

CURRICULUM VITAE

PERSONAL INFORMATION

Personal Details

Name: Nawiri Mildred Pauline, (PHD) AMRSC
E-mail: nawiri.mildred@ku.ac.ke
Address: P.O Box 43844-00100
Nationality: Kenyan
Gender: Female
Designation: Associate Professor

QUALIFICATIONS

Research Interests

- Food interventions for management of various health conditions including vitamin A & B deficiency, diabetics and cancer.
- Environmental management including soil, water, air analysis
- Analysis of foods and other consumer products, for heavy metals and essential elements
- Development of analytical methods for determination of trace elements

Academic Qualifications

- 2013: Post-Doc Research Fellow, Kenyatta University (KU)/NRF
- 2008: Doctor of Philosophy (Ph.D.), Chemistry, KU,
Research visit, Siegen University, Germany-2006:
Thesis Title: Effect of dehydration of dark green leafy vegetables on Bioavailability and bioconversion of serum beta-carotene among preschool children.
- 2000: Master of Science (M. Sc), Chemistry, KU
Thesis Title: Heavy metal and Pesticides in Marine sediment, seawater and seaplants along the Kenya-Mombasa Coastline.
- 1996: Bachelor of Education (B. ED., SC), KU
- 1990: KCSE, Bunyore Girls High School
- 1986: KCPE, Mumias Girls Primary School

Other courses

- **2021-2022** CEPU, Project Development Workshop Series, **Kenya**
- **2019-13th Dec:** CEPU, Fundraising Workshop III Kenyatta University, **Kenya**.
- **2019-1st Oct:** CEPU, Leadership and Strategy Development Workshop III, Kenyatta University, **Kenya** **2017-28th Aug-5th Sept:** Train the trainer (TTT) training in the Kenyatta
- **2017-28th August-5th September:** Train the trainer (TTT) training in the Kenyatta University Neu-Ulm University Germany –Project on applied Entrepreneurship Academy in renewable Energy held at Chandaria BIIC

- **2016-5th -6th Sept:** Development Research Uptake in Sub-Saharan Africa (training in the Kenyatta University Neu-Ulm) course for Trainers on research Uptake held in Nairobi , **Kenya**.
- **2015-24th -28th Aug:** The Chemical Inventory Management Systems (CIMS) Workshop Held at University of Nairobi, **Kenya**.
- **2015-3rd – 6th Aug:** The industrial Chemical Security Workshop, Ole Sereni Hotel, Nairobi, **Kenya**.
- **2015-28th – 30th Apr:** Advanced Chemical Safety and Security Training Workshop, Chiromo, University of Nairobi, **Kenya**.
- **2014-1st -6th Nov:** African Visionary Leadership Training Course held by the Regional Zss Institute of gender, Diversity, peace and Rights (RIGDPR) at Ahfad University for women (AUW), **Sudan**.
- **2012-June-August 2012:** Seeding Labs grant writing curriculum during the Visiting Fellows program hosted by Novartis Institute for Biomedical Research (NIBR) and Seeding Labs, LLC held between, Boston, MA, **USA**..
- **2012-April 9th-14th,** DIES-Training: “Proposal Writing for International Research Projects” Second Part: in Naivasha, Sawela Lodge, Kenya. Proposal presented:- Phytochemical compounds and nutrients in varieties of fresh and dehydrated indigenous vegetables and fruits grown in Kenya, **Kenya**.
- **2011-20th -25th Aug:** DIES-Training: “Proposal Writing for International Research Projects” First Part: November in Nairobi, **Kenya**. DAAD Annual conference held on 16th November, 2011 at Silver Springs Hotel, Nairobi, Kenya. **Theme:-** Capacity Development for the County Governments in the New Constitutional Dispensation in Kenya.
- **2010-31st Aug:** Kenyatta University Capacity building seminar for staff mentors at Business and students Services Center, , **Kenya**.
- **2010-7th May,** Catholic University of Eastern Africa Faculty of Science needs assessment training workshop at Kolping Organization of Kenya, , **Kenya**.

EMPLOYMENT HISTORY

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| • 2024/October- current | Associate Professor , Department of Chemistry, KU |
| • 2014/July -4 th October 2024: | Senior Lecturer, Department of Chemistry, KU |
| • 2008/October – 2014/ July: | Lecturer, Department of Chemistry, KU |
| • 2000- 2008/September: | Tutorial Fellow, Department of Chemistry, KU |
| • 2000-2002: | AVU Chemistry course Facilitator, KU |
| • 1997-2000: | Graduate Assistant, Department of Chemistry, KU |

RESEARCH PUBLICATIONS

Referred Journal Papers

1. Ojiambo, Ogombe C., Mildred, Nawiri P., Nyambaka, Hudson (**2024**) Bioaccessibility of Vitamins and Minerals in Processed Tubers and Leaves of *Manihot esculenta* Crantz

- Varieties, *Journal of Food Quality*, 2024, 8280498, 8 pages, <https://doi.org/10.1155/2024/8280498>.
2. Ogombe C. Ojiambo, Nawiri P. Mildred and Hudson Nyambaka (2024), Impact of Processing on Nutrients and Anti-Nutrients in Tubers and Leaves of Cassava (*Manihot Esculenta* Crantz), *J. Nutrition and Food Processing*, 7(1); DOI:10.31579/2637-8914/185
 3. George, N., Mildred, N., Wanzala, E., Munga, J., Oduori, C., Kinyuru, J. and Hudson, N. (2023) Nutritional Composition and Anti-Nutrient Levels in Raw and Processed Varieties of Finger Millet Promoted for Nutritional Security. *Food and Nutrition Sciences*, 14, 1183-1205
 4. Obumba, M., Noah, N and **Nawiri, M** (2023). Room Temperature Synthesis and Stabilization of Silver and Gold Nanoparticles Using Polyamic Acid *Journal of the Kenya Chemical Society* 16-1 (2023), 20-24.
 5. Mwasiagi. E., Kombo. K., **Nawiri, MP** and Iloka, K (2022). Reflection On Resource Requirement, Pedagogy And Entrepreneurship Skills Training For Competency Based Curriculum Implementation In Kenyan Universities. *International Academic Journal of Social Sciences and Education* | Volume 2, Issue 3, pp. 40-58
 6. Onyambu, MZ., **Nawiri, MP.**, Nyambaka HN and Noah, NM (2021). In Vitro Bioaccessibility of the Vitamin B Series from Thermally Processed Leafy African Indigenous Vegetables. *Journal of Food Quality*. Pgs 1-8 <https://doi.org/10.1155/2021/5540724>
 7. Onyambu, MZ., **Nawiri, MP.**, Nyambaka HN and Noah, NM (2021). In vitro Bioaccessibility of Beta Carotene from Thermally Processed Leafy African Indigenous Vegetables. *Journal of the Kenya Chemical Society* 14-1, 3-8
 8. Kimotho, I., Noah, N.M, **Nawiri, M** and Mbatia, B (2020). Fabrication of Nanostructured Polyamic Acid Membranes for Antimicrobially Enhanced Water Purification. *Advances in Polymer Technology* Article ID 7362789; 2020:1-10
 9. Nyaenya, NE., Nyambaka H., Murungi, J., **Nawiri, M.**, and Ongera. T (2020). Efficacy of Nanofertilizers on Spinach Growth Performance in Medially Polluted Soil. *The International Journal of Science & Technoledge*. Vol 8 Issue 4 page 16-25.
 10. Nyaenya, NE., **Nawiri, M.**, Murungi, J., Nyambaka H., and Ongera. T (2020). Effects On Nanaofertilizers On Cd and Pb Uptake In Kales Grown In Medially Polluted Experimental Soil *IOSR Journal of Applied Chemistry (IOSR-JAC)*. Volume 13, Issue 5 Pg 57-68 DOI: 10.9790/5736-1305015768
 11. Nyabuti G., **Nawiri, M**, and Nyambaka, H. (2019). Health Risk Assessment on Selected Essential and Non-Essential Elements in Food Crops Grown in Kibera Slum, Nairobi-Kenya. *Food and Nutrition Sciences* 10, 4236/***. ISSN Online: 2157-9458.
 12. Wakhanu, J., Nyambaka, H., Kimiywe, J., **Nawiri, M** and Thagana, W.M. (2019). Consumption of African Indigenous Vegetables Improves Children's body Fat Free Mass in Machakos County, Kenya *Journal of Food Science and Engineering* 9 305-317 doi: 10.17265/2159-5828/2019.08.002
 13. Nyabuti G., **Nawiri M** and Nyambaka H (2019) Health Risk Assessment on Selected Essential and Non-Essential Elements in Food Crops Grown in Kibera Slum, Nairobi-Kenya *Food and Nutrition Sciences*, 10, 635-647
 14. Ngolo P., **Nawiri M.**, Machocho A, and Oyieke H (2019). Pesticide Residue Levels in Soil, Water, Kales and Tomatoes in Ewaso Narok Wetland, Laikipia, County, Kenya

Journal of Scientific Research & Reports 24(5): 1-11; Article no.JSRR.48243 ISSN: 2320-0227

15. Wasike P. W., **Nawiri M. P.**, Wanyonyi A. A. (2019). Levels of Heavy Metals (Pb, Mn, Cu and Cd) in Water from River Kuywa and the Adjacent Wells. *Environment and Ecology Research* 7(3): 135-138, 2019 <http://www.hrpub.org> DOI: 10.13189/eer.2019.070303.
16. Onyambu Z.M., **Nawiri MP.**, Kareru P, and Wanjau RN (2018). Levels of Selected Heavy Metals in Aloe Vera Branded Herbal Creams Sold in the Kenyan Markets *Journal of Chemical and Pharmaceutical Research*, 10(1):9-12; ISSN : 0975-7384 CODEN(USA): JCPRC5 9
17. Basweti J.K., **Nawiri, M. P** and Nyambaka, H.N (2018). Physicochemical parameters and levels of polycyclic aromatic hydrocarbons in water, sediments and soil in river Nzoia, Kakamega County-Kenya. *Environmental Monitoring and Assessment*. 190:518.
18. Nderitu S.M., **Nawiri M. P.** and Nyambaka H. N. (2018). Sunflower and palm oils as potential preservatives of beta carotene extracted from *Asystasia mysorensis* and *solanum nigrum*. *Food Research* 2 (5): 437-442.
19. Ngolo P, **Nawiri M**, Machoch A, Oyieke H. (2018). Pesticides use in pest management: A case study of Ewaso Narok wetland small scale vegetable Farmers, Laikipia County, Kenya. *Journal of Agriculture and Ecology Research International* 14(2):1-8
20. Mobegi, E., **Nawiri, M.**, & Andala, D. (2018). Fabrication of metal oxide - biopolymer nanocomposite for water defluoridation. *MRS Advances*, 1-10. doi:10.1557/adv.2018.251
21. Onyambu, Z.M., **Nawiri, M.P.**, Kareru, P and Wanjau, R. (2018). Levels of Selected Heavy Metals in Aloe vera Branded Herbal Creams sold in the Kenyan Markets. *Journal of Chemical and Pharmaceutical Research (JOCPR)* 10(1):9-12
22. Mungai, Z. M., **Nawiri, M. P.** and Nyambaka, H. N. (2017). Retention levels of vegetable extractable beta-carotene preserved in virgin coconut oil and unadulterated honey. *Food Research* 1 (5) : 170 – 175.
23. Okello, P.O., **Nawiri, M.P.**, Musila, W. and Gweyi-Onyango, J.P. (2017). Water Stress Effect on Total Antioxiant Activity and Total Phenolic Content of *Solanum scabrum* Mill and *Solanum scabrum* in Kiambu, Kenya *International Journal of Biochemistry Research & Review* 17(1): 1-9.
24. Ogembo O.J, **Nawiri, P**, Musila, W and Gweyi-Onyango, J.P (2017). Effect of Phosphorus Deficiency on Phenolics and Antioxidants Content of Two African Nightshade Varieties Grown in Kenya. *International Journal of Plant & Soil Science* 15(3): 1-11.
25. Salano, O.A., Makonde, H.M., Kasili, R.W., Wangai, L.N., **Nawiri, M.P** and Boga, H.I (2017). Diversity and distribution of fungal communities within the hot springs of soda lakes in the Kenyan rift valley. *African Journal of Microbiology Research* Vol.11(19), pp. 764-775.
26. **Nawiri, M.P.**, Nyambaka, H.N and Mobegi, E.K (2017). Levels of polycyclic aromatic hydrocarbons in water from Nairobi River, Nairobi County-Kenya."(ST1704-012) *The International Journal of Science and Technology*. Vol 5 Issue 5, pp 14-18
27. Obumba, MO., Nyambaka, H.N and **Nawiri, M.P** (2017). Levels of lutein increase with room temperature storage of smooth cayenne *Ananas Comosus* grown in different

- counties of Kenya. *African Journal of Food Science*. *African Journal of Food Science*. Vol.11 (6), pp. 178-182.
28. Ojiambo, O.C., **Nawiri, M.P.** and Masika, E. (2017). Reduction of cyanide levels in sweet cassava leaves grown in Busia County, Kenya based on different processing methods *Food Research* 1 (3) : 97 - 102
 29. Mbakaya, C., Nyambaka, H., Waudu, J., **Nawiri, M.**, Amukoye, E., Orege, P., Kisingu, W., Koech, D., Ndiege, I., Mpoke, S., Mwangi, M., Wanzala, P, and Muniu, E (2016). Effects of Mega Dose Micronutrient Supplementation On Serum Zinc, Retinol and Immune Status of Adult Males and Females Diagnosed with and Without HIV, Malaria and TB in Western Kenya – An Unpublished Perspective as at The Year 2004. *EC Nutrition* 4.5 967-979.
 30. Mobegi, E.K, Nyambaka, H.N and **Nawiri, M.P** (2016). Physico -Chemical Characteristics and levels Of Polycyclic Aromatic Hydrocarbons in untreated water from Ngong River, Kenya. *Journal of Pollution Effects & Control* 4: 163. doi:10.4172/2375-4397.1000163.
 31. Hena, J.Y. Jr., Andala, D.M., Nyambaka, H.N. and **Nawiri, M.P.** (2016). Carotenoid Levels, Total Phenolic Content and Antioxidant Activity Variations in Varieties of *Citrullus lanatus* under Storage at Room Temperature. *International Journal of Biochemistry Research & Review* 9(3): 1-9.
 32. Kamau, T., Nyambaka, H.N and **Nawiri, M.P** (2015). Understanding Geophagic Practice as a Source of Mineral Nutrients and Toxicants. *International Journal of Modern Chemistry and Applied Science* 2(4), 208-210
 33. Odhiambo, V.O., Wanjau, R., Odundo, J.O and **Nawiri, M.P.** (2015). Toxic trace elements in different brands of milk infant formulae in Nairobi market, Kenya. *African Journal of Food Science* Vol. 9(8), pp. 437-440
 34. Njiru, M.K., Odundo, J.O., Wanjau, R.N and **Nawiri, M.P** (2014). Exploring the nutraceutical values of residues of *Mangifera Indica L.* grown in Embu County, Kenya. *Journal of Kenya Chemical Society Vol 8: (1)83-88.*
 35. Onyambu, Z.M., **Nawiri, M.P.**, Kareru, P and Wanjau, R. (2014). Levels of selected heavy metals in Aloe Vera branded herbal soaps sold in the Kenya market. *Journal of Kenya Chemical Society Vol 8: (1) 98-102.*
 36. Odundo, J. O., Oyoo, D. and **Nawiri, M. P** (2013). The artemisin potential of leaves from cultivars and wildlings of *Artemisia annua L.* grown in Western Kenya *International Journal of Education and Research Vol. 1 No. 7 1-10.*
 37. Odundo, J. O., Oyoo, D. and **Nawiri, M. P.** (2013). The artemisin potential of flowers from *Artemisia annuaL.* grown in Western Kenya. *Industrial Crops and Products* 49 233– 236.
 38. **Nawiri, M.P.**, Nyambaka, H.N. and Murungi, J.I. (2013). Sundried cowpeas and amaranthus leaves recipe improves beta-carotene and retinol in serum and hemoglobin concentration among preschool children. *European Journal of Nutrition* 52 (2) 583-589 doi 10.1007/s00394-012-036-2.
 39. Aywa, K., **Nawiri, M.P.** and Nyambaka, H.N. (2013). Nutrient variation in coloured varieties of Ipomea batatas grown in vihiga county, western Kenya. *International Food Research Journal*. 20(2): 819-825.

40. Muiruri, J.M., Nyambaka, H. N. and **Nawiri, M. P. (2013)**. Heavy metals in water and tilapia fish from Athi-Galana-Sabaki tributaries, Kenya. *International Food Research Journal*, 20(2): 891-896.
41. **Nawiri, M.P.**, Muturi, I.K., Bichanga, R. and Murungi, J.I. (2012). Essential antioxidant elements in oils of the cake and shell of *calodendrum capensenuts*. *Analytical Chemistry Letters* 2 (4) 240 – 243.
42. Nyambaka, H.N., Nderitu J., **Nawiri, M.P** and Murungi J.I. (2012). Use of kitchen steel wool as oxygen absorber improves storage retention of beta-carotene in solar-dried vegetables. *Mediterranean Journal of Chemistry*, 1 (6) 326-333.
43. Bor, S.K., Simbauni, J.A., **Oyugi, M.P.**, Njue, W.M and Chhabra, S.C (2007). Organochlorine residues in tissues of marine fauna along the coast of Kenya-Mombasa Island. *Bull. Chem. Soc. Ethiopia*, 21(1), 145-149.
44. **Oyugi, M.P.**, Chhabra, S.C., Njue, W.M and Kinyua, A (2003). Heavy metal and Pesticides in Marine sediment, seawater and seaplants along the Kenya-Mombasa Coastline. *J. of Trace Microprobe Techniques*, Vol 21 No. 1.pp.147-159.

Other Publications

Academic Thesis

1. **Mildred P. Nawiri (2008)**. Effect of dehydration of dark green leafy vegetables on Bioavailability and bioconversion of serum beta-carotene among preschool children. PhD Thesis, Kenyatta University, Chemistry Department.
2. **Mildred Pauline Oyugi (2000)**. Heavy metal and Pesticides in Marine sediment, seawater and seaplants along the Kenya-Mombasa Coastline. MSc Thesis. Kenyatta University, Chemistry Department.

Teaching Modules

1. **Nawiri, M.P (2021)**. SCH 104: Introduction to Laboratory procedures and Classical Analysis. Module KUSOMA .
2. **Nawiri, M.P (2012)**. SCH 551: Advanced Separation techniques. KU Press.
3. Nyambaka, H.N. and **Nawiri M.P (2012)**. SCH 404: Instrumental methods. KU Press.
4. Nyambaka, H.N., Murungi J.I., and **Nawiri M.P (2007)**. SCH 103: Introduction to classical analysis and separation techniques. KU Press

Project Reports

1. **Nawiri, M.P (2024)**. A report on the ONLINE Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Nyamira County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO)....*in press*
2. **Nawiri, M.P (2023)**. A report on the ONLINE Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Uasin Gishu County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).
3. **Nawiri, M.P (2022)**. A report on the ONLINE Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Garissa County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).

4. **Nawiri, M.P (2021).** A report on the ONLINE Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Bungoma and Busia County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).
5. **Nawiri, M.P (2020).** A report on the ONLINE Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Nairobi and Kajiado and Busia County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).
6. **Nawiri, M.P (2019).** A report on the Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Isiolo County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).
7. **Nawiri, M.P & Nyachae, S. (2018).** A report on the Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Embu County Submitted to Kenya National Commission for UNESCO (KNATCOM-UNESCO).
8. **Nawiri, M.P (2017).** A report on the Rapid Survey on status of Science, Technology and Innovation Governance in Kenya and capacity building workshop on strengthening Science, Technology Governance in Kenya Submitted to KNATCOM-UNESCO.
9. **Nawiri, M.P & Nyachae, S.A (2017).** A report on the Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Kisumu County Submitted to KNATCOM-UNESCO.
10. **Nawiri, M.P & Nyachae, S.A (2016).** A report on the Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Nakuru County Submitted to Kenya Adenauer Stiftung (KAS).
11. **Nawiri, M.P & Nyachae, S.A (2016).** A report on Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Mombasa County Submitted to KNATCOM-UNESCO.
12. **Nawiri, M.P & Nyachae, S.A (2015).** A report on Student training on Entrepreneurial Promotion for Youth (STEP-4Y) in Kiambu County Submitted to UNESCO Regional Office for Eastern Africa.

Chapters in Books

1. Andala, DM., Mobegi, E., **Nawiri, M** and Otieno, G. (2020). Fabrication of Metal Oxide Biopolymer Nanocomposite for Water Defluoridation. In Effects of Emerging Contaminants on Water Resources and Environmental Health (pp 242-271). IGI Global.
2. **Nawiri, M.P.**, Aywa, K., and Nyambaka, H.N. (2013). The micronutrient content in coloured varieties of sweet potatoes (*Ipomea batatas*) grown in Vihiga County, Kenya. In Trends and opportunities in the production, processing and consumption of staple food crops in Kenya. Edited by Onyango, C., Unbehend, G., and Lindhauer M. Deutsche nationalbibliothek Publisher, Germany. 95-105.
3. Nyambaka, H.N and **Nawiri, M.P (2013).** Indigenous vegetables: An excellent source of vitamin A. In Vitamin A and Vitamin E; daily requirements, daily, dietary sources and symptoms of deficiency. Edited by Leon De Smet and Mathis Claes. Nova Science Publishers, Newyork. Pg 105-122.

Papers Presented at Conferences

- 1) **2023-16th -19th October;** Global Food Security and Defense Fellows Professional Development Program Theme “Promoting resiliency of the agriculture sector in developing economies in the context of the covid-19 pandemic, University of Pine Bluff, **USA.**

- **Paper Title:** Nawiri, M.P: A case study of Muranga County
- 2) **2023-09th -16th September:** PHASE and Sakura Science Joint Planetary Health Symposium. Theme “Technological Interventions addressing challenges in remote areas and marginal regions, Nagasaki University, **Japan**.
 - **Paper Title:** Nawiri, M.P: Indigenous fruits and vegetables intervention to alleviate malnutrition in Kenya
- 3) **2022-Virtual Conference on Basic and Applied Sciences.** Theme “embracing Science & Technology for Resilience and Transformation. 16th -18th November 2022
 - **Paper Title:** Anyango, B., Nawiri, MP., nyambaka H and Andala, D:-Characterization of AlSO₄-FeCl₃-saponin-chitosan nanocomposite for removal of Cr (VI) in water
- 4) **2019-11th -12th April:** Global Mobility & ERASMUS+ Theme “promotion of ERASMUS+ Programmes and fostering cooperation in Higher Education in Under-represented countries in eastern Africa, Kenyatta University, **Kenya**.
 - **Paper Title:** Nawiri, M.P: ERASMUS+ Programmes: The Experience of Kenyatta University
- 5) **2018-September:** Euro-Global Conference on Food Science, Agronomy and technology. 20th- 22nd, Rome, **Italy**
 - **Poster Title:** Nawiri, M.P. Health Risk Assessment for peri-urban grown food crops in Kibra slum
- 6) **2017- 4th -6th October:** 2nd International Conference on Higher Education Meru University of Science and Technology, Meru, **Kenya**
 - **Paper Title:** Nawiri, M.P. “Towards strengthening University –Industry partnership for Kenyatta University”
- 7) **2017- 9th -12th May:** The 10th Kenya Chemical Society International Conference. United States International University (USIU)-Africa, Nairobi, **Kenya** Theme: ‘The Role of Chemistry in Inventing a Sustainable Future’.
 - **Paper Title:** Muturi S.N, Nawiri, M.P and Nyambaka, H.N. Retention of extractable beta carotene from indigenous vegetables *Asystasia mysorensis* and *Solanum nigrum* in sunflower and palm oils (**Awarded Royal Society of Chemists (RSC) poster winners’ prize**)
 - **Paper Title:** Basweti K.J, Nawiri, M.P and Nyambaka, H.N. levels of polycyclic aromatic hydrocarbons in water, sediment and soil from a section of River Nzoia, Kakamega County-Kenya (**Awarded RSC poster winners’ prize**)
 - **Paper Title:** Muanje, A.D, Nawiri, M.P and Wanjau, R.N. Determination of skin lightening agents in skin lightening cosmetics sold in Mombasa County
 - **Paper Title:** Duya, C.O, Nawiri, M.P and Wafula, W.A. Variation in Levels of Vitamins A and C with Maturity of *Amaranthus hybridus* (L) Leaves Grown in Different Soil - types in Kwale County, Kenya
- 8) **2016- 4th-6th October:** NIMR 30th Annual Joint Scientific Conference Julius Nyerere International Convection, **Tanzania**.
 - **Paper Title:** Nawiri, M.P, Hena, J., Andala, D.M and Nyambaka, H.N “Storing fruits of *solanum lycopersicum* at room temperature affects carotenoid levels, total phenolic content and antioxidant activity.
- 9) **2016- April 6 – 8:** Humboldt “Kolleg” Naivasha, **Kenya**.
 - **Paper Title:** Nawiri, M.P, *et al* “Carotenoid levels, Total Phenolic Content and Antioxidant Activity Variations in Varieties of *Citrullus lanatus* under Storage at Room Temperature”.

Theme: “Research and Networking: Laying the Foundation for the Sustainable Development Goals”

- 10) **2015-** 27th – 29th: The 4th Africa food & Nutrition Forum October Addis Ababa, **Ethiopia**
- 11) **2013-** 24th-27 July: KDSA/DAAD Scientific paper Writing workshop held at Kenyatta University Conference center
 - **Paper Title:** Where do I publish my research paper?
- 12) **2013-** 25th-26th April: Kenya Industrial Research and Development Institute (KIRDI) and Max Rubner-Institut (MRI) Conference on Trends and opportunities in the production, processing and consumption of staple food crops in Kenya held at the Intercontinental Hotel, Nairobi, **Kenya**
 - **Paper Title:** Nawiri, MP.,Nyambaka HN and Away K“The nutrient content in colored varieties of Ipomea batatas grown in Vihiga, Kenya.
- 13) **2012-** 13th -15th December: International Science And Technology Conference (ISTEC) held at Dubai, **United Arab Emirates (UAE).**
 - **Paper Title:-** Nawiri M.P., Oyoo, D and Odundo, J. O. “ The artemisinin potential of leaves from cultivars and wildlings of *Artemisia annua*L. grown in Western Kenya”
- 14) **2012-** 15th-16th November: Kenya DAAD Scholar’s Association Conference, Egerton University, Nakuru, **Kenya**
 - **Paper Title:-**Nawiri M.P., Nyambaka, H. and Aywa, K. “Nutrient content in colored varieties of ipomeabatatas”.
- 15) **2012-**15th -18th October: The 7th International Conference of the Kenya Chemical Society held at Botanic Garden Maseno University, **Kenya.**
 - **Paper Title:-** Odundo, J. O., Nawiri M.P.and Oyoo, D “ The artemisinin potential of leavesfromcultivars and wildlings of *Artemisia annua*L. grown in Western Kenya”
- 16)) **2010-** 4th -8th October: 4th Africa Nutritional Epidemiology Conference held at Safari park hotel, Nairobi, **Kenya.** Theme “Nutrition and Food security: Success and emerging challenges.
 - **Paper Title:-**Nyambaka, H,Nawiri M, et al. The nutritive value of indigenous vegetables in the lake Victoria basin in relation to HIV/AIDS management.
- 17) **2010-** 18th -20th August; African Women in Science and Engineering (AWSE) Conference held at Monetary Studies College, **Kenya.** Theme “A decade into the 20th Century: The contribution of African Women Scientists and Engineers.
 - **Paper Title:-**Nawiri, M.P, Nyambaka H. and Murungi J.I. Effect of Dehydration of dark green leafy vegetables on bioavailability of serum beta-carotene among preschool children.
- 18) **2010-** 10th-14th August; 1stEast African Regional Scientific Conference of Pure and Applied Sciences held at Kenyatta University Students Bussiness Centre, **Kenya.** Theme “The role of biological, physical and applied sciences in mitigating global climate change and achieving the millennium development goals”
 - **Paper Title:-**Nawiri, M.P, Nyambaka H. and Murungi J.I. Effect of dehydration of dark green leafy vegetables on bioavailability of serum retinol among preschool children.
- 19) **2003-** 4th-31st August: Multidisciplinary course in tropical freshwater Ecosystems management at Kenya Wildlife Training Institute, Naivasha, **Kenya.,**
 - **Paper Title:-**Oyugi, M.P, Njue W and chhabra S.C (1999). Heavy metal and Pesticides in Marine sediment, seaplants and seawater along the Mombasa Coastline.

20) **1999-16th -20th August:** The 3rd Kenya Chemical Society International Conference at JKUAT, **Kenya**.

- **Paper Title:-Oyugi, M.P,** Njue W and Chhabra S.C (1999). Heavy metal and Pesticides in Marine sediment, seaplants and seawater along the Mombasa Coastline.

Participation Workshops/Conferences

- **2024 September:** short term PHASE staff exchange program at Nagasaki university, Japan
- **2024 February:** Inclusive and Innovative Digital Education for Migrant community in Kenya and Somali (IIDEMIC) Project Kick off meeting, Dumlupinar University, Turkey
- **2023-June:** Workshop on promoting resiliency of the Agriculture sector in developing economies in the context of the COVID-19 pandemic
- **2022** Project Development Workshop sponsored by DAAD and BMZ
- **2021-** 8th May;- Virtual Workshop impacts of Endocrine disrupting pesticides and active pharmaceutical ingredients in hydrological cycles”
- **2021-**7th October; International Conference on entrepreneurial Universities in Africa, Mount Kenya University
- **2021-**28th November-4th December: Collaboration for Entrepreneurial Universities (CEPU), Idea Camp, **Kenya**
- **2020** Ideashop involving internal and external stakeholders in Academic process
- **2020-** STEP Train-the Trainers refresher workshop
- **2019-**6th -12th October: Collaboration for Entrepreneurial Universities (CEPU), Train-The-Trainer Idea Camp., Sagana Rapids camp, **Kenya**
- **2020-**12th February: Nomination to attend a meeting on the Austrian Academic Exchange Service, **Kenya**
- **2019-**6th -12th October: Collaboration for Entrepreneurial Universities (CEPU), Train-The-Trainer Idea Camp., Sagana Rapids camp, **Kenya**
- **2019-** 20th – 24th May: International Food safety Conference, Kenyatta University, **Kenya**
- Workshop on Laws and Policies for Chemical Management systems towards responsible consumption on production in Kenya. 7th -8th March **2019**, Kisumu Hotel, Maseno University, **Kenya**
- **2018-** 14th -15th Feb: Kenya Matchmaking workshop for the Programme Entrepreneurial Universities in Africa., Sarova Panafric Hotel, Nairobi, **Kenya**
- **2017-**4th -8th September: European University Network on Entrepreneurship (ESU) conference, Held, Leuphana University, Luneburg, **Germany**.
- **2016-**17th May: Symposium on Women in Chemistry, organized by the Organization for the Prohibition of Chemical Weapons (OPCW); The Hague, The **Netherlands**
- **2015-** 24th – 28th August: Chemical Inventory management Systems (CIMS) Workshop, Kenyatta University, **Kenya**
- **2015-** Sept 7th - 9th : STEP Train- the Trainer Workshop, Kenyatta University, **Kenya**
- **2015-** April 22nd: UNESCO/UNITWIN Chairs Consultative and Sensitization forum,, University of Nairobi, **Kenya**
- **2015-** 16th Jan: AGGN workshop on Good Governance in post 2015. Held at Best Western Hotel, Nairobi, **Kenya**.
- **2015-** 24th – 26th Feb: Ministerial Forum for Ministers of Social Development for Eastern African Region Nairobi **Kenya**.

- **2015:** Nomination to attend a meeting on students attachment, Internship and Partnership with the private sector organized by Ministry of Education, Science, **Kenya**.
- **2014- 13th -14th Feb:** Framework for the internalization of Doctoral education (FRINDOC) Induction working Group at University of Bergen, **Norway**,
- **2013- March 17-21:** Pittsburg Conference on Analytical Chemistry & Applied Spectroscopy (Pittcon). 2013 held at the Pennsylvania Convention Center in Philadelphia, Pennsylvania, **USA**
- **2012- 22nd August:** Biosafety Sensitization workshop organized by KUIBC, Kenyatta University, **Kenya**
- **2008- 26th Mar:** KU Mentors' Seminar, at KUCC, Kenyatta University, **Kenya**.

QUALITY TEACHING, LEARNING AND MENTORSHIP

Postgraduate Supervision

PhD Supervision- Completed

SNo.	Student Name Reg. No.	Title of Thesis	Degree- Institution Year	Department
1)	Mobegi Erick Kiage I84/31464/2015	Characterization of metal oxide biopolymer nanocomposite and its effect on levels of fluoride, arsenate and selected physicochemical parameters in water	PhD-KU 2023	Chemistry
2)	Ngorwe Evans Nyaenya I84/28935/2013	"Effects of Nano-Fertilizer Absorption on Cadmium & Lead, Growth Performance & Nutrient Uptake of Selected Crops"	Ph.D – KU 2023	Chemistry
3)	Onyambu Zipporah Moraa I84/32244/2015	Simulated Bioavailability studies of Vitamin A and the B series in selected African Indigenous Vegetables in Kenya	Ph.D – KU 2020	Chemistry
4)	Wakhanu John Akello I84/28573/2014	Effect of nutrition-sensitive intervention with indigenous vegetables on beta-carotene, zinc and iron levels of pre-teen in Kangundo sub-county, Kenya	PhD-KU 2019	Chemistry

PhD Supervision- Ongoing

SNo.	Student Name Reg. No.	Title of Thesis	Degree- Institution	Department	Status
1.	Charles O. Ogombe 184/25286/2018	Bioavailability study of selected nutrients in some edible products of <i>Manihot esculenta</i> Crantz grown in Busia and Kilifi Counties, Kenya	PhD-KU	Chemistry	Drafting Thesis
2.	Choge Phoebe I84/38130/2016	Human health risk assessment of selected heavy metals in vegetables grown in Uasin Gishu County, Kenya	Ph.D - KU	Chemistry	Lab work
3.	Anyango Beatrice I84/31349/2015	Efficiency of Endod Saponins-Zeolite Composite in water purification: A case	Ph.D - KU	Chemistry	Drafting Thesis

4.	Maxwell Ouma Obumba I84/28845/2018	of Ground water sources in Kisumu County, Kenya Synthesis, fabrication and characterization of flexible nanostructured polyamic acid membrane modified with silver and gold nanoparticles for water purification filters	Ph.D - KU	Chemistry	Labwork
5.	Nyabuti Ohingo George	Bioaccessibility of selected nutrients from raw and formulated products of finger millet and oyster mushroom	Ph.D - KU	Chemistry	Drafting thesis

Masters Supervision-Completed

SNo.	Name Reg. No.	Title of Thesis	Degree- Institution	Department	Year/Month Graduated
1)	Nyabuti Ohingo George I56/CE/28482/2013	Human health risk assessment on selected essential and non-essential elements in food crops grown in Kibra slum, Nairobi-Kenya	MSC-KU	Chemistry	2019
2)	Ngolo Peter B.M. Otieno 156/CE/27737/2013	Pesticide practices and residue levels in soil, water and selected vegetables in Ewaso Narok wetland, Laikipia County, Kenya	MSC-KU	Chemistry	2019
3)	Muanje Abdulwakil Daudi I56/CE/15055/2008	Determination of levels of mercury, Hydroquinone, Kojic acid, Arbutin and selected corticosteroids in skin lightening cosmetics in Mombasa, Kenya	MSC-KU	Chemistry	2019
4)	Basweti Judy Kwamboka I56/CE/14209/2009	Pollution levels of 16 priority polycyclic aromatic hydrocarbons in water, soil and sediment from a section of River Nzoia, Kakamega County-Kenya	MSC-KU	Chemistry	2018 Dec

5)	Nderitu Samuel Muturi I56/CE/26891/2011	Stability of extractable beta carotene from underutilized indigenous vegetables in edible oils	MSC-KU	Chemistry	2018 Dec
6)	Charles Ojiambo Ogombe I56/CE/23844/12	Variation of Cyanide Levels in Sweet Cassava Leaves Based on Different Processing methods	MSC - KU	Chemistry	2017 Dec
7)	Otieno Caleb Duya I56/CE/21450/2012	Variation of Vitamins A and C in Leaves of <i>Amaranthus Hybridus</i> (L)	MSC- KU	Chemistry	2017 Dec
8)	Mungai Zipporah Murugi I56/22808/2011	Studies on Retention of beta-carotene extracted from <i>Amaranthus</i> species preserved in virgin coconut oil and unadulterated honey	MSC-KU	Chemistry	2016 Dec
9)	Kamau Tabitha Wanjiru I56/15434/2009	Quantification of selected essential and toxic minerals in geophagic materials in Kiambu County, Kenya	MSC-KU	Chemistry	2016 Jul
10)	Obumba Maxwell Ouma I56/25158/2011	Variation of Carotenoids, Total Phenolics and antioxidant activity levels in <i>Ananas comosus</i> from different counties in Kenya with duration of storage	MSC-KU	Chemistry	2015 Dec
11)	Ogembo Joel Oyaro A144/22964/2012	Effects of phosphorus deficiency on secondary metabolites and distribution of African nightshade in Siaya and Kisii Counties, Kenya	MSC-KU	Agricultural Science and Technology	2015 Dec
12)	Peter Wasike I56/CE/1203/2007	Analysis of selected heavy metals in water from river Kuywa and adjacent wells in Bungoma Central sub-County-Kenya	MSC-KU	Chemistry	2015 Dec

13) Mobegi Erick Kiage I56/CE/23359/2010	Levels of physio-chemical parameters and polycyclic aromatic hydrocarbons in water from Ngong and Nairobi rivers, Nairobi County-Kenya	MSC-KU	Chemistry	2015 July
14) John Y. Hena, Jr I56F/22521/2012	Effect of room temperature storage on the levels of carotenoids, total phenolic content and antioxidant activity of <i>Lycopersicon esculentum</i> and <i>Citrullus lanatus</i>	MSC-KU	Chemistry	2015 July
15) Odhiambo Okello Peter A144/23192/2012	Effects of water stress on antioxidant activity and phenolic contents of African Nightshades and their distribution in Kisii, and Siaya Counties of Kenya	MSC-KU	Agricultural Science and Technology	2015 July
16) Silva Jerono Chebet I56/CE/22219/2010	Assessment of the levels of Thiocyanate processed and unprocessed red and brown finger millet (<i>Eleusine Coracana</i>) grown in Mogotio area, Baringo County, Kenya	MSC-KU	Chemistry	2014 Dec
17) Onyambu Zipporah Moraa I56/CE/14149/09	Determination of heavy metals in Aloe vera lotions, creams and soaps in the Kenyan market	MSC-KU	Chemistry	2014 July
18) Odhiambo Vincent Otieno I56/CE/14215/09	Assessment of levels of selected metals, nitrates and nitrites in some infant formula milk in Kenyan market	MSC-KU	Chemistry	2014 July
19) Michael Kariuki Njiru I56/CE/14204/09	Residues of selected varieties of <i>Mangifera indica</i> grown in Mbeere South	MSC-KU	Chemistry	2014 July
20) Mwangi John Muiruri I56/CE/14205/09	Determination of selected heavy metals in tilapia fish, sediments and	MSC-KU	Chemistry	2013 Dec

21) Irene Kirigo Muturi I56/CE/14905/09	water in Athi river selected tributaries, Kenya Determination of concentration of selected antioxidant vitamins and essential elements in <i>calodendrum capense</i> nuts grown in Nyeri County, Kenya	MSC-KU	Chemistry	2013 July
22) Joseph Ochieng Odundo I56/CE/14147/09	Quantification of artemisinin in cultivars and wildlings of <i>Artemisia annua l.</i> In Western Kenyan soils	MSC-KU	Chemistry	2013 July
23) Kennedy Amukoye Away I56/CE/10086/08	Assessment of Variability of selected nutrients in varieties of sweet potatoes grown in Vihiga County, Kenya	MSC-KU	Chemistry	2012 Dec

Masters Supervision- Ongoing

SNo.	Student Name Reg. No.	Title of Thesis	Degree- Institution	Department	Status
1)	Muriuki Joyce Nyathuta I56/CE/24669/2012	Effect of Solar Drying on vitamins from selected Indigenous fruits and Vegetables stored with coconut Oil Coating in Kilifi County, Kenya	MSc-KU	Chemistry	Lab work
2)	Wekesa Geoffrey I56/CE/25197/2014	Activated carbon ceramic filter in water purification in Msambweni kwale County, Kenya	MSC-KU	Chemistry	Drafting Thesis
3)	Mitei K Robert I56/CE/28299/2013	Nanoparticles-Based Biosensor for Detection of Methanol in Alcoholic Drinks	MSc-KU	Chemistry	Lab work
4)	Okindo Philemon I56/CE/26224/2011	Effect of different processing and preservation methods on carotenoid retention of selected vegetables in Kenya	MSc-KU	Chemistry	Lab work

5)	Bett Peter Kipkemoi I56/CE/11202/2007	Levels of selected essential elements at different stages of growth in some cattle feeds from Chepalungu, Kenya	MSC-KU	Chemistry	Drafting thesis
6)	Oundo Edwin Nandeke I56/CE/11213/2007	Determination of levels of selected toxic heavy metals in water from Lake Bogoria	MSC-KU	Chemistry	Drafting thesis
7)	Okore Sayvone Nyauchi I56/CE/14211/2009	Analysis of selected heavy metals in greenhouse soils and varieties of vegetables grown in Thika, Kiambu County, Kenya	MSC-KU	Chemistry	Drafting thesis
8)	Gathatwa Francis Wakaba A144/CE/28118/2015	Assessment of the Effects of Nitrogen Forms on Growth, Yield and Fatty Acids in Soy Beans grown in Kiambu County	MSC-KU	Agricultural Sciences	Lab work
9)	Omoke Onger Douglas A144/Ol/CTY/26631	Evaluation of Genotypic Effect on Selected Micronutrient, Antinutrient and Phytochemical Levels in Irish Potatoes grown in Nyandarua County, Kenya	MSC-KU	Agricultural Sciences	Lab work
10)	Muthimi Onesmus Muyalo I56/CE/26503/2013	Determination of selected poly-aromatic hydrocarbons in roasted maize in Kitui County, Kenya	MSC-KU	Chemistry	Lab work
11)	Kingori Gitahi I56/CE/28645/2013	Levels of selected priority poly-aromatic hydrocarbons in roasted cow meat, liver and intestines in Nairobi County, Kenya	MSC-KU	Chemistry	Lab work
12)	Antonita Kerubo Moriasi I56/CE/24247/2012	Assessment of the effect of varying temperature, pH and cooking time on thiocyanate levels in kales and cabbages, Masaba case study	MSC-KU	Chemistry	Lab work
13)	Kimani Ignatius Odhiambo I56/ce/34101/2017	Health risk assessment of selected heavy metals in vegetables grown along	MSC-KU	Chemistry	Proposal

Postgraduate Examination (KU)

SNo.	Year	Title of Thesis	Degree	Department
1)	2023	Determination of ivermectin residue in cow milk and the susceptibility of ticks to acaricides in Nyandoro county, Kenya	MSc	Chemistry
2)	2023	Effect of processing on nutritional and anti-nutritional content of selected edible insects	MSc	Chemistry
3)	2021	Physiochemical characteristics of Mangroove Honey from Kilifi, Kenya	MSc	Chemistry
4)	2019	Formulation of supplementary fertilizer from macronutrient rich agricultural biomass and evaluation of its efficacy on plant growth and yield	PhD	Chemistry
5)	2019	Analysis of the levels of lycopene, vitamin A and B-carotene in red Cactus (<i>opuntia-ficus</i>) fruit during ripening	MSc	Chemistry
6)	2019	Characterization of dead crude oil from Ngamia region Turkana County, Kenya	MSc	Chemistry
7)	2018	Assessment of selected essential micronutrients in some indigenous fruits in kakamega county kenya	MSc	Chemistry
8)	2018	Determination of levels of selected metals in Henna leaves and cosmetic Henna products within Lamu County, Kenya	MSc	Chemistry
9)	2017	Removal of cadmium(II) and lead (II) ions, methylene bleu and turbidity from synthetic water using bagasse adsorbents	MSc	Chemistry
10)	2017	Effects of nitrogen forms on growth, yield and nutritional quality of amaranth (<i>amaranthus species</i>) in Kiambu and Kirinyaga couties	MSc	Agriculture
11)	2016	Effects of Soil type, pH and distance on levels of selected heavy metals in plants and soils along Nairobi-Nakuru Highway	MSc	Chemistry
12)	2015	Levels of macronutrients in pumpkin varieties (<i>cucurbita spp</i>) Grown in the lake Victoria Basin	MSc	Chemistry
13)	2015	Physico – Chemical characterization of raw clays used in pottery at Ilesi in Kakamega County – Kenya	MSc	Chemistry
14)	2014	Assessment of active skin lightening compponds in some facial creams and soaps in Kenya	MSc	Chemistry
15)	2014	Assessment of the impact of industrial effluents on the water quality in Karanga river, Tanzania	MSc	Geography
16)	2014	Agrochemical residues on water quality in Weruweru sub-catchment, Tanzania	MSc	Geography
17)	2013	Determination of selected trace elements and beta-carotene in some solar dried	MSc	Chemistry

		indigenous vegetables as potential food supplement in Kiambu, Kenya		
18)	2013	Levels of selected micronutrients and antinutrients in recipes formulated from underutilised local vegetables in Lake Victoria basin	MSc	Chemistry
19)	2013	Determination of the levels of selected heavy metals in khat(<i>cathaedulisforsk</i>) grown in Kenya	MSc	Chemistry
20)	2013	Potential toxic levels of cyanide in cassava manihote sculentacrantz grown in some parts of Kenya	MSc	Chemistry
21)	2013	Evaluation of selected nutrients in some mulberry varieties grown at KARI station-Thika Kiambu County	MSc	Chemistry
22)	2013	Determination of lead and cadmium in paints used in buildings from Nairobi county, Kenya	MSc	Chemistry
23)	2013	Assessment of heavy metals pollution in soils and water of Samburu County, Kenya	MSc	Chemistry
24)	2012	Status of heavy metals in water, sediments, and fauna of selected areas along the Kenyan Coastline	MSc	Chemistry
25)	2012	Studies of pesticide residues in some vegetables rotated with tobacco ,and farmers ‘ awareness of pesticide effects in Kuria –Migori, Kenya	MSc	Chemistry
26)	2012	Speciation of lead, cadmium and zinc in garage soils and levels in nearby stream and vegetable of Machakos town Kenya	MSc	Chemistry
27)	2012	Quantification of B-carotene, lycopene and B-cryptoxanthin in different varieties of mangoes in Machakos county	MSc	Chemistry
28)	2011	Assessment of Bioavailability of Vitamin A, C and E in selected indigenous food and their potential use in the management of HIV and AIDS	MSc	Chemistry
29)	2011	Determination of selected essential elements in three varieties of watermelons from Githurai and Mwea markets in Kenya	MSc	Chemistry
30)	2011	Determination of bio availability of selected trace elements from indigenous foods and their potential use on management of HIV and AIDS	MSc	Chemistry

PROFESSIONAL/CONSULTING

Networking

- 1) **2023-16th September:-** Sakura Science exchange Program, Nagasaki University, **Japan**
- 2) **2023-May:** II International Staff week, University of Tuscia, Viterbo, **Italy**
- 3) **2023-February-April:** Participant in project “promoting Resiliency of the Agriculture Sector in Muranga County, Kenya in the context of the COPVID-19 Pandemic
- 4) **2023-April:** Erasmus + KA107 International Credit Programme mobility for training at University of pecs, **Hungary**
- 5) **2022-October:** Erasmus + KA107 International Credit Programme mobility for training at Manisa Celala Bayar University, **Turkey**
- 6) **2022-March:** Erasmus + KA107 International Credit Programme mobility for training at Manisa Celala Bayar University, **Turkey**
- 7) **2021-Dec:-**Round table meeting on Promoting resiliency in the Agriculture sector developing economies in the context of COVID 19
- 8) **2019-Nov: Lead consultant** for KNATCOM-UNESCO to conduct a rapid survey on the status of gender equality in science, technology, engineering and mathematics in Kenya. Improving science, technology and innovation policy making through use of UNESCO’s SAGA toolkit.
- 9) **2019-28th Oct -1st Nov:** Erasmus + KA107 International Credit Programme mobility for training at Manisa Celala Bayar University, **Turkey**
- 10) **2019-17th June- 23rd June** Erasmus + Mobility Staff exchange at Wyzsza Szkola Bankowa (WSB) Pozna, **Poland**
- 11) **2018-3rd -9th Dec:** International Staff framework of a faculty exchange (Job-Shadowing) in Bonn-Rhein-Sieg University of Applied Sciences (H-BRS), **Germany**
- 12) **2018- 15th -19th Dec:** Wismar University of Applied Sciences, **Germany**. Under the Collaboration for Entrepreneurial Universities (CEPU) Project (German Partners:- H-BRS, Leipzig University, Leuphana University Lüneburg, Wismar University of Applied Sciences and Hasso-Plattner Institute. Kenyan partners:- Mount Kenya University & Kenyatta University.
- 13) **2018-10th- 14th Dec:** International Staff week on Overcoming Challenges held at the National University of Public Service (NUPS), Budapest, **Hungary**
- 14) **2018-4th- 15th Nov:** International Staff week on Staff training at St Istvan University, Budapest, **Hungary**
- 15) **2018-10th May: Moderator** at the Official launch of African Women for Biosciences (AWfB)., Kenya International Convention Center (KICC)
- 16) **2018-Nov: Lead consultant** for KNATCOM-UNESCO to conduct a rapid survey on status of science, technology and innovation governance in Kenya and capacity building workshop on strengthening science technology governance in Kenya.
- 17) **2016-28th -30th June: Trainer:-** Quality Assurance & Quality Control for testing Laboratories towards ISO/IEC 17025:2005 Accreditation Course, Kenya Water Institute (KEWI), Nairobi

- 18) **2014-19th-23rd May:, Judge of scientific papers:-**The 3rdNational Science, technology and Innovation week. Held at the KICC, Nairobi from.
- 19) **2013-24th-27 July: Facilitator** KDSA/DAAD Scientific paper Writing workshop held at Kenyatta University Conference center on.
- 20) **2013-13th-17th May: .Judge of scientific papers:-**The 2nd National Science, technology and Innovation week. Theme “science, technology and innovation for the realization of Kenya Vision 2030 and beyond” held at the KICC, Nairobi.
- 21) **2013-28th-30th April: Trainer:-** Induction training for teaching practice mentor held on at KUCC.
- 22) **2013-29th-30th April: Resource person:-**Training on mentorship for teacher mentors held at Kenyatta University, KUCC on.
- 23) **2013-15th to 19th April: Resource person:-**An ABCIC, ASARECA and Kenyatta University five day training course on application of bioscience technologies in sorghum production and value addition held at Kenyatta University from
- 24) **2010-May: Resource Person:-** Training Analytical chemist of KEPHIS in Analysis of food additives
- 25) **2010-May Resource Person:-** Training Analytical chemist of KEPHIS in Elemental Analysis

4.1 External Examiner in other Universities

SNo.	Year	Title of Thesis	Degree	Institution	Department
1)	2023	Organometallic improvement of some tuberculosis drugs	MSc	University of the western cape JKUAT	Chemistry
2)	2023	Removal of Pharmaceutical residues from wastewater using activated Carbon from Rice Husks and their Bio-degradation using Microorganisms	PhD		Chemistry
3)	2022	Analytical methodologies for extraction of Vitamins A, C and E in cosmetics	MSc	University of Johannesburg MMUST	Chemistry
4)	2019	Source and distribution of Polycyclic Aromatic Hydrocarbons in Rivers, Soils and Sediments in Sugarcane Growing Regions within Nzoia Catchment Area	MSc		Chemistry
5)	2019	Furier transform infrared spectroscopy (ft-ir) based prediction of sugar, vitamins and the effect of fertilizer application rate on <i>mangifera indica</i> L. Fruit	PhD	JKUAT	Chemistry
6)	2018	Evaluation of Biogas slurry as an alternative organic fertilizer in Kajiado Kiambu and Nakuru Counties, Kenya	MSc	JKUAT	Chemistry
7)	2017	Biosorption studies of copper, lead and zinc using rogers mushroom (<i>lepiota hystrix</i>)"	MSc	JKUAT	Chemistry
8)	2016	Analysis of milk for nutrients in zero grazed exotic and free range indigenous cows in Kajiado County, Kenya	MSc	JKUAT	Chemistry
9)	2016	The Levels of selected heavy metals in solid wastes and their environmental pollution effects in Bungoma Town, Kenya	MSc	JKUAT	Chemistry
10)	2015	Cellulosic ethanol synthesis as a biofuel from locally available agricultural weeds and residues using indigenous basic mineral salt hydrolytic regimes	PhD	JKUAT	Chemistry
11)	2015	Glycerol supplementation effect on biogas production from selected organic wastes	MSc	JKUAT	Chemistry
12)	2015	Analysis of radiation levels in nairobi's central bussiness distcric (CBD) and the industrial area	MSc	JKUAT	Chemistry
13)	2012	Study of oxalate metabolism in <i>Sclerotinia Sclerotiorum</i> collected from soybeans and soils	MSc	JKUAT	Chemistry

Editor/Review of Professional Periodicals

- **2022-2024 The Kenya Institute for Public Policy Research and Analysis (KIPPRA)**
 - Manuscript Title: Analysis of The Nutrition Situation Within Households Practicing Small-Holder Irrigated Agriculture
- **2024 Meru University of Science and Technology**
External Research Proposal Reviewer for the 9th MUST Research proposal call (2 Manuscripts)
- **2023 The Journal of The Kenya national Commission for UNESCO**
Manuscript Title: Characterization of coconut oil (*Cocos nucifera* L.) from three Kenyan varieties extracted by different methods
- **2023 The Journal of The Kenya national Commission for UNESCO**
Manuscript Title: A comparative study of the Research Aithorization Processes.
- **2022 Journal of Global ecology and environment**
Manuscript Source Determination of Polycyclic Aromatic Hydrocarbons in Soil around Selected Asphalt Plant Areas within Port Harcourt Metropolis
- **2018 Asian Food Science Journal**
Manuscript Title: Determination of micro and macro elements and some biochemical paramenters in fresh cow milk from different locations in Maiduguri Metropolis, Borno State, Nigeria.
- **2017 Advances in Research**
Manuscript Title: Response surface optimization of bath type ultrasound-assisted extraction (UAE) of native starch from cassava tubers
- **2017 Chemical Science International Journal**
Manuscript Title: Water quality assessment of the River Bonsa in Tarkwa, a mining-impacted area of Ghana
- **2017 Asian Journal of Biotechnology and Bioresource Technology**
Manuscript Title: Optimization of phenolics and carotenoids extraction from leaves of *Passiflora edulis* using response surface methods
- **2016 Journal of Kenya Chemical Society**
Manuscript Title: Extraction and characterization of yellow oleander (*thevetia peruviana*) seed oil, meal and analysis of eggshells' catalyst as a potential feedstocks for biodiesel production in Kenya
- **2016 Journal of Ecology and the Natural environment**
Manuscript Title: Assessment of Honey source bee floras during major and minor honey harvesting seasons in Jimma zone, Southwest Ethiopia
- **2016 Asian Journal of Biology**
Manuscript Title: Detection of heavy metals in breast milk and drinking water in Damietta Governorate, Egypt
- **2016 International Journal of Marine Science**
- **2015 Journal of Kenya Chemical Society**
- **2013 International Food Research Journal (ISSN 1985-4668)**
- **2013 International Journal of Medicine and Medical Sciences**

Appointment to Boards

- 2024 National Phytotherapeutic Research Center (NPRC) **Chairperson**
- 2017 Chandaria BIIC Board, KU **Member**
- 2016 Center for International Programmes and Collaborations, KU **Member**
- 2015 University – Industry Partnerships Board , KU **Secretary**
- 2014 Directorate of Alumni Board, KU **Member**
- 2013 Directorate of Mentoring Board, KU **Member**

ADMINISTRATIVE RESPONSIBILITIES

Recognized University Administrative Position

- **Information Access Officer**, Kenyatta University 22nd May, 2025
- **Ag. Registrar, Corporate Affairs**, 21st May 2025
- **Director**, Centre for International Programmes and Collaborations, 1st Aug 2018-21st July 2023
- **Director** University- Industry Partnerships, 27th August 2014- 31st July 2018
- **Acting Director**, Chandaria Business Innovation & Incubation Centre, 3rd -10th Mar 2018
- **Acting Director**, Centre for international Programs and Collaborations, 4th-11th Dec 2017
- **Acting Director**, Quality Management systems, 11th -29th January 2016
- **Acting Director**, Alumni Programmes, 14th -27th May 2014
- **Coordinator** Kenyatta University- Presbyterian University of East Africa collaboration, 24th Jan-2011-27th August 2014

Other Responsibilities in the University

- 2025 Chairperson to Kenyatta University Editorial Board
- 2025 Chairperson to the Contract Implementation Committee fir Property Management Services of Unicity Mall and KU Plaza
- Chairperson to the Events management Committee
- 2025 Chairperson to a Committee to establish & Oversee Implementation Framework for New Reporting Guidelines for Public Entities & Private Bodies Under the Access to Information Act, 2016
- 2025 Committee to Develop KU Organizational Culture Framework (**Co-Chairperson**)
- 2025 Nairobi International Trade Fair Planning Committee (**Co- Chairperson**)
- 2025 Committee to establish the KU Customer Care Centre (**Chairperson**)
- 2025 57th Graduation Ceremony Organizing Committee (**Member**)
- 2024 Committee to review the operation and sustainability of the Directorate of Innovation, Incubation and University industry Linkages (II&UIL)
- 2024 Committee to strengthen the internationalization agenda
- 2024 School of Pure and Applied sciences Risk Management representative
- 2023 54th Graduation Ceremony Organizing Committee (**Master of Ceremony**)
- 2023 53rd Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2023 52nd Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)

- 2022 51st Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2022 Committee to organize YALI RLC EA stakeholders, partners and Alumni Forum
- 2022 Committee to organize a high Profile YALI RLC transition and launch of YALI Phase II Event
- 2022 10th FASU Games speeches sub-committee
- 2021 The KUSA Constitution review committee (**member**)
- 2021 50th Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2021 49th Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2021 Tender processing committee-May- (**Chair**)
- 2021 Tender processing committee-January- (**Chair**)
- 2020 Hospitality and logistics subcommittee of the Innovation Festival (**Member**)
- 2020 Local Organizing Committee (LOC) for the 2020 Africa University Games (**Member**)
- 2020 48th Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2019: Member of LOC Kenyatta University Biennial Research and Innovation Conference held at KU 23rd -25th October 2019
- 2019 STEP Regional conference 2020 planning Committee (**Co-Chairperson**)
- 2019 Committee on students' academic achievements Awards (**Chairman**)
- 2019 47th Graduation Ceremony Organizing Committee (**Member/Master of Ceremony**)
- 2019 Committee on establishment of Global Tourism Resilience and Crisis Management Satellite Center (GTRCMSC) at Kenyatta University (**Member**)
- 2019 Tender processing committee- (**Chair**)
- 2019 University Academic Mobility Steering Committee (**Secretary**)
- 2019 Sensitization of University Staff on Competence Based Curriculum (CBC) **Master of Ceremonies (MC)**
- 2019 KU-KENHA Collaboration committee (**Member**)
- 2019 46th Graduation Ceremony Organizing Committee (**Team leader for MC**)
- 2019 KAM 09 Cadet Matriculation Planning Committee (**Member**)
- 2019 Tender processing committee (**Chair**)
- 2019 Committee to develop a plan for utilization of space in the international language and cultural center building (**Member**)
- 2019 Tender processing committee (**Chair**)
- 2018 Committee to organize International conference (**Member**)
- 2018 Committee to develop a tracer study policy (**Member**)
- 2018 Committee to prepare a Bid Document for submission to the African Development Bank (**Member**)
- 2017 44th Graduation Ceremony Organizing Committee (**Team leader for MC**)
- 2018 Tender processing committee (**Chair**)

- 2018 Tender processing committee (**Chair**)
- 2017 Tender processing committee (**Member**)
- 2017 43rd Graduation Ceremony Organizing Committee (**Member**)
- 2017 42nd Graduation Ceremony Organizing Committee (**Member**)
- 2017 MOU and WADHWANI Foundation project implementation committee (**Member**)
- 2016 Master of Ceremony team for the 41st Graduation Ceremony (**Team leader**)
- 2016 41st Graduation Ceremony Organizing Committee (**Member**)
- 2016 Adopt a community initiative (ACI) launch committee (**Member**)
- 2016 Reconstitution of the Student Work Induction program (SWIP) Committee (**Secretary**)
- 2016 Committee to Operationalize Applied Entrepreneurship Education and Service Learning Concept (**Member**)
- 2016 40th Graduation Ceremony Organizing Committee (**Member**)
- 2016 Committee to engage key stakeholders in health financing (**Member**)
- 2015 Committee to plan for the official opening of the Alumni Building (**Member**)
- 2015 39th Graduation ceremony organizing committee (**Member**)
- 2015 Committee to work with University Events Management (**Member**)
- 2015 Committee to work with Total Kenya on the Business Program Forum (**Member**)
- 2015 Sub –Committee to develop the 2015 – 2025 University strategic and vision plan for the Chapter on Alumni (**Convener**)
- 2015 Committee to develop the 2015 – 2025 University strategic and vision plan (**Member**)
- 2015 Committee to work on a Concept for the processing of Branded Bottled water by the University. (**Member**)
- 2015 Committee to write a proposal to source for funding for the semester abroad programme. (**Member**)
- 2015 Committee to spearhead Collaboration with Industrial & Commercial Development Corporation (ICDC) (**Member**)
- 2015 Committee to work with Urbasolar on implementation of Solar Project at K.U. (**Member**)
- 2015 Committee to meet with Peace for Africa and Economic Development (PAD) team and purpose the nature of collaboration. (**Member**)
- 2015 Committee to work towards the development of a policy document to guide the various Partnerships & Collaborations. (**Member**)
- 2014 Committee for planning for the official opening of the Campanile, Directorate Complex & Biochemistry laboratories (**Member**)
- 2014 Steering Committee to implement the introduction of the STEP initiative to the Counties. (**Chair**)
- 2014 Committee to plan for the launch of Kenyatta University Consultancy Services. (**Member**)
- 2014 Committee to develop a Strategic Plan for the Directorate of University – Industry Partnerships. (**Member**)

- 2014 Committee to develop a strategic plan for the Center for International programmes and collaborations. (**Member**)
- 2014 Committee on official launch of Master of Economics (Cooperation & Human Development) (**Member**)
- 2014 36th Graduation ceremony organizing committee (**Member**)
- 2014 Opening of new administration building and graduate school by H.E the president (**Member**)
- 2014 Committee on launching teacher-student mentorship programme (**Member**)
- 2014 Launch of Korean language and culture center at KU (**Member**)
- 2014 Planning committee for the 6th ICAT conference on appropriate technology (**Member**)
- 2013 Framework for Internationalization of Doctoral Education (FRINDOC) (**Member**)
- 2013 Committee to develop curriculum for National Police Service (**Member**)
- 2013 Committee for proposal to RBA(**Member**)
- 2013 Committee on promotional materials (2013/2014) (**Member**)
- 2013 34th Graduation Organizing Committee (**MC**)
- 2013 University marketing committee (**Member**)
- 2013 Workshops coordinating committee (**Member**)
- 2013 KU Mentoring Programme (**Board member**)
- 2012 KU mentoring Programme (**Staff mentor**)
- 2012 33rd Graduation Organizing Committee (**MC**)
- 2012 KU Mentoring Programme (**Board member**)
- 2012 Committee on promotional materials (2012/2013) (**Member**)
- 2012 Committee on Next Generation of Academic and Researchers Network (NGARN) (**Member**)
- 2012: Committee on the Inaugural Conference of Nanotechnology and Material Science Development in Kenya held on 18th – 21st July **2012** at Kenyatta University Conference Centre (KUCC) Nairobi Kenya (**Member**)
- 2011 Planning committee SPAS Kitui Campus Open day (**Member**)
- Academic Advisor for First Year students in Chemistry Department
- Department of Chemistry social welfare committee (**Chairperson**)
- Chemistry department Postgraduate Seminars Committee (**Member**)
- Kenyatta University Staff Mentor for undergraduate students 2017/2018- Current
- Teaching practice area supervisor: Kakamega-VihigaMumias region (2010- 2014)
- **Master of ceremony**
 - Matriculation ceremonies (matriculation etc) **2015-2023**
 - Form four leavers Day at KU 31st Jan **2020**.
 - Launch of the KU-AJIRA Digital Club Graced by Hon Cabinet Secretary, Ministry of ICT on 5th April **2019**.
 - launch of the School of Architecture, KU on 25th November, **2015**.
 - open training for the youth on Entrepreneurship & Leadership skills sponsored by the ministry of Devolution & planning on 12th October, **2015**.

- 2nd public lecturer for second semester 2014/2015 certificate in leadership development & mentorship on 7th March, **2015**.

5.1 Internal Examiner
Undergraduate project supervision

SNo.	Student Name	Reg. No.	Title of Project	Institution/ Department	Year
1.	Adakha John	I71/1980/07	Analysis of selected heavy metals in homemade brews from Kakamega County	Kenyatta University (KU) - Chemistry	2010/11
2.	Moses Njagi Kibugi	I73/0722/08	Comparative analysis for selected locally available and imported sugar brands	KU-Chemistry	2011/12
3.	Morna Awuor Obuya	I71S/8637/07	Analysis of selected essential elements in <i>azadirachta indica (neem)</i> leaves	KU-Chemistry	2011/12
4.	Erastus Ndung'u Kariuki	I71/1967/07	Determination of toxic metals in domestic effluents discharging into Thika River	KU-Chemistry	2010/11
5.	Lillian C. Koech	I73/0693/09	Investigating of non-nutritive sugars and preservatives in juices in Kenyan Markets	KU-Chemistry	2012/13

Contribution to University Advancement

- 1) **2023: Coordinator and Trainer** in the Student Training for Entrepreneurship Training for Youth (STEP-4Y) in Uasin *Gishu County*, Kenya. Partners: Kenya National Commission for UNESCO (KNATCOM), Mount Kenya University and Kenyatta University. Topic: Networking and overcoming barriers
- 2) **2022: Carnegie African Diaspora Fellowship Program** Host: Project-Chemistry Curriculum co-development to promote innovative practices and active learning strategies for online delivery. Collaborator, University of Alberta, **Canada**
- 3) **2022: Coordinator and Trainer** in the Student Training for Entrepreneurship Training for Youth (STEP-4Y) in *Garissa County*, Kenya. Partners: Kenya National Commission for UNESCO (KNATCOM), Mount Kenya University and Kenyatta University. Topic: Networking and overcoming barriers
- 4) **2021: Coordinator and Trainer** in the Student Training for Entrepreneurship Training for Youth (STEP-4Y) in *Busia and Bungoma Counties*, Kenya. Partners: Kenya National Commission for UNESCO (KNATCOM), Mount Kenya University and Kenyatta University. Topic: Networking and overcoming barriers
- 5) **2020: Coordinator and Trainer** in the Student Training for Entrepreneurship Training for Youth (STEP-4Y) in *Kajiado and Nairobi Counties*, Kenya. Partners: Kenya National Commission for UNESCO (KNATCOM), Mount Kenya University and Kenyatta University. Topic: Networking and overcoming barriers
- 6) **2019-March: Kenyatta University Vice Chancellors delegation** meeting in States (Collaboration discussions with Higher Ed Partners, Dallas Texas, USA & Signing of MOU with Binghamton University, New York, **USA**,
- 7) **2019: Coordinator and Trainer** in the STEP-4Y in *Isiolo County*, Kenya. February –May 2019. Partners: Kenya National Commission for UNESCO (KNATCOM), Mount Kenya University and Kenyatta University. Topic: Networking and overcoming barriers
- 8) **2017/ September -Current UNESCO Club Patron**
- 9) **2017: Facilitator:** Capacity building workshop on strengthening Science, technology and Innovation (ST & I) Governance in Kenya and Improving participation of women and girls in ST & I.
- 10) **2017: Principle Investigator and Trainer** for Chemical security and safety vulnerability assessment training for technicians at Kenyatta university Held 12th, June – 15th June, 2017, KUCC, Kenyatta University
- 11) **2017: Member of the Local Organizing Committee** for the The 10th Kenya Chemical Society International Conference Held 9th -12th May at United States International University (USIU)-Africa. Theme: ‘The Role of Chemistry in Inventing a Sustainable Future’
- 12) **2017: Coordinator and Trainer** in the STEP-4Y in *Embu County*, Kenya. –Jan-Feb. Sponsored by Kenya National Commission for UNESCO (KNATCOM) and Kenyatta University. Topic: Networking and overcoming barriers
- 13) **2016: Coordinator and Trainer** in the STEP-4Y in *Kisumu County*, Kenya. January-March 2017. Sponsored by Kenya National Commission for UNESCO

- (KNATCOM) and Kenyatta University. Topic: Networking and overcoming barriers
- 14) **2016: Coordinator and Trainer** in the STEP-4Y in *Nakuru County*, Kenya. June-August, 2016. Sponsored by Kenya Adenauer Stiftung (KAS), Kenya and Kenyatta University. Topic: Networking and overcoming barriers
 - 15) **2016: Coordinator and Trainer** in the STEP-4Y in *Mombasa County*, Kenya. February-March, 2016. Sponsored by Kenya National Commission for UNESCO (KNATCOM), UNESCO Regional Office for Eastern Africa and Kenyatta University. Topic: Networking and overcoming barriers.
 - 16) **2015: Coordinator** for STEP-4Y training in *Kiambu County*, Kenya. November-December, 2015. Sponsored by UNESCO Regional Office for Eastern Africa and Kenyatta University.
 - 17) **2015- 15-17th Dec: Resource Person:-**Chemical Safety and Security Training for University Technicians in Kenya –Technical University of Kenya, Nairobi,
 - 1) **2014: Coordinator** for STEP training at Kenyatta University. Sponsored by Leuphana University, Germany and Kenyatta University.
 - 2) **2011: Secretariat** for DAAD Annual conference held on 16th November, **2011** at Silver Springs Hotel, Nairobi, Kenya on Capacity Development for the County Governments in the New Constitutional Dispensation in Kenya.
 - 3) **2011: Facilitator** for the Kenyatta University Venue at the Research Proposal Writing Training Workshop organized by The Kenya DAAD Scholars Association (KDSA), The Humboldt Alumni in Kenya, the REAL - UNISTAFF Alumni in Kenya and the IDC-UNILEAD Alumni together with the Graduate Schools of the various Universities in Kenya, DAAD Nairobi, the National Council of Science and Technology (NCST) and the Commission of Higher Education (CHE). Held on 16th and 17th September **2011** at various centres in Kenya.
 - 4) **Resource person:-**Curriculum Development for Bachelor of Science (BSc.) in Industrial Chemistry (Analytical Chemistry units) for Kimathi University College of Technology. February-**September 2011****2010: Chairperson**, Catering sub-committee for the 1st Regional Conference of Pure and Applied Sciences at Kenyatta University Students Business Centre, 10th-14th August, **2010**
 - 5) **2010: Secretary** of the committee organizing for DAAD workshop at Kenyatta University, August, **2010**.

COMMUNITY ENGAGEMENT AND OTHER CONTRIBUTIONS

Initiating/Leading Research Projects

- ✓ **2021-2024: Project coordinator-** Kenyatta University-University of Arkansas in Pine Bluff (UAPB). Project Promoting resiliency in the Agriculture sector developing economies in the context of COVID 19
- ✓ **2023-June:- Project coordinator** Service learning Study Abroad programme in Kenya, University of Arkansas, Pine Bluff, USA
- ✓ **2018-2022: CEPU Project coordinator-** Kenyatta University
 - 2022 April: Coordinator and Trainer for Student Training for Entrepreneurship Promotion (STEP) Training for Kenyatta university

students. Topic: Networking and overcoming barriers/ leadership and Strategic Management

- 2021 April: Coordinator and Trainer for Student Training for Entrepreneurship Promotion (STEP) Training for Kenyatta university students. Topic: Networking and overcoming barriers
- 2020 Jan: Coordinator and Trainer for Student Training for Entrepreneurship Promotion (STEP) Training for Kenyatta university students. Topic: Networking and overcoming barriers
- 2019-Dec: Fundraising Workshop
- 2019-Oct: Idea camp (Train –The-Trainer) at Sagana Rapids Camp
- 2019Oct: Leadership and Strategy Development Workshops III
- 2018-Oct: Leadership and Strategy Development Workshops 1 & II
- 2018-Octo: HEInnovate Workshops I & II
- 2019-Jun: Workshop on service oriented university administrations
- 2019-Feb: Coordinator and Trainer for Student Training for Entrepreneurship Promotion (STEP) Training for Kenyatta university students. Topic: Networking and overcoming barriers
- ✓ **2018-31st May:** STEP information sharing session, United nations Complex, Paper presented : Background of STEP
- ✓ **2017-17th November:** Kenya National Innovation Agency Strategic Plan Stakeholders forum and recognition ceremony for the 2016-Innovation Award Winners. at Nairobi Safari Club
- ✓ **2017-11th October:** Stakeholder meeting to review the draft united Nations Development assistance Framework (UNDAF) for 2018-2022, at UN compound, Gigiri.
- ✓ **2017-4th May:** An Experts meeting for the development of Kenya's capacity development action plan for the UNESCO-SIDA future earth initiative at KNATCOM-UNESCO.
- ✓ **2017-20th July:** An Experts meeting for the development of Kenya's capacity development action plan for the UNESCO-SIDA future earth initiative at KNATCOM-UNESCO.

Internal and External Grants

Year	Title of project/position/team members	Donor	Purpose	Amount (Ksh)
1) 2024	Green & Pink for Sustainable Education - GPS Education Position: Incountry Principle Collaborator	Ministry of University and Research, Italy	Enhance Italy cooperation with African, Asian and South American universities-Mobilities.	300,000,000
2) 2024	Strengthening Productivity of Farm Animals, African Indigenous Cereals and Pulses through Upscaling Climate-Smart Technologies and Value Addition for Improved Resilience and Food Security in Murangá County, Kenya Position: Collaborator	USD Department of Agriculture	Research Capacity building	5,100,000
3) 2023	Inclusive and Innovative Digital Education for Migrant community in Kenya and Somali (IIDEMIC) Position: Collaborator	European Union	Capacity Building	140,000,000
4) 2023	Faculty led Study Abroad Program Position: Coordinator	Hollins University, USA	Study Abroad Program	1,300,000
5) 2022	Faculty led Study Abroad Program Position: Coordinator	USD Department of Agriculture 1890 CEIED/GE 2020	Study Abroad Program	1,500,000
6) 2021-2024	Promoting resiliency in the Agriculture sector developing economies in the context of COVID 19 Position: Principle	University of Arkansa in Pine Bluff (UAPB)	Capacity Building	350,000
7) 2019	STEP Regional Conference 2020	Leuphana	Conference	300,000

	Position: Principle	University		
8) 2018	Collaboration for Entrepreneurial Universities (CEPU) Position Coordinator- Kenyatta University (KU) German Team Bonn-Rhein-Sieg University of Applied Sciences (PI); Leuphana University Luneburg; Leipzig University; Wismar University of Applied Sciences; Hasso-Plattner-Institute Kenyan team: Mount Kenya University & KU	DAAD	Research & Training	67,136,000
9) 2018	Gastrointestinal models (TIM) bioavailability studies of extractable Beta carotene stored in coconut oil and honey. Position Principle Investigator (PI)	Royal Society of Chemistry (RSC)	Research Fund Grant	399,100
10 2017	KAS Programme Sub Saharan African (A10000000V) Country Project Kenya Sub project EM (A10620000V) [Entrepreneurship in Kenya] Position Coordinator	Kenya Adenauer Stiftung	STEP-4Y	944,050
11 2017	Chemical security and safety vulnerability assessment training for technicians at Kenyatta university Position-PI Team:- Dr Dickson Andala; Dr Austin Aluoch; Mr. Dennis Osoro	The U.S.A. Department of State's Chemical Security Program (CSP)	Training	1,146,900
12 2015	Nutrition-sensitive intervention with African leafy vegetables to improve nutrition status of school going children in Kenya Position -Investigator Team:- Prof. Hudson Nyambaka (PI); Prof. Judith Kimeywe; Dr Wilson Thagana	KU-Vice Chancellors Research Grant	Research	1,499,970
13 2014	Risks and opportunities associated with paying lumpsum pension benefits to retirees in Kenya:	Retirement Benefits	Research	3,000,000

	implications for income security Position: Researcher Team (KU) : Prof. Mugenda, O.M (PI); Dr. Maina, L.W; Prof. Kimani, E; Dr. Muindi, D ; Dr. Wamburu, W	Authority		
14 2014	Curriculum development for National Police Service Position; Member Team (KU): Dr. Maina, L; Dr. Kavivya; Dr. Nyerere	National Police service	Curriculum development	1,400,00
15 2013	Potential anti-cancer suspensions of beta-carotene and lutein from cowpeas and amarantus vegetables of Kenya. Position:- PI	The World Academy of Sciences (TWAS)	Research grant	13,000
16 2012	Antioxidant oil suspension formulations from indigenous vegetables. Position:- PI	National Council of science and technology (NCST)	Post-doctoral research	956,992
17 2012	African Nightshade distribution in Kenyan groecologies in response to phosphorus and water status: Phenolicklis and related antioxidants profiling. Position:- collaborator Team : Dr. Joseph Patrick Onyango Gweyi (PI-KU), Dr. Winfred M Musila(National Museums of Kenya); Omolo Paul Ochieng(Kenya Agricultural Research Institute)	Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)	Research	5,000,000
18 2012	Characterization of antimicrobial compounds of fungi from lake magadi, Kenya. Position:- collaborator Team: Ms. Salano Odilia Atamba (PI- Thika Technical Institute); Dr. Laura Wangai (JKUAT); Dr. Grace Waceke JKUAT)	NCST	Research	2,029,160

19	1998	Beta carotene levels in indigenous vegetables. Principle investigator	Sigma Xi	Research	50,000
20	1998	Levels of carotenoids in dark green leafy vegetables Principle investigator	IPGRI	Research	60,000
21	1997	Effect of dehydration of dark green leafy vegetables on Bioavailability and bioconversion of serum beta-carotene among preschool children Principle investigator	DAAD	PhD research	365,000
22	1996	Heavy metal and Pesticides in Marine sediment, seawater and seaplants along the Kenya-Mombasa Coastline. Principle investigator	Kenyatta University Vice-Chancellors grant	MSc research	80,000

Community Service

- **2023** June: Motivational Speaker, kamusinga Boys High School, Bungoma County
- **2022** July: Chief Guest Emalindi Girls School Vihiga County,
- **2021** Guest speaker Emalindi Girls School Vihiga County,
- **2020-** March: Guest speaker- St Catherine Nanderema Secondary School, Funyula, Busia County
- **2020-** March: Guest speaker- St Mark Bukiri Secondary School, Funyula, Busia County,
- **2012** July: Book donation function held on at Hakati secondary School.
- **2011:** Development projects of St Cecilia Dahoro Catholic Church, Busia County
- **2012-** 29th Sept: Community serve day of older persons at PCEA Women's Guild Thogoto Home for the Aged on

Membership to Professional Bodies

- Kenya Federation of UNESCO Clubs, Centers and Associations (KEFUCA): (19th February 2019-Current) - **Treasurer**
- Royal Society of Chemistry (RSC) - **Associate Member**
- Kenya Chemical Society (KCS) - **Organizing Secretary**
- Kenya DAAD Scholars Association (KDSA) - **Member**

REFERENCES

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