

Dr. Eng. Peter Tumwet Cherop, PE, MIEK, PhD

C/o School of Engineering and Built Environment
Masinde Muliro University of Science and Technology
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1. PERSONAL DETAILS

Name	Peter Tumwet Cherop
Nationality:	Kenyan
Gender	Male
Qualifications	PhD, MSc, BSc
Current Position	Senior Lecturer/Researcher/Engineer
Profession	Lecturer/Professional Engineer
Languages	English, Kiswahili, Russian
Year of Birth	1983
Driving Licence	Licensed Driver

2. PROFILE

An accomplished Researcher, Senior Lecturer, Leader, Manager, and Professional Engineer with over **18 years** of experience - including **over 7 years** in leadership and management roles. Committed to continuous professional growth through proactive learning, ensuring adaptability to evolving challenges and the highest standards of efficiency.

3. EDUCATION BACKGROUND

Date	Qualification	Institution
2016 - 2019	Doctor of Engineering	Durban University of Technology, South Africa
2007 - 2009	Master of Science in Chemical Engineering	Mendeleev University of Chemical Technology, Russia
2003 - 2007	Bachelor of Science in Chemical Engineering	Mendeleev University of Chemical Technology, Russia
2002 - 2003	University Preparatory Course	Tver State Technical University, Russia
1998 - 2001	Kenya Certificate of Secondary Education	Chavakali High School, Kenya
1997	Kenya Certificate of Primary Education	Cheptais Primary School, Kenya
1990 - 1996	Primary School Education	Kipsis Primary School, Kenya

4. PROFESSIONAL BODIES MEMBERSHIP

SN	Professional Body	Abbreviation	Membership Class	Membership Number
1.	Engineers Board of Kenya	EBK	Professional	A5300
2.	Institution of Engineers of Kenya	IEK	Corporate	M.5142

5. WORK EXPERIENCE SUMMARY

SN	Year	Position	Place of Employment
1.	Dec 2023 to date	Associate Dean	School of Engineering & Built Environment Masinde Muliro University of Science and Technology, Kenya
2.	Oct 2023 to date	Senior Lecturer	School of Engineering & Built Environment Masinde Muliro University of Science and Technology, Kenya
3.	Aug 2019 - Nov 2023	Chair of Department	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya
4.	April 2012 - Oct 2023	Lecturer	School of Engineering & Built Environment Masinde Muliro University of Science and Technology, Kenya
5.	April 2016 - Dec 2018	Lecturer	Durban University of Technology, South Africa
6.	Sept 2011 - April 2013	Part-time Lecturer	Taita Taveta University College, Kenya
7.	Aug 2011 - Mar 2012	Projects Coordinator	Young Engineering Ltd.
8.	Oct 2010 - Aug 2011	Process Engineer	Athi River Mining Ltd. [ARM], Kenya
9.	Sept 2007 - June 2009	Graduate Assistant	Mendeleev University of Chemical Technology, Russia
10.	Sept 2008 - July 2010	Teacher of English	EF Education First, Moscow, Russia

6. MANAGEMENT AND LEADERSHIP EXPERIENCE

SN	Management Role	Organization	Period
1.	Associate Dean	School of Engineering & Built Environment Masinde Muliro University of Science and Technology, Kenya	Dec 2023 to date
2.	Chair of Department	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Aug 2019 - Nov 2023
3.	Projects Coordinator	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Feb 2019 - Feb 2020
4.	Coordinator, PSSP	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Feb 2019 - Mar 2021
5.	Examinations Coordinator	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Aug 2015 - Feb 2016
6.	Quality Assurance Officer	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Jun 2013 - Jan 2016
7.	Industrial Attachment Coordinator	Mechanical & Industrial Engineering Masinde Muliro University of Science and Technology, Kenya	Aug 2014 - Jan 2016

7. SUPERVISION OF POSTGRADUATE STUDENTS

SN	Student	Level	Topic	Status
1.	Benard Ronoh	Masters	Determination of Combustion Properties of Blended Briquettes of Sawdust, Maize Stalks and Coffee Husks	Completed in 2025
2.	Bonface Otedo	Masters	Optimization and Analysis of Fluidized Bed Dryer for Improved Thermal Efficiency in Tea Factories	Completed in 2024

SN	Student	Level	Topic	Status
3.	Reuben Tum	Masters	Co-Digestion of a Mixture of Cow Dung and Maize Stalk Residues and its Influence on Biogas Production	Completed in 2024
4.	Griffin Mabong	Masters	Analysis of Demonstrative-Kinesthetic Teaching on Robot Manipulator for Efficient Industrial Material Handling Applications	Completed in 2024
5.	Sammy Mugo	Masters	Optimization of Turbine Blade Pitch Angle of a Home-built Wind Turbine for Maximum Power Output	Completed in 2024
6.	Patrick Munialo	PhD	Modelling of Energy generation from Open Non-equilibrium Steady State Thermodynamic Systems	Completed in 2023
7.	David Masara	PhD	Optimization of pyrolytic and feedstock Parameters of Biochar Blends for Industrial Effluent-specific Treatment	Thesis Writing
8.	Patrick Owino	PhD	Optimization of Tilting Rotary Furnace for Waste Recovery in the Informal Sector	Thesis Writing
9.	Vincent Odhiambo	PhD	Dynamics and Wear Simulation Analysis of Contact Rolling Metallic Surfaces	Data Collection
10.	Martin Chesikak	Masters	Optimization of Efficiency of Green Coffee Beans Grading Machine	Data Collection
11.	Felistus Toroitich	Masters	Optimization of Grinding Parameters in Enhancing the Surface Finish of Ti-6V-4Al Components: Finite Element Analysis and Experimental Techniques	Data Collection
12.	Ishmael Makanga	Masters	Evaluation of Physical and Chemical Characteristics of Bagasse-based Fuel Briquettes in Western Kenya	Proposal Defended

8. ATTRACTION OF FUNDS/FUNDING APPLICATIONS

SN	Fund	Year	Amount (KES)	Status
1.	Funding to attend a Conference on "Heat and Heatwave Trends and their Health Implications in the Global South" – Funded by Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) JSS Science and Technology University (JSS STU), Mysuru, Karnataka, India; and the Scientific Committee on Problems of the Environment (SCOPE), Delft, the Netherlands	Nov 2025	400,000	Successful
2.	Funding to attend a Seminar on "Vocational Education for Officials from Developing Countries" – Funded by the Ministry of Commerce of the People's Republic of China	April 2025	1,420,000	Successful
3.	Higher Education Management (DIES) - Deans' Course Africa 2025/2026, DAAD	2024	5,000,000	Unsuccessful
4.	EPFL - Excellence in Africa Online Labs	2024	7,000,000	Unsuccessful
5.	MIASA Writing Workshop on Governance, Democracy and Green Energy, Ghana	2024	1,000,000	Unsuccessful

9. PUBLICATIONS IN REFEREED JOURNALS

Since Promotion to Senior Lecturer

SN	Title
1.	D. O. Masara, P. T. Cherop , E. E. Osore and B. H. Masinde, "Dual-Optimization of Pyrolytic Parameters of Biochar for Application as a Sustainable Effluent Biofilter", International Journal of Environmental Science and Technology, Vol. , pp. , 2026. ISSN: 1735-2630
2.	W. Wanjala, J. Owino, P. Buhere, P. Nyongesa, P. Cherop , P. Bukhala, A. Umulkher and E. Omukunda, "The Prevalence of Intestinal Parasites and Water, Hygiene and Sanitation Activities among School Going Children in Artisanal Gold Mining Areas in Kakamega County", Afro-Egyptian Journal of Infectious and Endemic Diseases, Vol. 15 [4], pp. 199-209, 2025. ISSN: 2090-7184
3.	R. K. Tum, B. H. Masinde and P. T. Cherop , "Effect of Sodium Carbonate Pretreatment and Pretreatment Duration on Total Solids of Maize Stalk: Response Surface Methodology Approach", Bima Journal of Science and Technology, Vol. 9 [2A], pp. 178-188, 2025. ISSN: 3115-4662

SN	Title
4.	B. C. Ronoh, P. T. Cherop and B. H. Masinde, "Determination of Fixed Carbon of Blended Briquettes of Sawdust, Maize Stalks and Coffee Husks: A Case Study of Tea Industry in Kericho County, Kenya", <i>Science Mundi</i> , Vol. 5 [2], pp. 21-35, 2025 . ISSN: 2788-5844
5.	G. P. Mabong, E. E. Osore and P. T. Cherop , "Accuracy Assessment of Demonstrative-Kinesthetic Teaching of Robotic Manipulators to Acquire the Desired Position", <i>Bima Journal of Science and Technology</i> , Vol. 9 [1A], pp. 1-7, 2025 . ISSN: 3115-4662
6.	G. P. Mabong, E. E. Osore and P. T. Cherop , "A Demonstrative-Kinesthetic Teaching Approach for Inverse Kinematics of a 4-DOF Robot Manipulator", <i>Journal of Applied Engineering Science</i> , Vol. 22 [4], pp. 772-780, 2024 . ISSN: 1451-4117
7.	B. O. Otedo, P. T. Cherop and E. E. Osore, "Optimization of Drying Parameters for Minimization of Moisture Content in Black Tea Production", <i>Science Mundi</i> , Vol. 4 [2], pp. 198-210, 2024 . ISSN: 2788-5844
8.	G. P. Mabong, E. E. Osore and P. T. Cherop , "Robot Manipulator Programming Via Demonstrative-Kinesthetic Teaching for Efficient Industrial Material Handling Applications", <i>African Scientific Annual Review</i> , Vol. 1 [1], pp. 165-171, 2024 . ISSN: 3007-0902
9.	S. G. Mugo, B. H. Masinde and P. T. Cherop , "Optimization of Turbine Blade Pitch Angle of a Home-built Wind Turbine for Maximum Power Output", <i>Journal of Renewable Energy and Mechanics</i> , Vol. 7 [2], pp. 82-99, 2024 . ISSN: 2614-8315

Conference Papers

10. **P. T. Cherop**, "Assessing and Mitigating Urban Heat Island Intensity in the Global South: A Thermodynamic and Engineering Perspective", International Conference on "Heat and Heatwave Trends and their Health Implications in the Global South", 6 - 7 Nov **2025** – JSS STU, Mysuru, Karnataka, India

Before Promotion to Senior Lecturer

11. P. W. Munialo, C. K. Enwemeradu, J. Owuor, **P. T. Cherop** and S. Makokha, "Investigation on Selected Areas Deviating from the Second Law of Thermodynamics: Challenges to the Thermodynamics Second Law", *International Journal of Mechanical Engineering and Technology*, Vol. 13 [5], pp. 54-62, **2022**. ISSN: 0976-6359

12. **P. T. Cherop**, S. L. Kiambi and P. Musonge, "Kinetics of Granulated Waste Tyre Pyrolysis via Thermogravimetry and Model-Free Methods", *European Journal of Engineering and Natural Sciences*, Vol. 3 [1], pp. 96-102, **2019**. ISSN: 2458-8156

13. **P. T. Cherop**, S. L. Kiambi and P. Musonge, "Non-isothermal model-free and model-fitting kinetics of tyre crumb pyrolysis", *The Journal of Solid Waste Technology and Management*, Vol. 45 [2], pp. 121-130, **2019**. ISSN: 1088-1697

14. **P. T. Cherop**, S. L. Kiambi and P. Musonge, "Modelling and optimisation of oxidative desulphurisation of tyre-derived oil via central composite design approach", *Green Processing and Synthesis - De Gruyter*, Vol. 8 [1], pp. 451-463, **2019**. ISSN: 2191-9550
15. **P. T. Cherop**, S. L. Kiambi and P. Musonge, "Kinetic study of non-isothermal co-pyrolysis of tyre crumb with eucalyptus sawdust", *International Journal of Environment and Waste Management*, Vol. 21 [2-3], pp. 184-200, **2018**. ISSN: 1478-9868
16. E. K. Kosgey, S. L. Kiambi and **P. T. Cherop**, "Analysis of potassium nitrate purification with recovery of solvent through single effect mechanical vapor compression", *South African Journal of Chemical Engineering*, Vol. 24, pp. 1-7, **2017**. ISSN: 1026-9185
17. **P. T. Cherop**, S. L. Kiambi and E. K. Kosgey, "Effect of Non-Ionic Cellulose Ethers on Properties of White Portland Cement", *International Journal of Applied Engineering Research*, Vol. 12 [10], pp. 2502-2508, **2017**. ISSN: 0973-9769
18. **P. T. Cherop**, S. L. Kiambi and E. K. Kosgey, "Influence of vinyl acetate-ethylene copolymer on early-age ettringite formation and behavior in OPC/CAC/hemihydrate gypsum binder system: A case of higher CAC content than OPC content in the binder", *International Journal of Applied Engineering Research*, Vol. 12 [1], pp. 11-21, **2017**. ISSN: 0973-9769

Conference Papers

19. E.K. Kanda, **P. T. Cherop**, J. Owuor, V.O. Lutta and E. Nandasaba, "Knowledge, Attitudes and Perceptions on Wastewater Re-Use in Kenya", 14th International Multi-Disciplinary Conference", 19-21 May **2021** – MMUST, Kenya.
20. B.W. Sabuni, N. Mburu, M. M. Mukolwe, **P. T. Cherop** and J. Owuor, "Tailoring Engineering Curriculum to Align Training to Industry and Development Needs in Kenya", 14th International Multi-Disciplinary Conference", 19-21 May **2021** – MMUST, Kenya.
21. B. Sabuni, **P. Cherop**, J. Owuor and M. Mukolwe "Effect of Covid-19 Pandemic on Engineering Education in Kenya: A Case of Masinde Muliro University of Science and Technology", STEM Education International Conference [STEMEIC2020]", 25-27 November **2020** – MMUST, Kenya
22. **P. T. Cherop**, "Gasification of biomass: A review of the effect of process conditions", "in Proceedings of Sustainable Research and Innovation Conference", **2020**, pp. ISBN: 2079-6226
23. P. Sakwa, **P. T. Cherop** and M.P. Ochuro, "Design of a sensor operated smart greenhouse", 13th Multi-disciplinary International Conference", 19-21 June **2019** – MMUST, Kenya.
24. **P. T. Cherop**, "Effect of process parameters and conditions on waste tyre pyrolysis products yield: A review", 13th Multi-disciplinary International Conference", 19-21 June **2019** – MMUST, Kenya
25. **P. T. Cherop**, "Study of sulphur removal in waste tyre pyrolysis oil using hybrid design", "in Proceedings of Sustainable Research and Innovation Conference", **2020**, pp. 101-104. ISBN: 2079-6226

26. M. Moyo, **P. T. Cherop**, K. Kanny, T. P. Mohan, S. Kiambi and P. Musonge, "Kinetics of non-isothermal degradation of poly lactic acid films", "in Proceedings of Advances in Composites, Biocomposites and Nanocomposites", **2018**, Vol. 3, pp. 378-391. ISBN: 978-1-919858-30-2

27. **P. T. Cherop**, S. Kambi and P. Musonge, "Central composite design approach in the study of oxidative desulphurisation of waste tyre pyrolysis fuel". GPE-6th International Congress on Green Process Engineering 3-6 June **2018** – Toulouse, France

28. **P. T. Cherop**, S. L. Kambi and P. Musonge, "Kinetics of granulated waste tyre pyrolysis via thermogravimetry and model-free methods", "in Proceedings of 3rd International Conference on Environmental Science and Technology", **2017**, pp. 58-63. ISBN: 978-605-83575-7-0

29. **P. T. Cherop**, S. Kambi and P. Musonge, "Kinetics of granulated scrap tyre pyrolysis via thermogravimetry", "in Proceedings of Sustainable Research and Innovation Conference", **2017**, pp. 150-155. ISBN: 2079-6226

10. EXAMINATION OF THESES AND DISSERTATIONS

SN	Student	Level	Topic	Year Examined
1.	Michael Mukiibi	Masters	Evaluation of the Effect of Cattle Bone Heat Treatment on Processing and Nutritional Quality of Bone Meal Supplement	Examined in 2025
2.	Joseph Kuta	PhD	Effect of Coir and Crushed Coconut Shells on Engineering Properties of Concrete	Examined in 2025
3.	Conrad Mutobera	Masters	Optimization of Biogas Purification using Water Scrubbing Technology for Enhanced Gas Quality	Examined in 2025
4.	Joseph Otieno	Masters	Optimization of Hybrid Cyclone in Reduction of Particulate Fly Ash in Sugar Industries in Kenya	Examined in 2025
5.	Frank Odero	Masters	Effect of Glass Powder on Durability Performance of Hardened Concrete in Aggressive Environment	Examined in 2025
6.	Thomas Lukeyo	Masters	Transient and Steady State Stability Analysis on Solar PV-Wind Grid-tie System	Examined in 2024
7.	Michael Juma	Masters	Optimal Sizing and Analysis of a Sustainable Solar PV-Biomass Hybrid Energy System for Learning Institutions	Examined in 2024

SN	Student	Level	Topic	Year Examined
8.	Keithy Thuku	Masters	Effect of Micro-lime on Engineering Properties of Ambient-cured Sugarcane Bagasse Ash-based Geopolymer Concrete	Examined in 2024
9.	Daniel Kotieno	Masters	Effect of Blending Sand from Different Sources on Strength of Concrete: Case of Western Kenya	Examined in 2023
10.	Tabitha Soo	Masters	Investigation of the Structural Performance of Portland Pozzolana Cement in Concrete: A Case of Kakamega County	Examined in 2023
11.	Stephen Shitabuleh	Masters	The Structural Behavior of Concrete-Filled Bamboo Columns Under Axial Compression	Examined in 2020

11. CONTINUOUS PROFESSIONAL DEVELOPMENT

SN	Course Title	Organizer/Sponsor	Period
1.	32 nd IEK International Convention	Institution of Engineers of Kenya (IEK)	25 th – 28 th Nov 2025
2.	Pre-Submission Conference	Engineers Board of Kenya (EBK)	25 th Jul 2024
3.	Engineering Deans Research Workshop	Morendat Institute of Oil and Gas (MIOG) Science and Technology, Kenya	28 th – 30 th May 2024
4.	5 th Engineering Partnerships Convention 2024	Engineers Board of Kenya (EBK)	6 th - 10 th May 2024
5.	World Engineering Day	Institution of Engineers of Kenya (IEK)	4 th Mar 2024
6.	World Engineering Day	Institution of Engineers of Kenya (IEK)	4 th Mar 2023
7.	Research Outreach Engagement Forum	Kenya Education Network (KENET)	31 st May 2023
8.	Excellence in Departmental Leadership	MMUST	23 rd – 24 th Mar 2023
9.	Intellectual Property Training	MMUST/FOIPAL	29 th Nov 2022
10.	Redefining Engineering Curriculum for Industrial Development	Royal Academy of Engineering	30 th April 2021

SN	Course Title	Organizer/Sponsor	Period
11.	Industry Collaboration for Development Research	MMUST	26 th Feb 2021
12.	Financial and Procurement Management	MMUST	11 th - 13 th Mar 2020
13.	Researcher Connect	British Council, Kenya	11 th - 13 th Feb 2019

12. SUPERVISION AND EXECUTION OF PROJECTS

SN	Project	Place	Year	Status
1.	Solar PV System	MMUST	2023-2023	Completed
2.	Herbal Sauna Project	MMUST	2020-2021	Completed
3.	Sanibooth Project	MMUST	2020-2021	Completed
4.	Construction of Multi-purpose Hall	MMUST	2012 -2014	Completed

13. EXTERNAL ENGAGEMENTS AND APPOINTMENTS

SN	Engagement	Organization	Period
1.	External Examiner	Moi University, Kenya	Sept 2025 to date
2.	Curriculum Development Stakeholder	Kisii University, Kenya	June 2014

14. CONSULTANCY

1. Consultancy on "Feasibility Study for Establishment of School of Engineering at Umma University, Kenya" [March - August 2024]
2. Consultancy on "Identification, Specification and Listing of Equipment for TVET Institute for Textile Technology at The Kisumu National Polytechnic, Kenya" [April - May 2024]

15. MENTORSHIP

1. Engineering Students Challenge, KES 1,000,000 prize at the Youth National Climate change and Water Security Innovation Summit and emerged 2nd overall", Kisumu, Kenya [2024]
2. Engineering Students Challenge, USD 1,500 prize at the Enactus-Schneider Battery Innovation Challenge and emerged 2nd overall", Nairobi, Kenya [2024]

3. Jeremy Omaye, **Scholarship [top candidate]** for "Master of Science in Sustainable Energy Transitions", Strathmore University **[2022]**

16. MEMBERSHIP IN EDITORIAL BOARDS

1. Editorial Board Member, "Journal of Advances in Environment and Energies". ISSN: 2833-6046
2. Editorial Board Member and Reviewer, "Journal of Advances in Science, Engineering and Technology"

17. COMMUNITY ENGAGEMENT

1. Member of the Elgon Young Professionals [EYP], Mt. Elgon, Bungoma County, Kenya
2. Patron, Mt. Elgon University Students Association [MTEUSA], Masinde Muliro University of Science and Technology Branch
3. Member, Kipsis Arrows Football Club, Mt. Elgon, Bungoma County, Kenya
4. Associate Board Member of the Elgon Centre for Education [ECE], Mt. Elgon, Bungoma County, Kenya

18. POSITIONS HELD IN ACTING CAPACITY

1. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[19th – 21st Nov 2025]**
2. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[10th – 14th Nov 2025]**
3. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[13th – 15th Oct 2025]**
4. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[8th – 12th Sept 2025]**
5. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[11th – 29th Aug 2025]**
6. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[24th June – 3rd July 2025]**
7. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[16th - 20th Dec 2024]**
8. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[20th – 30th Aug 2024]**
9. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya **[13th May – 28th June 2024]**

10. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [19th – 21st Feb 2024]
11. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [13th July - 4th Aug 2023]
12. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [21st – 25th Nov 2022]
13. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [20th - 22nd Oct 2020]
14. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [30th Sept - 2nd Oct 2020]
15. **Acting Dean**, School of Engineering and the Built Environment, Masinde Muliro University of Science and Technology, Kenya [12th - 15th Oct 2015]

19. MEMBERSHIP TO COMMITTEES AND BOARDS

1. **Member**, Organizing Committee for the Inaugural Lecture by Prof. Eng. Sibilike K. Makhanu, Masinde Muliro University of Science and Technology, Kenya [June – Oct 2025]
2. **Chairperson**, Inspection and Acceptance Committee for Transport Services Department, Masinde Muliro University of Science and Technology, Kenya [Feb 2025 to date]
3. **Member**, Committee on Inaugural Innovation Championships and Launch of Science Park Innovation Academy, Masinde Muliro University of Science and Technology, Kenya [13th - 14th Feb 2025]
4. **Member**, Quotation Evaluation Committee on Hire of Event Ware and Public Address System for 20th Graduation Ceremony, Masinde Muliro University of Science and Technology, Kenya [Nov - Dec 2024]
5. **Member**, Seating Arrangement and Security Sub-committee, 21st Graduation Ceremony, Masinde Muliro University of Science and Technology, Kenya [Aug - Dec 2024]
6. **Member**, Trustees Election Board, Staff Retirement Benefit Scheme, Masinde Muliro University of Science and Technology, Kenya [Aug - Sept 2024]
7. **Focal Officer**, HEST-AfDB Project on Establishment of the Centre of Excellence in Industrial Engineering, Masinde Muliro University of Science and Technology, Kenya [March 2024 to date]
8. **Member**, Deans' Election Board, Masinde Muliro University of Science and Technology, Kenya [Feb - March 2024]
9. **Member**, Proposal Writing Committee, School of Engineering and Built Environment, Masinde Muliro University of Science and Technology, Kenya [Feb 2024 to date]
10. **Member**, Committee on Innovative Financing Options, Masinde Muliro University of Science and Technology, Kenya [Oct 2023 - June 2024]

11. **Chairperson**, Tender Evaluation Committee for Proposed Solar Installation Works, Masinde Muliro University of Science and Technology, Kenya **[March - April 2023]**
12. **Chairperson**, Quotation Evaluation Committee on Supply and Delivery of Teaching Materials for Mechanical and Civil Engineering Departments, Masinde Muliro University of Science and Technology, Kenya **[Feb - March 2023]**
13. **Member**, University Solar Photo Voltaic Energy Project Implementation Committee, Masinde Muliro University of Science and Technology, Kenya **[W.e.f. Jan 2023]**
14. **Chairperson**, Tender Evaluation Committee for Mechanical and Electrical Installations at the Proposed Engineering and TVET Complex, Masinde Muliro University of Science and Technology, Kenya **[Nov - Dec 2022]**
15. **Chairperson**, Tender Evaluation Committee on Supply, Delivery, Installation, Testing and Commissioning of Structured Cabling and CCTV Surveillance at the Proposed Engineering and TVET Complex, Masinde Muliro University of Science and Technology, Kenya **[Nov - Dec 2022]**
16. **Chairperson**, Quotation Evaluation Committee on Supply and Delivery of Laboratory and Teaching Materials, Masinde Muliro University of Science and Technology, Kenya **[May - June 2022]**
17. **Chairperson**, Quotation Evaluation Committee on Supply, Delivery, Installation and commissioning of Equipment and Teaching Materials, Masinde Muliro University of Science and Technology, Kenya **[May - June 2022]**
18. **Chairperson**, Tender Evaluation Committee on Supply, Delivery, Installation and commissioning of Teaching Equipment, Masinde Muliro University of Science and Technology, Kenya **[Sept - Nov 2021]**
19. **Member**, Senate Ad Hoc Committee to Investigate Main Examination Irregularities for Semester II 2021/2022 Academic Year, Masinde Muliro University of Science and Technology, Kenya **[Sept - Nov 2021]**
20. **Member**, Technical Committee to carry out an evaluation and Audit of African Development Bank (AfDB) - HEST Project Phase I, Masinde Muliro University of Science and Technology, Kenya **[Nov 2019 - Feb 2020]**

20. WORKSHOPS, TRAINING AND SEMINARS ATTENDED

1. 32nd IEK Convention - themed “Engineering the Future: The Roadmap for Kenya” organized by **Institution of Engineers of Kenya** at PrideInn Paradise Beach Resort & Spa, Mombasa, Kenya **[25th - 28th Nov 2025]**
2. Training on “**Research Management and Leadership**” at Golf Hotel, Kakamega, Kenya **[12th - 14th Nov 2025]**
3. Workshop on “**Research Grants Management Best Practices**” at Golf Hotel, Kakamega, Kenya **[2nd Oct 2025]**

4. Seminar on "Mitigation Measures to Prevent Landslides: Examples in Italy and East Africa" at Masinde Muliro University of Science and Technology, Kenya [28th Aug 2025]
5. Workshop on "Competencies for Universities and Teacher Education Programs in Alignment with Competency-based Education in Kenya" at Kakamega Sports Club, Kakamega, Kenya [11th Aug 2025]
6. Workshop on "Transportation Engineering: Redefining Transportation in Kenya and Beyond ... for a sustainably Safe, Reliable, Effective and Efficient Movement of People, Goods and Services" at Golf Hotel, Kakamega, Kenya [6th - 7th Aug 2025]
7. Consultative Engagement on "Formulation of Detailed Terms of Reference on Consultancies under the HEST Phase II Project" at Hotel Hylise, Naivasha, Kenya [16th - 20th June 2025]
8. Seminar on "Vocational Education for Officials from Developing Countries" at Jiangxi Vocational College of Foreign Studies, People's Republic of China [29th April - 19th May 2025]
9. Workshop on "MMUST Senate Role on Implementation of Strategic Plan 2024-2028" at Sirikwa Hotel, Eldoret, Kenya [20th - 21st March 2025]
10. Workshop on "Validation of Transition and Completion Rates for MMUST for the Period 2017-2023" at Golf Hotel, Kakamega, Kenya [17th March 2025]
11. Workshop on "Piloting of Supervision and Mentorship Framework (SMF) and Capacity Building for Effective Supervision and Mentorship of Female Postgraduate Students in STEM" at Bishop Nicholas Stam Pastoral Centre, Kakamega, Kenya [27th Feb 2025]
12. Workshop on "Quality Management System for Heads of Cost Centres" at Golf Hotel, Kakamega, Kenya [17th Sept 2024]
13. Workshop on "Engineering Deans Research Workshop" at Morendat Institute of Oil and Gas, Naivasha, Kenya [28th - 30th May 2024]
14. 5th Engineering Partnerships Convention - themed "Engineering at 60" organized by Engineers Board of Kenya at Dedan Kimathi University of Technology, Nyeri, Kenya [6th - 10th May 2024]
15. Training on "Finite Element Analysis" at Masinde Muliro University of Science and Technology, Kakamega, Kenya [7th March 2024]
16. Training on "Competency-based Education and Training (CBET) Preparedness for Associate Deans and CoDs" at Golf Hotel, Kakamega, Kenya [5th - 6th March 2024]
17. Training on "Gasification, Catalysis and CHEMCAD Software for Chemical Processes" at Masinde Muliro University of Science and Technology, Kakamega, Kenya [20th - 24th Nov 2023]
18. Training on "Productivity Mainstreaming for Committee Members and Cost Center Heads" at Golf Hotel, Kakamega, Kenya [7th - 10th Nov 2023]
19. Training on "Module Development and e-Learning" at Golf Hotel, Kakamega, Kenya [23rd - 25th Oct 2023]

20. Workshop on “**Research Outreach Engagement Forum**” by KENET at Sarova Imperial Hotel, Kisumu, Kenya [31st May 2023]
21. Workshop on “**Excellence in Departmental Leadership**” at Kisumu Hotel, Kisumu, Kenya [23rd – 24th March 2023]
22. Workshop on “**Review of Strategic Plan 2022/2023 - 2026/2027 for Masinde Muliro University of Science and Technology**” at Kisumu Hotel, Kisumu, Kenya [19th – 20th Jan 2023]
23. Training Workshop on “**Intellectual Property**” at Masinde Muliro University of Science and Technology, Kenya [29th Nov 2022]
24. Workshop on “**Redefining Engineering Curriculum for Industrial Development**”, supported by the Royal Academy of Engineering [UK], at Golden Gates Hotel, Nyeri, Kenya [30th April 2021]
25. Workshop on “**Industry Collaboration for Development Research**” at Bishop Nicholas Stam Pastoral Centre, Kakamega, Kenya [26th Feb 2021]
26. Workshop on “**Engineering Curriculum Review Through Industry-Academic Linkages to support Knowledge Transfer and Sharing**”, supported by the Royal Academy of Engineering [UK], at BestWestern Hotel, Kisumu, Kenya [14th -15th Jan 2021]
27. Workshop on “**Development and Negotiation of Cost Centre Performance Contract**” at Bishop Nicholas Stam Pastoral Centre, Kakamega, Kenya [19th Oct 2020]
28. Training on “**Financial and Procurement Management**” at Kisumu Hotel, Kenya [11th – 13th March 2020]
29. Training on “**Enterprise Resource Planning [ERP]**” at Masinde Muliro University of Science and Technology, Kenya [June 2019]
30. Training on “**British Council Researcher Connect**” Training, at Acacia Premier Hotel, Kisumu, Kenya [11th -13th Feb 2019]
31. Workshop on “**Performance Contracting Awareness**” at Masinde Muliro University of Science and Technology, Kakamega, Kenya [9th Nov 2015]
32. Workshop on “**Masinde Muliro University of Science and Technology Curricula vetting**” at Kamadep Guest House, Kenya [24th – 26th Sept 2014]
33. Stakeholders meeting aimed at developing a Bachelor of Technology in Mechanical and Production Engineering Curriculum for Kisii University at Egerton University ARC hotel, Kenya [11th June 2014]
34. Workshop on “**Engineering Curriculum Review**” at Masinde Muliro University of Science and Technology, Kenya [15th – 16th May 2014]
35. Training Workshop on “**Curriculum Development, Review, Implementation and Accreditation for Public Universities in Kenya**” at Masinde Muliro University of Science and Technology, Kenya [23rd – 24th Jan 2014]
36. Workshop on “**Emerging trends in cement Technology**” at Mendeleyev University, Russia [5th – 8th May 2008]

37. Workshop on “Global warming” at Mendeleyev University, Russia [13th – 16th March 2007]

21. WEBINARS AND PUBLIC LECTURES ATTENDED

1. Webinar on “Sensitization on Gazetttement of Engineers” organized by Engineers Board of Kenya, Kenya [4th Dec 2025]
2. Webinar on “Sensitization on the Washington Accord” organized by Engineers Board of Kenya, Kenya [30th July 2025]
3. Webinar on “Sustainable Engineering Practices Inspired by Indigenous Knowledge” organized by Masinde Muliro University of Science and Technology, Kenya [25th March 2025]
4. Webinar on “Sensitization on Gazetttement of Engineers” organized by Engineers Board of Kenya, Kenya [7th March 2025]
5. Webinar on “Leadership and Personal Development” organized by Institution of Engineers of Kenya (IEK), Kenya [3rd March 2025]
6. Webinar on “Urine Analysis Test for Early Disease Detection and Monitoring using Computer Vision” organized by Kenya Education Network, Kenya [12th Feb 2025]
7. Webinar on “Leveraging Generative AI for Transformative Teaching and Learning” organized by Kenya Education Network, Kenya [11th Feb 2025]
8. Webinar on “Engineering Professional Practice Guidelines” organized by Engineers Board of Kenya, Kenya [29th Jan 2025]
9. Inaugural Lecture on “Transforming Digital Literacy with Support of AI and Chat GPT” by Prof. Andrey Koptelov, Sam Houston State University, Texas, USA [3rd Dec 2024]
10. Public Lecture on “Transforming Science Education in Kenya: Navigating Policies and Realities in the Classroom” by Prof. William Toili, Masinde Muliro University of Science and Technology, Kenya [28th Nov 2024]

22. RESEARCH INTERESTS

Energy, Waste management, Pyrolysis, Pollution control, Environmental engineering, Cement and Concrete Technology.

23. THESES AND DISSERTATIONS

1. Kinetic Modelling of Scrap Tyre Pyrolysis and Oxidative Desulphurisation of Tyre-derived Oil [PhD Thesis: 2019]
2. Research on the Causes of Cement Corrosion due to delayed Ettringite Formation [Master’s Thesis: 2009]
3. Production of Sulphate-resistant Cements [Undergraduate Project: 2007]

24. AWARDS AND SCHOLARSHIPS

1. **Top Doctoral Student** in the Faculty of Engineering and the Built Environment, Durban University of Technology [Based on 2017 research outputs, **Dec 2017**]
2. **PhD Scholarship**: National Research Foundation, Durban University of Technology [**Jan 2016 - Dec 2018**]
3. **Top Student in Chemistry Contest**, Chavakali High School: Awarded by the Provincial Director of Education [**Aug 2001**]

25. Philanthropy, Community and Society Activities

1. Attended the "**World Engineering Day**" organized by Institution of Engineers of Kenya at Masinde Muliro University of Science and Technology, Kenya [**4th March 2025**]
2. Sponsored Awards during the 21st Graduation Ceremony, Masinde Muliro University of Science and Technology, Kenya [**Dec 2024**]
3. Attended the "**World Engineering Day**" organized by Institution of Engineers of Kenya at Masinde Muliro University of Science and Technology, Kenya [**4th March 2024**]
4. Attended the "**World Engineering Day**" organized by Institution of Engineers of Kenya at Masinde Muliro University of Science and Technology, Kenya [**4th March 2023**]
5. Sponsored Awards during the 17th Graduation Ceremony, Masinde Muliro University of Science and Technology, Kenya [**Dec 2021**]
6. Participated and contributed in Mater Heart Run, Kakamega, Kenya [**11th June 2022**]

26. SHORT COURSES

1. Meeting Management Course, Chicago Institute of Business [**June 2015**]
2. 10 Soft Skills You Need, Chicago Institute of Business [**June 2015**]
3. Virtues Project International [VPI] Training at Masinde Muliro University of Science and Technology, Kenya [**11th Dec 2014**]

27. ICT AND COMPUTER SKILLS

- ✓ Engineering Applications: Design Expert, Minitab, ChemCAD, Edraw Max, MATLAB and Aspen-Plus
- ✓ Excel as an Engineering, Data Organisation and Data Analysis Tool
- ✓ Microsoft Office Applications: Word, Excel, PowerPoint, Google workspace
- ✓ Data and File Management
- ✓ Referencing and Management Tools
- ✓ Software Installation and Troubleshooting
- ✓ Operating Systems: MS Windows

28. LANGUAGES

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Swahili	Good	Good	Good
Russian	Good	Good	Good

Date: 15th, January 2026