PROF. CHRISTOPHER MAINA MURIITHI

CURRICULUM VITAE

Profession/Occupation: Associate Professor of Electrical Engineering

Accumulated experience: 16 years **Nationality:** Kenyan

Email: cmainamuriithi@gmail.com, cmmuriithi@mut.ac.ke

Membership in Professional Societies:

Engineers Board of Kenya (EBK), **B5401**Institute of Engineers of Kenya (IEK), **G2734**

Kenya Engineering Technology Registration Board, **P00563/1-19**Institute of Engineering Technologist and Technicians of Kenya, **1094**

Institute of Electrical and Electronics Engineers (IEEE)

Key Qualifications:

PhD Electrical Engineering (2012), MSc. Eng (2003), B. Eng (2001) in Electric Engineering

Professional skills:

- a) Graduate Electrical Engineer. Specializing in Power Systems, Artificial Intelligence Applications and Renewable Energy Technologies.
- b) Professional Engineering Technologist in Electrical Engineering.
- c) Qualified Solar Photovoltaic Installer and Trainer of Trainers : Solar Home Systems and Grid connected Renewable energy hybrid systems
- d) Licensed Solar Technician, T3 with Energy Regulatory Commission. ERC/SPVT/00199
- e) Registered Assessor and Verifier with TVET-CDACC. Registration code: CDACCASV760
- f) Computer languages and applications: Fortran Power Station, Microsoft products (2000/XP) including Microsoft Excel, Power Point and FrontPage, OrCAD, P-Cad, Smartdraw, AutoCAD, MathCAD, MATLAB and Simulink, Octave, Arduino.
- g) Published 58 refereed conference papers, 41 refereed journal papers and 1 patent.

Post Graduate Supervision:

Supervised to graduation 22 Masters Students and 4 PhD students.

Professional Strengths:

- Educationist specializing in Teaching, Training and Examining in Electrical Engineering.
- Participated in Grant Proposal writing
- Experience in research in Power system related areas
- Ability to engage in new fields and a fast learner
- Strong communication and interpersonal skills.
- Self-motivated professional with a knack for detail.
- Energized, able to work long hours without supervision and work under strict deadlines.

Education:

Institution	Date/Mon/Yr	Event	
Jomo Kenyatta University of	22 nd June 2012	Awarded PhD in Electrical Engineering	
Agriculture and Technology			
Moscow Power Engineering	30 th June 2003	Awarded MSc. in Engineering and	
Institute (Technical University)		Technology	
Moscow Power Engineering	30 th June 2001	Awarded Bachelor of Engineering and	
Institute (Technical University)		Technology	
Kagumo High School, Nyeri,	1992-1995	Kenya Certificate of Secondary Education	
Kenya			

Academic appointments

- 1. 24th July 2017 Appointed Associate Professor in the Department of Electrical and Electronic Engineering, Murang'a University of Technology.
- 2. 23rd July 2014 Appointed Senior Lecturer in the Department of Electrical and Power Engineering, Technical University of Kenya.
- **3.** 03rd /Jun./2009 Appointed on Promotion as a Lecturer at the Department of Electrical and Electronics Engineering, Jomo Kenyatta University of Agriculture and Technology, (J.K.U.A.T).
- 4. 03rd /Oct./2005 Appointed Assistant Lecturer at the Department of Electrical and Electronics Engineering, Jomo Kenyatta University of Agriculture and Technology, (J.K.U.A.T).
- 5. 03rd /Jan./2005 Appointed Tutorial Fellow at the Department of Electrical and Communications Engineering, MOI University.

External Appointments

- 27th May 2019 Registered as an assessor and verifier for Electrical Installation level 6 with TVET CDACC.
- 2. 1st July 2018 Appointed as a Peer Reviewer for the Commission of University Education **Selected publications**

Patents

C M Muriithi, D W Maina, "MULTI-STOREY GARDEN WITH SOLAR POWERED AUTOMATED IRRIGATION SYSTEM", KE/P/2020/3716; Field of Innovation: Automation, organic farming, food security, renewable energy. Industrial Property Journal, KIPI, April 2021

Journal publications

- [1] Gideon Guyo Kidegho, Robert Kinyua, Christopher Muriithi, Francis Njoka, Innovative Solar Photovoltaic and Thermoelectric Power Generator for a Recirculating Aquaculture System, International Journal of Renewable Energy Research, Vol.10, No.3, September, 2020, https://ijrer.org/ijrer/index.php/ijrer/article/view/10668/pdf
- [2]Bukola Babatunde Adetokun and Christopher Maina Muriithi (2021), Impact of integrating large-scale DFIG-based wind energy conversion system on the voltage stability of weak national grids: A case study of the Nigerian power grid, in Energy Reports, 23rd Jan. 2021, https://www.sciencedirect.com/science/article/pii/S2352484721000263
- [3]Bukola Babatunde Adetokun and Christopher Maina Muriithi (2021), Application and control of flexible alternating current transmission system devices for voltage stability enhancement of renewable-integrated power grid: A comprehensive review, Elsevier Heliyon, March 2021, https://authors.elsevier.com/sd/article/S2405844021005661
- [4] Gideon Guyo Kidegho, Francis Njoka, Christopher Muriithi, Robert Kinyua, Evaluation of Thermal Interface Materials in Mediating PV Cell Temperature Mismatch in PV-TEG Power Generation, Energy Reports 7 (2021) 1636–1650

Research Grants and Consortiums involvement

- 1. Awarded Russian Government Scholarship to study Electrical Power Engineering, September 1996 to June 2003 (7 years).
- 2. Awarded ANSTI Conference Grant of USD 2000 to attend the 3rd African Conference on Power and Energy Systems in Gaborone, Botswana, September 2010.
- 3. Participated in the Japan International Cooperation Agency (JICA) Bright Project-2014 as a Trainer of Trainers in Solar Home Systems for Technicians level 1 and 2.
- 4. Participated in the GoK/AfDB project phase II, under the Ministry of Education, State Department of Vocational and Technical Training.
- 5. Participating in the Murang'a University of Technology Mt. Kenya University joint project referenced MUT/EXT-COM/VC/22/2017/Vol.2-(154).

- 6. Awarded KENET Travel Grant of USD 1495 to attend the IEEE Africon Conference in Accra, Ghana, 25-27th September 2019.
- 7. Lead partner in the Royal Academy of Engineers grant titled "Engineering Skills Where they are Most Needed". The amount granted is £ 50,000 (UK Pounds Fifty Thousand Only).
- 8. Coordinator of the HEPSSA PHASE II, through a grant by Royal Academy of Engineers, programme in Murang'a University of Technology (June 2018 June 2021).

Languages:

	SPEAKING	READING	WRITING
ENGLISH	EXCELLENT	EXCELLENT	EXCELLENT
KISWAHILI	EXCELLENT	EXCELLENT	EXCELLENT
RUSSIAN	EXCELLENT	EXCELLENT	EXCELLENT

Hobbies:

Reading, playing tennis, cycling, rugby and cooking.

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this biodata correctly describes me, my qualifications and my experience.

Signature

Date: 9th August 2021

Day/Month/Year