### THE TECHNICAL UNIVERSITY OF KENYA

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#### NAME: PROF MICHAEL LAVI MUIA × Faculty: Applied Sciences and Technology School: PHYSICS AND EARTH SCIENCES TECHNICAL AND APPLIED PHYSICS Department: Current Designation: Professor, FUNDAMENTAL AND THEORETICAL PHYSICS (DFTP) Office Telephone: +254(020) 2219929, 3341639, 3343672 Official Email: michael.muia@tukenya.ac.ke **Consultation Hours:** 8AM-5PM MON - FRI

EDUCATION					
LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR		
Doctor of Philosophy (PhD)	Physics, X-ray Fluorescence	University of Antwerp(Belgium)	1991		
Masters of Science (M.Sc.)	Physics, Nuclear Analytical Techniques	University of Nairobi(Kenya)	1986		
Bachelor of Science (BSc)	Mathematics and Physics	University of Nairobi(Kenya)	1981		

WORK EXPERIENCE					
PERIOD	INSTITUTION	POSITION			
Sep.2014 - To date	Technical University of Kenya	Professor			
Sept 1995 - Sept 2013	Egerton University	Associate Professor			
2011 - Feb 2016	Kenya Polytechnic University College	Executive Dean			
Sept 2013 - 2014	Egerton University	Professor			
2007 - 2011	Egerton University	Egerton University Council, Senate Representative			
2007 - 2011	Egerton University	Associate Dean, Faculty of Science			
1994 - 2002	Egerton University	Chairman of Physics Department			
1992 - 1995	Egerton University	Senior Lecturer			
1990 - 1992	University of Nairobi	Lecturer			
1984 - 1990	University of Nairobi	Tutorial Fellow			
1983 - 1984	University Nairobi	Graduate Assistant			

Telecommunications Applications of Physics in the Study of Insect Communication Applications of Nuclear Analytical Techniques in Environmental and Biological Sciences

SELECTED PUBLICATIONS				
TITLE	LINK TO PUBLICATION	YEAR		
Characteristic Performance of a Polarized MIMO Dipole in an Indoor Environment at 5.2 GHz	View online			
Microprocessor Based Temperature Controller on Power Transistors	View online			
A comparative study of Anopheles Gambiae Male mosquito's response to frequency modulated [FM] and Pulse Modulated [PM] waves at different acoustic frequencies and distances	View online			
Determination of rare earth elements in geological materials by total reflection X-ray fluorescence.,	View online			
Total reflection X-ray fluorescence analysis using an extended focus tube for the determination of dissolved elements in rain water	View online			
Energy dispersive X-ray fluorescence of borax beads using double dilution without comparison standards, X-ray Spectrometry.,	View online			
EDXRF analysis of geological materials in borax beads using Tertians Binary Coefficient approach combined with internal standard addition	View online			
Introduction to Electronics (Book)	View online			
Use of Theoretical accurate influence coefficients with Tertians equation in X-ray fluorescence analysis of silicate rocks in borax beads, X-ray Spectrometry	View online			
Evaluation of Fundamental parameters method for Biological materials and soil analysis by energy dispersive X- ray spectrometry	View online			

POSTGRADUATE STUDENTS SUPERVISION

NAME	PROJECT TITLE	PERIOD	
Charles K. Wangati	Synthesis and Characterisation of CuAlxB1-xSe2 T thin films deposited by Magnetron Sputtering for P	2013 PhD studies	
Daniel Mutiso Kasuku	Conversion of Acoustic Energy into Electrical Energy; M.Sc	2013	
Muchai Ian Kaniu	Development of Nuclear Digital Spectrometric Analysis via Machine Learning and application to trace	2013 ; Graduated PhD	
Germana William Mlay Impact of Radioactivity on Communities and in the Ecosystem of Manyoni District in Singida Region, Central Tanzania		2019 PhD studies	
Radioactivity in the Ecosystem of Mrima Hill area in Kenya: Application of Multivariate Techniques a		2013 PhD studies	

# PROFESSIONAL AFFILIATIONS AND SOCIETIES

### TITLE INSTITUTION

MEMBER The Kenya Physical Society

# EXTRA INFORMATION

### **DESCRIPTION**

Associate Member, Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste , Italy (1998 - 2005)