

Curriculum Vitae

Charles Muyanja

Educational and Professional Backgrounds

- 2002 PhD, Food Science (Microbiology & Biotechnology), Norwegian University of Life Sciences, Norway, Aas, Norway
- 1996 Msc, Food Science (Meat and Fish Technology), Norwegian University of Life Sciences, Aas, Norway,
- 1992 Bsc, Food Science and Technology, Sokoine University of Agriculture, Morogoro, Tanzania.

Academic and Professional positions

MAKERERE UNIVERSITY

- 2012 to-date: Professor, Department of Food Technology and Nutrition
- 2011-2012: Associate Professor, Department of Food Technology and Nutrition
- 2005 to 2010: Senior Lecturer, Department of Food Science and Technology
- 1997–2005: Lecturer, Dept. of Food Science and Technology
- 1992–1996: Assistant Lecturer, Dept. of Food Science and Technology

Professional Experience

Teaching, Research, and Supervision

- During my 30 years at Makerere University, I teach the following undergraduate courses to date: Food packaging and Materials (FST 3202), Food Microbiology (**FST 2102**), Food processing and preservation (**FST 2202**): Meat, Poultry & Fish Technology, (**FST 4103**), Cereal, Legumes and Root Crop Technology, (**FST 4104**), Environmental Health and Sanitation (**HMN1301**).
- I teach the following postgraduate course to date: Meat, Fish and Poultry Technology (**FST 7208**), Quality Assurance, (**FST 7104**) Food Legislation (**FSM 7102**). Food Safety Culture (**FSM 7203**). I have researched extensively in the field of Food Microbiology and Food Safety.
- Supervised a number of students, both undergraduate and postgraduate research. Served as External Examiner for Gulu University, several Universities in South Africa, and Examination Modulator for University of Swaziland. Designed and developed research and development projects. Worked on several donor funded community based projects as principal investigator and collaborator. Worked with donors such as NORAD, SIDA, USAID, FAO, McKnight Foundation, Irish Aid/ HEA, World Vision, AICAD, USDA, SGS

Management and Administration

- Initiated and Spear headed the development of a Master degree program in Food Safety and Quality Management at Makerere University in collaboration with Ministry of Trade, Industry and Cooperatives under Quality Infrastructure and Standards Programme (QUISP). The program was approved by the university council and higher education council. It is up running to provide human resource to support various food value chains with respect to food safety issues.

Invited guest Professor/ Consultant/ food safety expert: Ghent University Belgium

- Trained international participants attending the 3-months VLIR UOS sponsored Intensive Training Program in Food Safety, Quality Assurance and Risk Assessment (www.itpfoodsafety.ugent.be) Ghent University, Ghent, Belgium, 2016, Risks associated with street vended foods and their packaging were discussed.

Commonwealth Standards Network (CSN), UK, Department for International Development, the British Standards Institution 2019

- Researching, identifying and examining “standards gaps” that are preventing compliance in Shea-nut, Rice, soybean, pineapple and avocado value chains. Providing an independent third party assessment of what needs to happen and in particular how public sector players should work more efficiently together to provide the necessary knowledge and training to producers.

Palladium Group (U) Limited 2018

- Assessment of food safety and quality of vegetable oils produced by selected oil processors in Northern Uganda. Under Northern Uganda-transforming the economy through climate Smart agriculture (NU-TEC) market development (md) programme 2018. The main purpose for this assignment was to assess the food safety and quality situation of selected vegetable oil processors so as to support them technically till certification by Uganda National Bureau of Standards (UNBS).

USDA/ Mississippi State University 2016-2017 2

- Food Safety Law and Regulatory: Review for The Eastern, Western & Southern Regions of Africa- 2016". Involving countries Ethiopia, Rwanda Malawi Kenya Ghana , Tanzania, Uganda Cameroon and Madagascar. Assessments and compilation for different Food Safety Policy and Country SPS Policy for each country for the purpose of harmonisation of food safety laws with the region. Developed action plans for harmonising policy and regulation that will improve food safety, facilitate trade and increase food security in participating countries. Evaluated the regulatory infrastructure that exist in Sub Saharan countries by region and individual countries.

CARANA Project /USAID 2014-2017

- Developing quality control protocols for Maize value chain. Training key players on food safety aspects such as Good manufacturing practices (GMP, ISO 22000 standards, Hazard Analysis Critical Control points (HACCP), Good Hygienic practices (GHP), Technically support the sunflower Vegetable oils enterprise for certification including packaging design meet the requirements of Uganda National Bureau of Standards.

Quality infrastructure and Standards Programme (QUISP) with Funding From SIDA and Trademark East Africa under the Ministry of Trade Industry and Cooperatives, Uganda, 2012

- Undertook research to collect and compile data needed to harmonise national positions and facilitating Uganda's delegates participating effectively in international SPS and food safety related trade negotiations. Technical Position papers were generated.

EPA- TAPSS /Ministry of Trade, Industry and Cooperatives, 2013

- Under the partnership with Ministry of Trade, Industry and Cooperatives through the EPA- TAPSS Program I conducted and facilitated 8 workshops training on Sanitary and Phyto-sanitary (SPS) measures in the food value chains (plant and animal value chains).

Africa institute for capacity Building and Development (AICAD) 2007, 2008 and 2011

- Facilitated AICAD participants in processing and value addition focusing on Food packaging and materials and Food hygiene. The training considered packaging requirements for different food including Fruits and vegetables fish, and fisheries products, meat and meat product, Milk and milk products cereal and cereal products, Drinks and Beverages. Contributed a chapter on food packaging for the training manual.

UNIDO Food Component, 2008

- Designed, organised, and facilitated a food Inspection certificate course in Food Safety and Inspection for food inspectors from Kampala, Mpigi, Wakiso and Mukono Districts in Uganda. The course covered HACCP, Risk Analysis, Food safety standards and SPS issues along food value chains were covered.

Local and International meetings

UN Food Summit Country Dialogues on Food systems 2021

Key speaker

- On Action Track 2 I gave a speech on shift to healthy and sustainable consumption patterns

Kenyatta University: Food Safety Conference 2019

Key Speaker

- To give a key note speech on the innovative ways to disseminated food safety knowledge in Africa.

Uganda National Bureau of standards Food Safety conference, 2016

Key Speaker:

- The theme of the conference food safety and beverage industry: Importance of Drink safety in Changing Environment Delivered a paper on Food Labelling and Food Safety.

International Association for Food Protection Conference (IAFP), 2018

Oral Speaker:

- Innovative ways for dissemination of food safety knowledge in the world.

Uganda National, Bureau of Standards

Participate actively in meetings of various technical committees. I have been a delegate for the country as an expert for negotiation of several regional standards harmonization positions.

- **Member:** National Codex Committee (2013-to-date) and Chair for the various technical committees
- **Chair:** UNBS/TC 213 on Live animal, meat and meat products
- **Member:** Working Group; UNBS/TC208 on Food Labeling and Hygiene
- **Member:** UNBS/TC 2 on Food and Agriculture Standards
- **Registered** and participating in Codex Committee for Food Labelling Electronic Working Groups on Front-of-pack Nutrition labelling, allergen labelling and guidelines on internet sales /e-commerce.
- **Head Delegate** Development of Harmonized EAC Standards on Labeling of Prepackaged Foods. Considering nutritional labeling and nutrition & health claims based on Codex Standards for Labelling. **Bujumbura, Burundi, 2013**

- **Head Delegate:** Harmonization of Milk and Milk products in East African Region. The standard for Raw Cow milk Pasteurized Milk, UHT milk including skimmed and semi-skimmed Reconstitute and recombined milk products, Standards for Ice cream. Butter sweetened condensed milk and other milk products were discussed. **Kigali, Rwanda 2018**
- **Head Delegate** Regional standards harmonization on meat, poultry, game, eggs and their products technical committee (**EASC/TC 004**): Virtual Meeting ZOOM

AU Level:

Food Safety Strategy for Africa, 2021

- Participated actively as Delegate in the continental consultative meeting for development of the Food Safety strategy for Africa. **(08-11 June 2021)**

ARSO technical committees

Chair for ARSO Technical Committee (TC23) for Live animals. Deliberating and harmonizing standards for Live Animal for Africa

Memberships to Professional Organizations

- First President of Africa Continental Association of Food Protection (ACAFP) (www.acafoodprotection.org). This is the 49th Affiliate of IAFP. Currently a treasurer for the Association. ACAFP provides a forum for food safety professionals and students to share information and experiences on food safety related issue.
- Member of International Association for Food Protection (IAFP) Association for advancing Food safety worldwide.
- Member of Society for Applied Microbiology (SfaM) The society of the voice of applied Microbiology.
- Member of International Committee of Food Microbiology and Hygiene (ICFMH). A committee devoted to food microbiology and Food safety Research.

Certificate Trainings	
21 June- 12 July 2022 University of Pretoria	Certificate :Training of Trainers Workshop on Horticultural Chain Management on Measurement and Actions to Manage Quality and Reduce Food Losses in Fresh Produce Supply Chains Implemented with the support of the Food and Agricultural Organization of the United Nations
July 2017 Entebbe Botanical Beach Hotel, Uganda	Risk Analysis, a training supported by USAID- East Africa Trade and Investment Hub (EATIH) and the East African Community to enhance SPS capacity in trade, Reorganising the importance of SPS measures in regional and international trade.
2015 Sub Regional East African Food safety capacity	Building workshop hygiene that focussed on food production and consumption continent FAO, Swiss confederation
2014 , EDES (EU ACP) Training Food safety program Uganda	Certificate in Strengthening of Food Safety Systems and Governance. The program covered food safety systems, regulation and standards and official controls and evaluation of national food control systems.
2010 -Hebrew University Jerusalem, Israel	Certificate in Food safety (Ensuring Food Safety in Times of Global Change)
15 th – 16 th December 2009, Kampala -Uganda WTO National Seminar	WTO National Seminar on the Agreement on the Application of Sanitary and Phytosanitary Measures along value chains Meat , fish, Milk and fruits and vegetables
2007 Stellenbosch University, South Africa.	Certificate in Food Safety in Africa. The program concentrated on food microbiology and Hygienic aspects. Risk analysis and Risk assessment, application of HACCP principles on Street vended foods and in small scale operations were dealt with
2005 Michigan State University, International Institute of Agriculture/Institute of Food Laws/National Food Safety and Toxicology Centre at Michigan State University USA	Certificates in Food Safety and Environmental Biosafety - International Food safety course. The programs covered areas of Food establishment, Guide to installation and construction, Food establishment inspection, Codex standards, Personal cleanliness and hygienic practices. Biosafety and Risk assessment Risk management and monitoring in agricultural biotechnology was also dealt with
29th –31 st October 2003FAO/UNIDO National workshop	FAO/UNIDO National workshop on Food Safety System and Strengthening of the Uganda National Codex Committee Trained stakeholders in Food control systems
November 1999. A NORFA/Nordic regional workshop held at the University of Oslo, Norway	Regional workshop on Food hygiene and safety in production. This involved aspect of codes of hygiene and focussed on fermented foods including fermented fish and meat products.
24-29 August 1997. The Hague International conference centre, The Netherlands,	World Congress on Food Hygiene . The congress focused on food safety and Production hygiene

Publication and reports

Author of over 70 scientific articles in international reputable Journals, authored chapters in books, abstracts in several conference proceedings. I have facilitated and documented several workshops and conducted several consultancies culminating into technical reports.

- Innocent Hope Tinka Mukama, Ivan Muzira Mukisa, Charles Kyeyune Muyanja **(2023)**. Profile and Operations of Highway Tourist Stop-over Foodservice Establishments in Uganda, ASEAN Journal on Hospitality and Tourism, Vol. 21, No. 3, pp. 233-253.
- Elizabeth Khakasa ,Charles Muyanja, Robert Mugabi, Yusuf Mukasa, Mary P. Babirye , , Brian Balikoowa , Priver Namanya , Jerome Kubiriba , Ivan K. Arinaitwe, and Kephass Nowakunda **(2023)** Internal Quality Assessment of East African Highland Cooking Banana (*Musa spp.*) Flour: Significance for Breeding and Industrial Applications Foods 2023, 12(23), 4323; <https://doi.org/10.3390/foods12234323>
- Elizabeth Khakasa, Charles Muyanja, Robert Mugabi, Christophe Bugaud, Nelly Forestier-Chiron, Brigitte Uwimana, Ivan Kabiita Arinaitwe, Kephass Nowakunda **(2023)** Sensory characterization of the perceived quality of East African highland cooking bananas (matooke) Journal of the Science of Food and Agriculture First published: 07 April 2023 <https://doi.org/10.1002/jsfa.12606>:
- Obed M. Ogega, Mary Majani, Cheryl Hendricks, Olumuyiwa Adegun, Maria Mbatudde, Charles Muyanja, Peter Atekyereza, Ngandeu N. Hugue, Razak M. Gyasi, Research capacity strengthening in Africa: **(2023)** Perspectives from the social sciences, humanities, and arts, Scientific African, Volume 20, 2023, e01708, SSN 2468-2276, <https://doi.org/10.1016/j.sciaf.2023.e01708....>,
- Soumaya Abdou Salam¹, Ivan Mukisa Muzira¹ , Robert Mugabi¹ & Charles Muyanja **(2023)** Preservation of Chayote (*Sechium Edule L*) Using Different Drying Methods Journal of Food Research Vol. 12, No. 4 (2023), DOI:10.5539/jfr.v12n4p45
- Lillian Nabwiire, Angela Shaw, Gail Nonnecke, Joey Talbert , Charles Muyanja , Terri Boylston¹, Rodrigo Tarté and Kenneth Prusa **(2023)** Compliance with food safety standards by beef vendors at butcheries in Kamuli district, Uganda African Journal of Food Science Vol. 17(9) pp. 192-206, September 2023 DOI: 10.5897/AJFS.2272
- Martínez-García, A., Oller, I., Vincent, M., Rubiolo, V., Asimwe, J. K., Muyanja, C., McGuigan, K. G., FernándezIbáñez, P., & Inmaculada Polo-López, M. **(2022)**. Meeting daily drinking water needs for communities in Sub-Saharan Africa using solar reactors for harvested rainwater. Chemical Engineering Journal, 428, <https://doi.org/10.1016/j.cej.2021.132494>
- William S. Kisaalita, Charles K. Muyanja & John M. Mativo **(2022)** Undergraduate students' short-term inquiry- or design-based overseas experiences enhance their global engagement acumen, European Journal of Engineering Education, 47:6, 1216-1228, DOI: 10.1080/03043797.2022.2134761
- Azahara Martínez-García, Isabel Oller, Martin Vincent, Viviana Rubiolo Jacent Asimwe, Charles Muyanja, Kevin McGuigan, Pilar Fernández-Ibáñez, María Inmaculada Polo-López **(2022)** Meeting daily drinking water needs for communities in Sub-Saharan Africa using solar reactors for harvested rainwater, Chemical Engineering Journal, Volume 428, 132494
- Julia Kigozi, Ivan Mukisa, Charles Muyanja, Leatitiah Namubiru, Brenda Kitarikawe **(2021)** Unearthing the potential of solid waste generated along the pineapple drying process line in Uganda: A review, Environmental Challenges Volume 2, 100012
- Stellah Byakika, IM Mukisa, YB Byaruhanga, C Muyanja **(2020)** Probiotic Potential of Lactic Acid Starter Cultures Isolated from a Traditional Fermented Sorghum-Millet Beverage. International Journal of Food Contamination volume <https://doi.org/10.1155/2020/7825943>
- Isaac O. Omagor , Julia Kigozi , Charles Muyanja , Mary Namwanje , Sloans K. Chimatiro and Ivan Muzira **(2020)** Effect of artisanal (small-scale) processing on the quality attributes of *Rastrineobola argentea* (silver cyprinid) Journal of Advances in Food Science & Technology 7(1): 6-11
- Isaac O. Omagor, Julia Kigozi, Charles Muyanja, Ivan Muzira, Mary Namwanje and Sloans K. Chimatiro **(2020)** Artisanal processing and preservation practices carried out by silver cyprinid (*Rastrineobola argentea*) processors along the shores of Lake Victoria in Uganda. International Journal of Fisheries and Aquatic Studies 2020; 8(4): 265-273

Policy brief

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