

**UNIVERSITY OF NAIROBI  
COLLEGE OF BIOLOGICAL AND PHYSICAL SCIENCES  
SCHOOL OF PHYSICAL SCIENCES**

**DEPARTMENT OF CHEMISTRY**

# **ANNUAL REPORT**

**2012**

**DEPARTMENT OF CHEMISTRY  
ANNUAL REPORT**

## **1.1 INTRODUCTION**

The Department of Chemistry is located in Department of Chemistry Building, Chiromo Campus, Off-Riverside Drive. It is one of the four departments in the School of Physical Sciences in the College of Biological and Physical Sciences.

The Department offers the following undergraduate degree programmes:

Bachelor of Science in Chemistry, Bachelor of Science in Chemistry combined with another subject, Bachelor of Science in Industrial Chemistry, Bachelor of Science in Environmental Chemistry and Bachelor of Science in Analytical Chemistry. In addition the department also offers service courses to the College of Health Sciences (School of Pharmacy), College of Architecture and Engineering (Mechanical and Manufacturing Engineering, Civil and Construction Engineering, Environmental and Biosystems Engineering) and College of Agriculture and Veterinary Sciences (Food Science and Technology, Agriculture).

At postgraduate level the Department offers the following degree programmes:

Master of Science in Chemistry, Master of Science in Environmental Chemistry, Master of Science in Analytical chemistry, Master of Science in Industrial chemistry, MSc Organic Chemistry, MSc Inorganic Chemistry and Ph.D in chemistry.

In addition to our day programmes, the Department is offering module II evening programs at both the undergraduate and post-graduate levels.

## **1.2 ACADEMIC STAFF MEMBER AND THEIR DESIGNATION**

Professors	6
Associate Professors	7
Senior Lecturers	8
Lecturers	16
Tutorial Fellows	6
Assistant Lecturer	1
Graduate Assistants	3
<b>TOTAL</b>	<b>47</b>

## 2.0 STAFF APPOINTMENTS, PROMOTIONS

### 2.1 NEWLY APPOINTED/RECRUITED ACADEMIC STAFF

NAME	GENDER	TITLE
Dr John Onyatta	Male	Lecturer
Ms Ruth Odhiambo	Female	Tutorial Fellow

### 2.2 ACADEMIC STAFF PROMOTED

NAME	GENDER	PREVIOUS TITLE	PRESENT TITLE
Dr. John Wabomba	M	Tutorial Fellow	Lecturer

### 2.3 STAFF RETIRED, ON LEAVE OF ABSENCE, TERMINATED, DECEASED

NAME	GENDER	TITLE	STATUS
Prof. Raphael Munavu	M	Professor	Leave of absence
Dr Evans Kituyi	M	Snr Lecturer	Leave of absence
Prof. Paul Shiundu	M	Professor	Leave of absence
Mr Joseph M. Ng'ang'a	M	Pricipal Technologist	Retired
Mr. Francis K. Ndule	M	Lab Attendant	Retired
Dr. Wenwa A. Odinga	F	Snr. Lecturer	Leave of absence

## 3.0 ACADEMIC PROGRAMMES

### Undergraduate Programmes

B.Sc. Industrial Chemistry

B.Sc Chemistry

BSc Analytical Chemistry

BSc Environmental Chemistry

### **Postgraduate Programmes**

M.Sc. in Chemistry

M.Sc. in Environmental Chemistry

M.Sc. in Analytical Chemistry

M.Sc. in Industrial Chemistry

M.Sc. in Organic Chemistry

M.Sc. in Inorganic Chemistry

### **4.0 NUMBER OF STUDENTS ADMITTED INTO EACH UNDERGRADUATE PROGRAMME**

<b>PROGRAMME</b>	<b>NUMBER</b>
BSc.	565
BSc –Industrial Chemistry	149
BEd (Sc)-Kenya Science	280
BSc- Analytical Chemistry	22

### **5.0 NUMBER OF STUDENTS ADMITTED INTO EACH POSTGRADUATE PROGRAMME**

<b>PROGRAMME</b>	<b>NUMBER</b>
M.Sc. Chemistry	24
M.Sc. in Environmental Chemistry	43
M.Sc. in Analytical Chemistry	11
M.Sc. in Industrial Chemistry	3
M.Sc. in Organic Chemistry	-
M.Sc. in Inorganic Chemistry	-

Ph.D.	6
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#### 6. NUMBER OF STUDENTS WHO GRADUATED FROM EACH PROGRAM

Ph.D.	1
M.Sc	12
B.Sc Industrial chemistry	19

#### 7. NUMBER OF STUDENTS DISCONTINUED ON ACADEMIC GROUNDS

BSc	0
MSc	2
Ph.D	0

#### 8.0 ONGOING RESEARCH PROJECTS IN DEPT OF CHEMISTRY

##### 8.1 Undergraduate research projects

##### 8.2 Ongoing Postgraduate research projects (M.Sc)

NAME	TITLE	SUPERVISORS
Kerandi, Anne Moraa. I56/76301/09	Investigation on Genotoxicity of Solar Disinfected (SODIS) Water.	Prof Wandiga
Pembere, Anthony M I56/77607/09	Investigation of Heavy Metals in Vegetables Grown in the Agricultural and Industrial Areas of Webuye and Mumias	Prof Jumba, Dr Oduor
Okanga, Boventure.	Determination of the Alcoholic	Dr Benson Wamalwa

I56/60505/09	Content of Various Spirits: Denatured and Undenatured Among Selected Small Scale Production Units with Respect to Excise Legislation in Kenya	
Njogu, Rachael. I56/77605/09	Investigation of Leaf Nutrient Uptake of Camellia Sinensis in the Eastern and Western Highlands of Kenya Following Foliar and Compound Fertilizer (NPK) Application	Dr Kariuki and Dr D.M. Kamau (TRFK)
Karani, Christopher I56/60531/10	Industrial Production of Sodium Hydroxide and Chlorine Gas from locally available Materials	Prof Kamau
Kavivi, Lynnette I56/60282/09	Use of Homology Modelling in the Development of the G-Coupled Protein Receptor of the Migratory Locust. Use of Homology Modelling in the Development of the G-Coupled Protein Receptor of the Migratory Locust.	Dr Damaris Mbui
Riungu, Emily I56/60538/10	Municipal Wastewater Treatment with Anodizing Solid Waste	Dr H. Njenga and Prof L. Njenga
Kathambu Muriithi I56/78601/09	Bioassay Guided Characterization of Rheumatic Principles from Cyperus Articulatus (Ndago) Plant	Prof Midiwo and Prof Abiy
Fredrick Mzee Mwazighe I56/60158/2010	“Physico-chemical characterization of chamomile extract and stability monitoring of the extract”.	Prof Kamau, Dr Mwaniki

Tonkei, Wilson I56/77606/09	Development of an Electrochemical Sensor for the Detection of Heavy Metals in Waste Water.	Dr Aluoch Prof Shiundu
Mr. Dennis Ndaya	Biodiesel production from <i>Calodendrum capense</i> seeds: Process design and technological assessment	Dr John Onyari Prof Shiundu P.M. Dr James Nyangaya Prof F. Mulaa
Mr. Evans Nangulu	GIS clustering and mapping pollution from industries within nairobi	Dr Aluoch Austin Dr Martin Marani
Mr. Murimi J. Mbugua.	To improve on lead acid battery manufacture in a more environmental friendly manner	Prof Kamau G. Dr Guto P.
Ms. Judith Ngugi Joseph	Chemical analysis of borehole and shallow well water in arid and semi-arid regions of kenya.	Prof Lydia Njenga Dr Kithinji J.P.
Mr. Wanyonyi Peter Namutala	Electroanalytical determination of trace metals using stripping voltammetry technique	
Mr. Rael Obong'o Kasera	Determination of effectiveness of untreated and edta-treated luffa cylindrica in removal of $cr^{3+}$ and $cu^{2+}$ from waste water.	Prof Shiundu P.M. Dr Austin Aluoch
Ndiritu, Cecilia W.	Mobility of Heavy Metals, Microorganisms and Hydrodynamics of a Section of Nairobi River	Prof Kamau G. Prof Mwaura, Dr Kithinji J.P.
Kundu, Bevin N.	Comparison of Burning effectiveness	Dr Onyari J.M.

	of Liquid Biofuels and their Blends with Kerosene as Alternative Fuel for Lighting and Cooking	Dr Kithinji J.P.
Masenge, Edna M.	Total Petroleum Hydrocarbons in Sediments and Water in Ngong and Mathare River	Prof Wandiga S.O. Prof Shiundu P.M.
Muya, Catherine N.	Electrocatalytic Decomposition of Organochlorine Pollutants	Prof G. Kamau Dr Peterson Guto
Everlyne Kasima N.	Efficiency of Kipevu treatment works, Mombasa	Dr A.O. Yusuf Dr D.K. Kariuki Dr D. Abong'o
Mbewa, Tom Joseph	Heavy Metal Analysis of Thermoplastic Paints in the Kenyan Market and the Environmental Implications of Application as road Marking Paints	Prof Kamau G. Dr F. Oduor Dr Kariuki D.K.
Ogange, Elphas O.	The Role of Fertilizer Usage and Agrochemical Effluents on the Persistence of Algae Bloom on Kenyan Shores of Lake Victoria	Dr F. Oduor Dr Kariuki D.K.
Wanyama, George N.	An Account of the Phyto-Bioconcentration of Copper in the Control of <i>Eichhornia Crasspies</i> (Water Hyacinth)	Prof Jumba I.O. Dr Oduor F.D.
Murimi, John Mbugua	An Alternative Metal/Electrolyte for Lead Acid Battery Making	Prof Kamau G. Dr Guto Peterson
Awas, Erick Okoth I56/63685/10	A Comparative Study of the Toxicity, Protective and Cell Defense Induction	Prof Midiwo, Dr Mwaniki and Ndakala



	Capacity of Flavones from Kenyan Plants and Lipophilic Semi-Synthetic Derivatives	
Njeru, Daisy Nyawira I56/63228/10	Phytochemical Investigation of the Root of <i>Desmodium Ramosissimum</i> for Antiplasmodial Principles	Dr Derese and Prof Abiy
Mugo, Fredrick Muriithi I56/63877/10	Total Element Speciation and Soil Fertility Analysis Around Mt. Kenya	Prof Njenga L.
Ogalo, Linet I56/65065/10	Use of Electro-Analytic Methods in the Development of Biosensor for Detection of Bisphenol A.	Dr Mbui D.
Everlyne Kasima I56/60282/08	Effectiveness of the Kipevu Treatment Works	Dr A. Yusuf , Dr. D.K. Kariuki, Dr D. Abongo
Ochieng, Fredrick Nyateng I56/64713/10	Assessment of pesticide and polychlorinated biphenyls residue Levels in Fish from Kericho and Upper Nyando of River Nyando drainage basin in Kenya	Prof Wandiga S.
Oyagi, Moses Ondabu I56/64280/10	Synthesis of Silver Nanoparticles at Room Temperature using Tea Extracts from Terminal Bud and Two Adjacent Leaves.	Prof Kamau G.
Muraga, Joseph I56/77605/09	Determination of Dissolved Ions and Microbial Coliforms in Ground Water in Selected Areas in Athi River Basin	Prof Wandiga S.
Katithi David I56/65092/10	Green Synthesis and Characterization of Iron Nanoparticles using Aqueous Sorghum Bran Extracts and their Application in Environmental Remediation.	Prof Kamau G.
Marube Elijah I56/63820/10	Application of Cleaner Production Techniques in Leather Industries in Kenya	Prof Kamau G.

Makokha, John Wanjala I56/64538/10	Utilization of Titanium Oxide in formulation of Refractory Clay Bricks	Dr Kariuki D.K.
Victor Nthusi Kyalo I56/63840/10	Assessment of Organochlorine, PCB,s and Organophosphate Pesticide Residues in Fish from Lower Nyando Drainage Basin	Prof Wandiga S.

### 8.3 Ongoing Postgraduate research projects (Ph.D)

NAME	TITLE	SUPERVISORS
Madadi O. Vincent	Studies of pesticide and macronutrient interaction dynamics in water-sediment/soil systems	Prof. Shem O. Wandiga Prof. Paul M. Shiundu
Godfrey A. Wafula	A Study of atmospheric fine particulate matter and their toxic components in Nairobi and its environs	Prof. Shem O. Wandiga Prof. Paul M. Shiundu
C.W. Mirikau	A computerized model for the identification and location of water polluting industries in Nairobi	Prof. G.N. Kamau Prof. I.O. Jumba
Mrs. Marina Mukabi		Prof. Duke Orata Dr. Austin Ochieng'
Ms. Joyce G. Njagi-Kithure	Distribution of diazinon and chlorpyrifos in selected aquatic matrices from the upper Tana River in Kenya	Prof. S.O. Wandiga Prof. I.O. Jumba
Mrs. Ruth Odhiambo	Synthesis of bionucleating macrocycles incorporating thiolato and polyether compounds fused to 1,10-phananthroline as sensors for soft heavy metal	Prof. S.O. Wandiga Dr. Austin Ochieng'
Farida Hussein Were	Assessment of levels of selected heavy metals and their effects on the health of industrial health workers in Nairobi and Athi River, Kenya	Prof. Geoffrey Kamau Prof. P.M. Shiundu Dr. C.M. Muturi

Immaculate Achieng'	Evaluating the efficacy of selected lignocellulosic materials of Kenyan origin in the adsorption of textile dyes and inks from aqueous industrial effluents	Prof. P.M. Shiundu Dr. A. Aluoch Dr. B. Wamalwa
Beatrice Irungu	Bioprospecting for antiplasmodial compounds from some albizia, turea and zanthozylum species in Kenya	Prof. Abiy Yenesew

## 9.0 LIST OF RESEARCH PUBLICATIONS

1. Endale M, Alao J.P., Akala H.M., Rona N.K., Eyase F.L., Derese S., Ndakala A., Mbugua M., Walsh D.S., Sunnerhagen P., Mate E. and Abiy Y. (2012): Antiplasmodial quinines from pentas longiflora and pentas lanceolata, planta Med, 78, 31-35.
2. Gumula I., Heydenreich M., Derese S., Ndiege I.O. and Abiy Y., (2012): Isoflavones from the stem bark of platycladium vonce, Phytochemistry Letters, 5, 150-154.
3. Alice Anyango Onyango, Joseph O. Lalah and Shem O. Wandiga (2012). The effects of local cooking methods on polycyclic aromatic hydrocarbons (PAHs) content in beef, goat meat and pork as potential sources of human exposure in Kisumu City, Kenya. **Polycyclic aromatic compounds. 32: 1-13.**
4. Alice Anyango Onyango, Joseph O. Lalah & Shem O. Wandiga (2012): The effect of Local Cooking Methods on Polycyclic Aromatic Hydrocarbons (PAHs) Contents in Beef, Goat Meat, and Pork as Potential Sources of Human Exposure in Kisumu City, Kenya, **Polycyclic Aromatic Compounds, 32:5, 656-668**

## 10.0 WORKSHOPS AND CONFERENCES ATTENDED

School	Staff Name	Conference attended	Date	Venue
1	Prof G. Kamau	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
2	Dr P. Gitari	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
3	Dr L. Kerubo	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
4	Dr A. Ndakala	2 <sup>nd</sup> IYC Conferece	15-17 February	Nairobi, Kenya

			2012	
5	Mrs R. Odhiambo	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
6	Dr S. Derese	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
7	Prof S. Wandiga	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
8	Dr A. Yusuf	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
9	Prof R. Munavu	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
10	Dr J. Kithinji	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
11	Prof Abiy Yenesew	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
12	Prof B. Bhatt	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
13	Mr W. Tonkei	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
14	Mr C. Karani	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
15	Mr T. Hannington	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
16	Mr F. Mwazighe	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
17	Mr D. Buyinza	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
17	Mr E. Terer	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
19	Mr P. Lekimain	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya

20	Mr A. Negera	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
21	Ms A. Kerandi	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
22	Dr H. Njenga	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
23	Prof L. Njenga	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
24	Dr P. Guto	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
25	Ms M. Mutisya	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
26	Ms V. Muinde	2 <sup>nd</sup> IYC Conferece	15-17 February 2012	Nairobi, Kenya
20	Mr C. Mirikau	FNRBA Workshop on fundamentals of nuclear reactor safety & regulations	13-17 February 2012	Nairobi, Kenya
21	Dr. A. Ndakala plus other members of Dept	Seminar on Short stories on computational medicinal chemistry by Dr Lewis Whitehead and Dr Heather Burke	8 February 2012	Nairobi, Kenya
22	Dr. A. Yusuf, Dr L. Kerubo Dr J. Wanjohi	Seminar on chemistry crystals by Prof N. Sathyamurthy	7 February 2012	Nairobi, Kenya
23	Mr A. Negera Abdissa	Seminar on Antiplasmodial anthraquinones from East African plants of the asphadelaceae family	9 March 2012	Nairobi, Kenya
24	Prof S. Wandiga	PACN round table discussion	23 February 2012	London, England
25	Dr B. Wamalwa	Workshop on jnr fellows program	15-18 January2012	Bonn, Germany
26	Prof S. Wandiga	UNESCO-KALINGA Prize for popularizing science	2-7 January 2012	Bhabaneswar , India

## 11.0 RESEARCH THESIS TITLES

### 11.1 Ph.D. Thesis Titles

NAME	TITLE
Milkyas Endale	Phytochemical analysis of selected pentas species for

	antiplasmodial principles
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## 11.2 M.Sc Thesis Titles

Muinde, Veronica. I56/78955/09	Investigating the Factors Affecting Levels of Omega-3-Polyunsaturated Fatty Acids (PUFA) Levels in Commercial Fish from Lake Victoria
Chanzu, Harry I56/76520/09	Biosorption of organic dyes using spent brewery grains in batch and continuous systems
Kennedy Owuor Olale I56/78094/09	Phytochemical Screening and Infrared Predictions of Wood Density and Carbon with Emphasis on <i>Prinus Africana</i> of Kenya
Bernard Macharia I56/77604/2009	Phytochemical Investigation of <i>Millettia Oblata ssp.teitensis</i> for Antiplasmodial and Larvicidal Principles
Ms. Amina Bakari	A survey of mercury pollution from fluorescent lamps disposal in selected sites in nairobi and environs.
Mr. Leonard Baraza	Phytochemical investigation of millettia oblata for antiplasmodial and larvicidal principles
Mr. Tom Oduor Okumu	Investigation of nutritional components of <i>tylosema fassoglense</i>
Mr. Wycliffe Chisutia Wanyonyi	Biosorption of organic dye from aqueous solution using <i>eichhornia crassipes</i> from lake victoria
Mr. Amboga Davis Anzeze	Adsorption Studies of plant biomass from water hyacinth( <i>eichhornia crassipes</i> ) and possible utilization in removal of heavy metals from polluted water streams

## 12. OUTREACH AND COMMUNITY SERVICE ACTIVITIES

1. Prof. J.O. Midiwo: NAPRECA Executive secretary; External examiner, Maseno University
2. Prof. Abiy Yenesew: External examiner Kenyatta University, Maseno University, University of Botswana, University of Dar-es-Salaam; Journal of Bulletin of Chemical Society of Ethiopia Referee
3. Dr. D.K. Kariuki: KEBS Water Quality committee; NEMA Hazardous and Toxic Materials committee member; WRMA Threshold Pollution in Waste Water Committee.
4. Dr. B.M. Wamalwa: Board member of Japan Government scholarships
5. Prof. Wandiga S.O.: Chairman Bondo University Council; Pan African Chemistry Network Chairman, Regional Chapter; UNEP/GEF-UoN Project coordinator, UNEP POPs project coordinator
6. Dr. A.O. Yusuf: External examiner JKUAT, Kenyatta University; IDB Scholarship Selection Committee Board Member.

## 13. NEWLY ESTABLISHED LINKAGES

The Department has the following new links:

### 1.NOVARTIS-NIBR FELLOWSHIP PROGRAMME

Cooperation with Department in supporting the training of staff in research activities related to computational chemistry in order to generate mitishamba database. Novartis donated four computer workstations

### 2.Grand Challenges Canada

The purpose of this grant is to pursue bold, creative ideas to tackle health problems. The funding amounts to \$100,000.

### 3.NCST

IFS has provided a research grant amounting to KShs 2,200,000 to help Dr Hellen Njenga in advancing her research career in potential use of surfactants from commiphora.

## 14. RESEARCH EQUIPMENT PURCHASED

The Department received a donation of GC-MS from Sweden facilitated by Michael and International Foundation of Science (ISP)

## 15. STAFF IN DEPARTMENT OF CHEMISTRY

NAME	DESIGNATION
1. Prof. Shem O. Wandiga	Professor
2. Prof Raphael Munavu	Professor
3. Prof Isaac O. Jumba	Professor
4. Prof Geoffrey N. Kamau	Professor

<b>5.</b> Prof. Jacob O. Midiwo	Professor
<b>6.</b> Prof. Peter M. Gitu	Professor
<b>7.</b> Prof. Duke O. Orata	Associate Professor
<b>8.</b> Prof David N. Kariuki	Associate Professor
<b>9.</b> Prof Abiy Yenesew	Associate Professor
<b>10.</b> Prof Bhalendu M. Bhatt	Associate Professor
<b>11.</b> Prof Lydia W. Njenga	Associate Professor
<b>12.</b> Prof Paul M. Shiundu	Associate Professor
<b>13.</b> Prof. John M. Onyari	Associate Professor
<b>14.</b> Dr. Helen N. Njenga	Snr Lecturer
<b>15.</b> Dr. Jacob P. Kithinji	Snr. Lecturer
<b>16.</b> Dr. Amir O. Yusuf	Snr Lecturer-( Chairman)
<b>17.</b> Dr. Evans Kituyi	Snr Lecturer
<b>18.</b> Dr. Wenwa A. odinga	Snr Lecturer
<b>19.</b> Dr. David K. Kariuki	Snr Lecturer
<b>20.</b> Dr. Joseph M. Mwaniki	Snr Lecturer
<b>21.</b> Dr. Solomon Derese	Snr Lecturer
<b>22.</b> Mr. Charles W. Mirikau	Lecturer
<b>23.</b> Dr.Fredrick O. Oduor	Lecturer
<b>24.</b> Dr. Patricia Gitari	Lecturer
<b>25.</b> Dr.Martin N. Mbugua	Lecturer
<b>26.</b> Mr. Jumaa M. Makopa	Lecturer
<b>27.</b> Mr. Godfrey A. Wafula	Lecturer
<b>28.</b> Dr. Benson M. Wamalwa	Lecturer
<b>29.</b> Immaculate N. Michira	Lecturer
<b>30.</b> Dr. Peterson M. Guto	Lecturer
<b>31.</b> Dr. John M. Wanjohi	Lecturer
<b>32.</b> Dr. Leonida O. Kerubo	Lecturer
<b>33.</b> Dr. Damaris W. Mbui	Lecturer
<b>34.</b> Dr Deborah Abongo	Lecturer



<b>35. Dr. Jairo A. Ndakala</b>	Lecturer
<b>36. Dr. John Onyatta</b>	Lecturer
<b>37. Mr. John N. Wabomba</b>	Lecturer
<b>38. Ms. Immaculate Achieng' Odera</b>	Tutorial Fellow
<b>39. Mr. Erick K. korir</b>	Tutorial Fellow
<b>40. Mr. Njagi Njomo</b>	Tutorial Fellow
<b>41. Ms. Beth Ndunda</b>	Tutorial Fellow
<b>42. Ms Ruth Odhiambo</b>	Tutorial Fellow
<b>43. Mr. Vincent O. Madadi</b>	Tutorial Fellow
<b>44. Mrs. Marina Mukabi</b>	Assistant Lecturer
<b>45. Mr Fredrick Mwanzighe</b>	Graduate Assistant
<b>46. Mr Wilson Tonkei</b>	Graduate Assistant
<b>47. Ms Rachael Njogu</b>	Graduate Assistant
<b>48. Mr. Joseph M. Ng'ang'a</b>	Principal Technologist
<b>49. Ms. Annanciata M. Muia</b>	Chief Technologist
<b>50. Mr. Gregory K. Katiku</b>	Snr. Technologist
<b>51. Mr. Peter K. Njoroge</b>	Snr. Technologist
<b>52. Mr. Frank Waiharo</b>	Snr. Technologist
<b>53. Ms. Rose Mutungi</b>	Snr. Technologist
<b>54. Ms. Felistas Wainaina</b>	Snr. Technologist
<b>55. Mr. Evans Kimega</b>	Snr. Technologist
<b>56. Ms. Veronica Muinde</b>	Snr. Technologist
<b>57. Mr. Ephantus Mwangi</b>	Snr. Technologist
<b>58. Ms Alice Ndekei</b>	Snr. Technologist
<b>59. MrJohn Njenga</b>	Snr. Technologist
<b>60. Mr. Stephen Katembu</b>	Snr. Technologist
<b>61. Ms Mary Nyuthe</b>	Snr. Technologist
<b>62. Mr. B.K. Rop</b>	Technologist
<b>63. Mr. Geoffrey K. Kaptich</b>	Technologist
<b>64. Ms. Emma N. Kamau</b>	Technologist

<b>65.</b> Emmanuel K. Terer	Technologist
<b>66.</b> Mr. Douglas Okumu	Technologist
<b>67.</b> Mr. Esseyangwa F. Odanga	Technologist
<b>68.</b> Mr. Wilfred Orangi	Technologist
<b>69.</b> Ms. Marion Checha	Technologist
<b>70.</b> Mr. Patrick Lekimain	Technologist
<b>71.</b> Mr. S. Shilamala	Documentalist
<b>72.</b> Ms. Nginyo Catherine	Laboratory Attendant
<b>73.</b> Ms Lydia Mwombe	Secretary
<b>74.</b> Ms Polly Rwigi	Secretary
<b>75.</b> Ms Doreen Alusa	Snr Admin. Ass.