

# Staff Profile

*(Tailor the blue texts to suit your personal profile)*



## Contact details

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Researcher ID: [AAJ-7227-2021](#)

## Dr. Osore A. Ebinga Emmanuel

*(Describe your professional self: Maximum 200 words)*

Dr. Emmanuel A.E. Osore is currently a Graduate Engineer and Lecturer in the department of Mechanical and Industrial Engineering of Masinde Muliro University of Science and Technology. He holds a Ph.D. degree in Mechanical Engineering from The University of Nairobi – Kenya, an MSc. in Industrial Engineering and Management and B. Tech in Production Engineering both from Masinde Muliro University of Science and Technology, Kenya.

His area of specialization is Manufacturing and Industrial technology in which he has taught and researched intensively. He has published in peer reviewed journals and presented various seminar and conference findings. He has also attended and participated in several workshops. Having worked in an Engineering consulting company, he has commensurate practical skill relevant to the industry.

His research focus is on advanced manufacturing technology, specifically automation in relation to material handling, CNC, 3D Printing. Also, free energy source discoveries. His current research includes lean automation on the competitiveness of industries in Kenya and development of free sources of energy for remote areas in developing countries.

Some of his key published works include: -

*(Publications relevant to Webometrics ranking are encouraged)*

- 1. Osore E.A.E, Ogola J.M and Madara O.M, (2021): *Impact of Lean Automation on Adaptive Control for Improved Real-Time Process Control in Sugar industry: Case Of Kenya*, ARPN Journal of Engineering and Applied Sciences Vol. 16, No. 6 pp 656-665 ISSN 1819-6608. Available online: [http://www.arnjournals.org/jeas/research\\_papers/rp\\_2021/jeas\\_0321\\_8535.pdf](http://www.arnjournals.org/jeas/research_papers/rp_2021/jeas_0321_8535.pdf)**
- 2. Osore E.A.E, Ogot M.M and Ogola J.M, (2020): *Influence of Lean Automation on Resource Wastage in Sugar Industries: Case in Kenya*, International Journal on Advanced Science, Engineering and**

Information Technology, vol. 10, no. 5, pp. 1963-1969, [Online]. Available: <http://dx.doi.org/10.18517/ijaseit.10.5.9261>

3. **E.A.E Osore**, J.M Ogola & M.M Ogot (2020): *Prospects of diffusion as a Six-Sigma automation in enhancing continuous improvement of cane juice extraction in Kenya*, Cogent Engineering, 7:1, 1733737. Taylor and Francis, United Kingdom. Available online:

<https://doi.org/10.1080/23311916.2020.1733737>

4. **Osore E.A.E**, Ogola J.M & Ogot M.M (2019): *Characterization of Levels of Automation on the Quality of Sugar Cane Juice Extraction: Case of Kenya*, Journal of Automation and Control, Vol. 7, No. 1, 15-24, DOI:10.12691/ Available online <http://pubs.sciepub.com/automation/7/1/3>

5. **Osore E.A.E** (2019): *Robotics as the appropriate measure for improving National and International security -Review*, International Journal for Research in Applied Sciences and Engineering Technology (IJRASET) ISSN: 2321-9653 Volume 7, Issue IV, April 2019 pp 2467 - 2470 DOI: 10.22214. [Online]

<https://doi.org/10.22214/ijraset.2019.4450>

View full CV here:

*(Include all your details and any academic outputs)*

# CURRICULUM VITAE

## Personal Details

**Names** : Dr. Emmanuel Austine Ebinga Osore  
**Gender** : Male  
**Date of Birth** : 3<sup>rd</sup> September, 1984  
**Address** : P.O. Box 2102- 50100 Kakamega - Kenya  
**Marital Status** : Married  
**Religion** : Christianity  
**Nationality** : Kenyan (ID No. 23920353, PP No. A1741417, DL No. 1447230)  
**Languages Spoken** : English, Kiswahili, Luhya and Luo  
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**ResearcherID:** : AAJ-7227-2021  
**Email** : [eebinga@yahoo.com](mailto:eebinga@yahoo.com), [eosore@mmust.ac.ke](mailto:eosore@mmust.ac.ke)

## Educational Background

**PhD in Mechanical Engineering** (Manufacturing Processes); University of Nairobi, Kenya (2016-2020)

**MSc (Mech. Eng /Industrial Engineering and Management)**; Masinde Muliro University of Science and Technology, Kenya (2012- 2014)

**B. Tech (Mech. Eng /Production Engineering)** – (First Class Honours); Masinde Muliro University of Science and Technology, Kenya (2005- 2010)

**Kenya Certificate of Secondary Education** (KCSE: B+); Khamis High school (2000-2003).

**Kenya Certificate of Primary Education** (KCPE: 515/700); Sparki Primary School (1993-1999)

## Personal Profile

A reliable, flexible, hardworking well trained professional, ready to work in a multi-racial and multicultural environment with a major aim of providing capacity building to local expertise in the field of Engineering and other closely related fields.

## Work Experience

**Lecturer** - Department of Mechanical and Industrial Engineering, Masinde Muliro University of Science and Technology (2021 - Date)

**Assistant Lecturer** - Department of Mechanical and Industrial Engineering, Masinde Muliro University of Science and Technology (2014 - 2021)

**Graduate Assistance** - Department of Mechanical and Industrial Engineering, Masinde Muliro University of Science and Technology (2011- 2014)

**Internship** - Prime Consult Ltd (Mechanical and Electrical Consulting Engineers and Project Management) (October-December 2011)

**Data Remediation Clerk** - Kenya Commercial Bank Ltd (June - September 2011)

**Trainee**- South Nyanza Sugar Company, Sare Awendo (May-July 2009)

**Trainee**- Kenya Ports Authority, Mombasa (September-October 2008)

**Trainee**- Pan African Paper Mills Ltd, Webuye (July-September 2008)

### **Professional Affiliation**

1. Registered member of Engineers Board of Kenya (EBK) – Graduate Engineer No. B15384
2. Registered member of Institution of Engineering Technologists and Technicians of Kenya (IET) Registration No. 436

### **Extra Skills**

#### **Computer skills:**

1. Basic knowledge in ANSYS™ Simulation and Modelling software
2. Basic knowledge in Part programming for CNC lathe and Milling machines
3. Basic knowledge in Arduino™ Programming.
4. A good command of MS Office™ (Word™, Excel™, Access™ and Power point™,
5. Publisher™, Office Project™)
6. Basic knowledge of programming in Pascal programming language through computer studies at High school.
7. Good command of graphic design applications (AutoCAD™, Inventor™, Fusion™ and SolidWorks™) through training during internship and personal determination.

#### **Leadership skills/ Community contributions:**

1. PTA Executive committee member at St. Ignatius Mukumu Boys High School, Kakamega Kenya. Representing Form 3Y (2014-2017)
2. An electoral commissioner for the Engineering Student Association at Masinde Muliro University of Science and Technology and the presiding officer of IEBC for the 2013 general elections.
3. Active development committee member of the Mary Seat of Wisdom (MSOW) MMUST Chaplaincy (2012-Date)

## **Additional information**

### **Administrative roles:**

1. Trained Internal Quality Assurance Auditor, MMUST (9<sup>th</sup> July 2019 – Date)
2. A member of the Directorate of Corporate Communication and Marketing, School of Engineering and Built Environment Representative, MMUST (1<sup>st</sup> May, 2018 – Date)
3. A member of the Directorate of Quality Assurance in charge of Examination Administration and Monitoring, MMUST (21<sup>st</sup> February, 2018 – Date)
4. Acting Head of Mechanical and Industrial Engineering Department, MMUST (13<sup>th</sup> December 2016 – 17<sup>th</sup> January 2017)
5. Projects coordinator in the department of Mechanical and Industrial Engineering (2014 –Date)
6. A member of the Examination and Timetabling committee in the department of Mechanical and Industrial Engineering (2014 –Date)
7. A member of the Curriculum review committee in the department of Mechanical and Industrial Engineering (2014 –Date)

### **Projects Participation:**

1. Mechanical designing of the Roboken Robot construction of Masinde Muliro University of Science and Technology, 2014
2. Design and fabrication of robot at Masinde Muliro University for the national robotic exhibition context held at the Bomas of Kenya in 2010.
3. Flying Faculty member on ProUni Edu-WEK Program at Brandenburg University of Applied Sciences and Magdeburg University of Applied Sciences of Germany in 2018.

### **Publications:**

1. **Osore E.A.E**, Ogola J.M and Madara O.M, (2021): *Impact of Lean Automation on Adaptive Control for Improved Real-Time Process Control in Sugar industry: Case Of Kenya*, ARPN Journal of Engineering and Applied Sciences Vol. 16, No. 6 pp 656-665 ISSN 1819-6608. Available online: [http://www.arpnjournals.org/jeas/research\\_papers/rp\\_2021/jeas\\_0321\\_8535.pdf](http://www.arpnjournals.org/jeas/research_papers/rp_2021/jeas_0321_8535.pdf)
2. **Osore E.A.E**, Ogot M.M and Ogola J.M, (2020): *Influence of Lean Automation on Resource Wastage in Sugar Industries: Case in Kenya*, International Journal on Advanced Science, Engineering and Information Technology, vol. 10, no. 5, pp. 1963-1969, [Online]. Available: <http://dx.doi.org/10.18517/ijaseit.10.5.9261>
3. **E.A.E Osore**, J.M Ogola & M.M Ogot (2020): *Prospects of diffusion as a Six-Sigma automation in enhancing continuous improvement of cane juice extraction in Kenya*, Cogent Engineering, 7:1, 1733737. Cogent OA, United Kingdom. Available online: <https://doi.org/10.1080/23311916.2020.1733737>

4. **Osores E.A.E**, Ogola J.M & Ogot M.M (2019): *Characterization of Levels of Automation on the Quality of Sugar Cane Juice Extraction: Case of Kenya*, Journal of Automation and Control, Vol. 7, No. 1, 15-24, DOI:10.12691/ Available online <http://pubs.sciepub.com/automation/7/1/3>
5. **Osores E.A.E** (2019): *Robotics as the appropriate measure for improving National and International security -Review*, International Journal for Research in Applied Sciences and Engineering Technology (IJRASET) ISSN: 2321-9653 Volume 7, Issue IV, April 2019 pp 2467 - 2470 DOI: 10.22214. [Online] <https://doi.org/10.22214/ijraset.2019.4450>
6. Ndugi D.S, Ndiema C.K, Omwando T.A, **Osores E.A.E**, Yegon E, (2015): *Energy audit for a steam plant (case Study pyrethrum factory in Nakuru, Kenya)*, International Journal of Innovative Research in Engineering & Management (IJIREM) ISSN: 2350-0557, Volume-2, Issue-5, September- 2015 pp 111-114
7. **Osores E.A.E** (2015): *Performance efficiency of jacketing materials in relation to emissivity on environmental conservation in insulated steam pipes*, International Journal of Engineering Research and Technology (IJERT) ISSN: 2278-0181, Volume4, Issue8, August 2015.pp 298-302
8. **Osores E.A.E**, Ndiema C.K, Masinde H.B, Ndugi D.S (2015): *Characterization of Emissivity of Jacketing Materials on Personnel Safety in insulated Steam Pipes*, International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869 (O) 2454-4698 (P), Volume3, Issue-7, July 2015 pp 18-21
9. **Osores E.A.E**, Ahmed S.M, Rotich P.K (2015): *Correlation between process control and emissivity of jacketing materials in steam pipes*, International Journal of Engineering Science and Innovative Technology (IJESIT) ISSN: 2319-5967, Volume4, Issue4, July 2015 pp 6874
10. **Osores E.A.E**, Ndiema C.K, Masinde H.B, Ndugi D.S (2015): *Influence of Emissivity of Jacketing Materials on Energy Conservation in Insulated Steam Pipes*, International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869 (O) 2454-4698 (P), Volume-3, Issue-7, July 2015 pp 13-17
11. Omwando T. A. & **Osores E.A.E** (2010): *Evaluation and control of particulate fly ash in sugar industries (A case study of South Nyanza sugar company Ltd-Kenya)*, Proceedings of the 1<sup>st</sup> engineering, Science and Technology conference at Masinde Muliro University of Science and Technology ISBN:9966-779-11-6 pp 275-288

#### **Conference and Seminar papers presented:**

1. **Osores E.A.E** “*How Lean Automation can reduce Resource Wastage in the Sugar Industry in Kenya*”, Newton Fund Researcher Links Workshop: How Resilient Manufacturing can solve the unemployment problem in Kenya; 18<sup>th</sup>– 21<sup>st</sup> September 2018 at Intercontinental Hotel, Nairobi, Kenya.
2. **Osores E.A.E** “*Prospects of diffusion as a 6 $\sigma$  - automation to improve production rate of cane juice extraction*”, Newton Fund Researcher Links Workshop: How Resilient

Manufacturing can solve the unemployment problem in Kenya; 18<sup>th</sup>– 21<sup>st</sup> September 2018 at Intercontinental Hotel, Nairobi, Kenya.

3. **Osore E.A.E** *“Influence of Emissivity of Jacketing Materials on Energy Conservation in Steam Pipes”* Faculty of Engineering Seminar, 2014 Theme: Technology in Touch with Today and Tomorrow: Engineering News 1 (Part Two), 2014
4. **Osore E.A.E** *“Effects of Emissivity of Jacketing material on the performance of thermal insulation designs in steam pipes”* Seminar presentations in the department of Mechanical and Industrial Engineering of Masinde Muliro University of Science and Technology, 2013
5. **Osore E.A.E** *“Fuels and Combustions”* Seminar presentations in the department of Mechanical and Industrial Engineering of Masinde Muliro University of Science and Technology, 2012
6. **Osore E.A.E** *“Evaluation and control of particulate fly ash in sugar industries (A case study of South Nyanza sugar company-Kenya)”*, presented during the 1<sup>st</sup> engineering conference for the theme: Science and Technology for Engineering Innovation and Industrialization at Masinde Muliro University of Science and Technology, 9<sup>th</sup> -11<sup>th</sup> 2010.

**Workshops and conferences attended:**

1. Newton Fund Researcher Links Workshop: How Resilient Manufacturing can solve the unemployment problem in Kenya; 18<sup>th</sup>– 21<sup>st</sup> September 2018 at Intercontinental Hotel, Nairobi, Kenya.
2. Stakeholders’ workshop on TVET Programmes held on 17<sup>th</sup>– 19<sup>th</sup> February 2016 at Bishop Stem Pastoral center Kakamega, Kenya
3. Performance contracting awareness session held on 9<sup>th</sup> November, 2015 at the MMUST Graduation Square; Topic: *The role of performance contract in service delivery.*
4. Staff seminar on management of post graduate studies in MCU at Masinde Muliro University of Science and Technology on 23/04/2015
5. Academic advisory training workshop in MCU at Masinde Muliro University of Science and Technology, 2014
6. Faculty of Engineering Curriculum review workshop in MCU at Masinde Muliro University of Science and Technology, 2014
7. The Engineering Student’s conference at Masinde Muliro University of Science and Technology for the theme “Science, Technology for self-reliance, economic stimulation and environmental conservation”, 2014
8. National Human Rights Commission Defenders (NHRCD) workshop on Leadership, Integrity and Transparency at Sheywe Guest House, 2013

9. Publishing of Articles by Singer publishers in MCU Masinde Muliro University of Science and Technology, 2013

### **Hobbies**

Playing football, Athletics, Swimming, Travelling, Chatting

### **Referees**

Eng. Muhamed Ahmed Swaleh

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