection Committee for In-Country Scholarship Scheme (ISS), External Examiner to the Department of Mechatronics Engineering, Alex Ekwueme Federal University Ndufu-Alike (AE-FUNIA), Ebonyi State, Nigeria, Patron, FUOYE Faculty of Engineering JET club, an Associate Editor of FUOYE Journal of Engineering and Technology (FUOYEJET), Chairman, Faculty of Engineering Innovation Committee and a reviewer to a number of refereed journals.

I am proficient in the use of FORTRAN, Microsoft Office, AutoCAD and MATLAB and SIMULINK, C++, Python, LabVIEW, LINUX and PLC programming.

My Curriculum Vitae and supporting documents are attached.

I look forward to driving the vision of making the Mechatronics Engineering Department and the University, a national and global hub of innovation and learning.

Thanks for your favourable attention to my application.

Yours faithfully,



Uguru-Okorie, Daniel.