

Jamlick Murimi Kinyua

Current: Tutorial Fellow	:	Jomo Kenyatta University of Agriculture & Technology
Previous Institution	:	DeKUT and University of Cape Town
Previous Position	:	Teaching Assistance/Research Assistant
Previous Firm	:	Electrical Distributors Limited;
Previous Position	:	Assistant Electrical Engineer;
Key Responsibility	:	LV switchgear Design, Maintenance, Planning and Supervision of Electrical installations;
Date Birth	:	27- July- 86;
Address	:	P.O. Box 56-10300, Kerugoya, Kenya;
E-mail Address	:	jkibuchi12@gmail.com
Telephone (Mobile)	:	+254-724-571-003: +254-734-044-244;
Nationality	:	Kenyan;

Membership in Professional Body:

Registered G. Engineer EBK (B6824);
Member of the Institute of Engineers of Kenya (GMIEK): G4387;
Energy Regulatory Commission Registered Electrician: C5344
Student Member: IEEE

Key Qualifications:

3 Years teaching Experience-University of Cape Town (UCT), Dedan Kimathi University (DeKUT and Technical University of Kenya (TUK)

Roles involved: **DeKUT**: Lecturer for: EEE 2503, TIE 2503(Reliability Engineering), EEE 2509(High Voltage Technology) EEE 2312(Electrical Machines III), EEE 2415 (Electrical Machines V) and EEE 2513(Machine Drives) **TUK**: Lecturer for EEMI 3132 and EEMP 1233 (Electrical Machines), EEEQ544 & EEEQ548

UCT: -Teaching Assistant for EEE4099F (Electrical Machines and Drives) and EEE3057A-S/EEE3031S (Energy Utilization).

4 years' professional experience:

- Specialized in facility condition surveys, all types of LV switchgears design, preparation of tender documents, tendering, contract administration, project management and supervision of installation of electrical work;
- Experienced in the planning, design, preparation of specifications and bills of quantities and construction;
- Technical evaluation of the clients drawings, and preparation of the final drawing;
- Contract administration;
- Computer literate;
- Experience of operation and maintenance of LV electrical equipment including motor control and protection, Generator installation and Maintenance.
- Lead and Supervise projects implementation and preparing time to time reports on the project progress;
- Experience in automation and controls;

As the Assistant Electrical Engineer, I was being involved in key aspects of projects being implemented, I was responsible for facility condition site surveys, design, preparation of contract specifications and bill of quantities documentation and layout drawings, tendering, supervision of installation works, testing and commissioning of all electrical LV switchgears for low voltage power generation and distribution networks. The low voltage switchgears designed involved projects like office blocks, residential houses, schools, churches etc.

The electrical services comprise the condition site surveys, detailed design, site supervision of installation works, testing and commissioning of the following electrical services:

- Incoming electricity supplies;
- Standby generator sets-automatic Main/Gens;
- L.V. switchboards, distribution boards and MCC boards;
- Power reticulation, cabling;
- Power circuits;
- Fire alarm systems;
- Power Factor correction unit design and assembling
- Separate supply undertaking power metering
- Perimeter Electric fence/DC electric wire fencing
- Use of Simatic Micro PLC's logo (SIEMENS Logic Module-LOGO!)

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- Concepts of Automation and controls (SYPT Pro Programming)
- Use of rectifiers, converters, inverters and PMUs;
- Solar panel installations;
- Earthing and lighting protection;
- Uninterruptible power supply system, voltage stabilizers and surge arrestors;
- Knowledge of Star delta starters, DOL, Drives, and relay logic controls, AVR's
- 11kV/415V/240V overhead power distribution networks;
- Lift installations;
- ATS/APS for BTS;
- Wind Power Generation;
- Knowledge of trouble shooting Electrical and Electronics on PLC and AC drives based on automatic machines;

Education:

MSc. Electrical Engineering, University of Cape Town [UCT]: - Power Systems (2017)

BSc (Hons) Electrical Engineering, University of Nairobi [UoN]: -Heavy Current (2011)

Computer Knowledge:

Specialized in and experienced in the following computer application and design programs:

- Perception Software, eDrive (HBM)
 - Proficient in PLC, LOGO! Soft Comfort-Module 12'. Introduction to Simatic 7.
 - PLS CADD
 - AutoCAD 14/15;
 - Autodesk Revit 2015, Dialux.
 - Microsoft Outlook, Microsoft Access, Microsoft Excel Microsoft Word, Microsoft Project and Microsoft PowerPoint.
 - Math CAD (Matlab)-Simulink and Microsoft Visual C++ 6.0 professional edition (C++, Visual Basic)
 - LabVIEW, Solid Works
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Employment Record:

2017-2018 Technical University of Kenya
2016- Up-to-date: Part time lecturer: TUK and DeKUT (2016)
2016-2017 Sanix Engineers-Electrical Consultants
2013 – to 2015: Research Assistant, University of Cape Town. South Africa.
2011 – to 2013: Assistant Electrical Engineer, Electrical Distributors K. Ltd.

Professional Training:

Aug 2015	Hottinger Baldwin Messtechnik GmbH-Germany	eDrive and Perception Software (HBM Gen 7i data acquisition System)
July 2015	Emerson I. Automation & Controls Emerson I.A. Southern Africa Pty (Ltd)	Introduction to drive Programming (SYPT Pro)
April 2013	International Energy Technik (IET)	Introduction Session on SIEMENS LOGIC MODULE-LOGO!

Journal Publications:

[1]. C.S. Gajjar, J.M. Kinyua, M.A. Khan, P.S. Barendse, "Analysis of a Nonintrusive Efficiency Estimation Technique for Induction Machines Compared to the IEEE 112-B and IEC 34-2-1 Standards", *IEEE Transactions on Industry Applications*, Vol. 51, No. 6, pp. 4541 – 4553, Nov.-Dec 2015. DOI: [10.1109/TIA.2015.2453257](https://doi.org/10.1109/TIA.2015.2453257)

Conference papers/Publications

[2]. J.M Kinyua, M.A Khan and P. Barendse, "Development and Efficiency estimation of a Regenerative Test Rig for Induction Motor Testing", *Energy Conversion Congress and Exposition (ECCE), 2016 IEEE, pp. 1-6, 2016 Milwaukee, WI, USA, Sep 18-22 2016* DOI: [10.1109/ECCE.2016.7855038](https://doi.org/10.1109/ECCE.2016.7855038)

[3]. J.M Kinyua, M.A Khan and P. Barendse," Power Flow and Dynamic Efficiency Analysis of Motor Drives",

[4]. H. Dehnavifard, J. M. Kinyua, M. A. Khan, and P. Barendse," A Comprehensive Review of Wound Rotor Induction Generator (WRIG) Analytical Design",

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Spearheaded the feasibility studies of a research on “*Determine the Impact of Voltage Regulation and voltage Unbalance on Induction Motor Lifespan*” for **Eskom** Sustainability Division, Research, Testing and Development.

MSc Research Topic

“Development of a Specialized Test Rig for Assessing the Efficiency of Large Industrial Induction Machines” (Design, procuring components, developing and commissioning of 110kW regenerative drive system-Including Instrumentation and control)

Personal Attributes

- Good communication Skills both oral and written;
- Good interpersonal Skills;
- Good presentation Skills;
- Ability to work under pressure and meet tight deadlines;

Referees:

1. Prof M.A Khan (MSc Thesis Supervisor)
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 2. Prof P.S Barendse (MSc-Co Supervisor)
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 3. Dr. Cyrus Wekesa,
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