

# Curriculum vitae

## Personal information

**Name** KILAVI, Pamela Kageliza  
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## Education

### University of Nairobi/University of Witwatersrand

Doctor of Philosophy in Physics Student

*Research Topic: “Radiological dose and risk assessment of enhanced naturally radioactive materials in selected high background radiation areas of Kenya.”*

### University of Nairobi, (October, 2010 to August, 2014 )

- Master in Science (Nuclear Science)

*Thesis topic: “Trace element analysis in complementary infant foods from selected rural-urban areas using total x-ray fluorescence technique.”*

### Kenyatta University, (1996 to 2000)

- Bachelor of Education (Science), Physics and Mathematics

## Other trainings

- Nuclear Security trainings and workshops–ICTP/IAEA, African Centre for Science and International Security (AFRICIS) and Kings London College
- IAEA TC project Management using the Logical Framework Approach
- E-learning series on Information and communication Technology on Education
- Professional development course for teachers on International learning and Education for Global Citizenship
- Master training with British Council/Microsoft
- Item Writing – Kenya National Examination Council

## Successful Grants

- Kalambuka H. Angeyo, Kaniu I. Muchai, **Kilavi P. Kageliza** Multimodal spectrometric characterization of uranium and thorium bearing mineral ores in the high background radiation areas (HBRA) of Kenya. National Research Fund, Kenya, 2016

## Successful Awards

- Organization of Women in Science from Developing Countries (OWSD) PhD Award, University of Witwatersrand, 2018
- Higher Education Loans Board PhD tuition Scholarship, 2018
- National Commission for Science and Technology research grant award towards Master of Science in Nuclear Science at the Institute of Nuclear Science and Technology, University of Nairobi, 2012
- International Science Program (ISP) award towards Master of Science in Nuclear Science at Institute of Nuclear Science, University of Nairobi, 2010

## Leadership Experience

### International Level

#### a) International Youth Nuclear Congress (IYNC)

- Public Chair of IYNC2018 conference
- Manager of IYNC2016 plenary session on Atoms for Development: Meeting Human Needs.
- A member of the grant committee
- Participating in decision making as a member of the board of directors
- Co-managed and developed the a workshop plan, in coordination with the Manager in coordination with the IYNC2014 Workshop Chair

### Kenyan Young Generation in Nuclear (KYGN)

- Organized the International Science and Technology Centre (ISTC) Management Board Ministerial visit to Kenya as they sought Kenyan Membership to ISTC board, 2019
- Organized a seminar on CBRN on behalf of ISTC, 2019
- Chair of AYGN-KYGN Integrated Workshop on Nuclear Advocacy and Communication, November, 2017
- President and Co-Founder of Kenyan Young Generation in Nuclear

### African Young Generation in Nuclear (AYGN)

- Co-Founder of African Young Generation in Nuclear
- General Chair of Inaugural African Youth Nuclear Summit 2017 (AYNS2017)

## Working Experience

### Technical University of Kenya – Tutorial Fellow (August 2015 – to date)

- Teaching, evaluation and mentoring of undergraduate students; Units: Atomic and Nuclear Physics, Nuclear Energy and other General Units

- Examination Officer (August 2015 – February 2017)

**Part-time Physics Lecturer – Jomo Kenyatta University of Agriculture and Technology (April- 2015 - August 2015)**

- Planning lessons, training and evaluating students. Units: Radionuclide Technology.

**Part-time Physics Lecturer – Catholic University of Eastern Africa (January 2015 - April 2015)**

- Planning lessons, training and evaluating students. Units: Radiation Physics; Waves and Vibrations; Geometrical Optics.
- Guide my students on research topics and help them come up with cutting edge research and link them for industrial attachment.

**Facilitator - British Council (January 2012 – March 2015)**

- Training educators on how to use ICT in innovative teaching and global citizenship education
- Training educators on integration of ICT in teaching and learning

**Part-time Physics Lecturer – Technical University of Kenya (May 2012 to 2013)**

- Planning lessons, training and evaluating students in accordance to the existing syllabus and guidelines of the University.

**Senior Examination Officer Kenya National Examination Council (2007 to 2012)**

- Assessing, evaluating and grading of candidates nationally in Computer Studies (451/1).
- Supervising and coordinating other examiners
- Ensuring integrity, security and confidentiality of national exams.
- Training, supervising and appraising new examiners

**Examination Officer(Computer Studies) - Kenya National Examination Council (2000-2006)**

- Assessing and evaluating of candidates nationally in Computer Studies

**Physics and Computer studies teacher – Alliance High School (February 2004 to October 2010)**

- Planning, teaching and evaluating in accordance to the existing syllabus and ministry guidelines.
- Supervision of Science and ICT projects which are part of Science and Congress

competitions

- Scholarship Coordinator

### **Computer Studies Teacher – St. Georges’ Secondary School (May 2000 to February 2004)**

- Planning, delivery and evaluation of lessons in accordance to the existing syllabus and ministry guidelines.

### **Publications**

- Kaniu I., Tollah S.O., Kilavi P.K (2015). Monte Carlo Simulation for Radiation Monitoring in Nuclear Power Plant Environs, Proceedings of ENYGF 2015, June 22-26, - Paris, France.
- Kilavi P.K., Maina D.M., Gatari M.J., Wagner A., Adeleye M.O (2014) Determination of Mn, Fe, Cu and Zn in indigenous complementary infant flour from Kenya by Total-Reflection X-Ray Fluorescence, Journal of Food and Nutrition Science, **3(4)**, 110-116.
- M.O. Adeleye, Y.V. Ibrahim, P.K. Kilavi (2014) Calibration of Gamma-Ray Spectrometer Using Electronic Spreadsheet Package and Dedicated Spectral Analysis Software, International Journal of Science and Technology, **3(3)**, 168-176.

### **Presentation**

- Kilavi P.K. (2018). Application of TXRF in assessing bioavailable portion of trace elements in formulated indigenous complementary infant flour. OWSD-Africa Conference, 5 – 7 September, 2018, ICIPE, Nairobi
- Kilavi P.K. (2018). Security and export controls on uranium production, transport and export for conventional and non-conventional resources. Conference on enhancing Africa’s capacity on nuclear safety, security and safeguards in SADC countries. 29 -30 August, Lusaka, Zambia
- Kilavi P.K., Maina D.M., Gatari J.M., Wagner A. (2016), Application of TXRF in Assessing Trace Elements in Formulated Indigenous Complementary Infant Flour, 23<sup>rd</sup> WiN Global Annual Conference: Women in Nuclear Meet Atoms for Peace, 24 – 28 August, Vienna, Austria.
- Kilavi P.K., Kaniu I., Tollah S.O., (2014), Young Generation Initiative to Promote Nuclear Science and Technology: Kenyan Chapter, 6<sup>th</sup> Interdisciplinary Scientific Conference, 16-17 Oct, Catholic University of East Africa, Nairobi, Kenya.
- Kilavi P.K., Ngugi H., Kaniu I. (2014). Nuclear Energy: A Key Ingredient in Propelling Kenya Vision 2030, 6<sup>th</sup> Interdisciplinary Scientific Conference 2014, 16-17 Oct, Catholic

University of East Africa, Nairobi, Kenya.

- Kilavi P.K. Maina D.M., Gatari J.M., Wagner A. (2014). Determination of Mn, Fe, Cu and Zn in indigenous complementary infant flour by Total Reflection X-ray Fluorescence, 15<sup>th</sup> International Conference on Total Reflection X-Ray Fluorescence Analysis and 49<sup>th</sup> Annual conference on X-ray chemical analysis, Sept 23-27, Osaka, Japan

### **Membership**

- KEBS TC 106: Dosimetry, Radiotracer and NDT (2018- 2019)
- Board of Director on the International Youth Nuclear Congress Network and the Kenyan Representative to International Youth Nuclear Congress (iync) Board
- Co-founder and President of Kenyan Young Generation in Nuclear
- Co-founder and Executive Committee Member of Organization of Women in Science from Developing Countries – Kenya (OWSD-Ke)
- Executive Committee Member of Physics Society of Kenya
- Member Eastern Africa Association for Radiation Protection

### **References**

On request