

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY



Name of Faculty/Staff: Dr. Silvanus Kuboka Shisia PhD.

Designation/Rank: Lecturer

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Educational Background:

- PhD (Applied Chemistry - Nanotechnology), Kenyatta University, Kenya (2017)
- Masters in. (Chemistry), Kenyatta University, Kenya (2007)
- Bachelors in Education Science (B.ED Sc) Egerton University, Kenya (1995)

Brief Auto-biography of the Faculty/Staff

Chemistry is a major part of our daily life in the world around us. Many chemical reactions that take place in our bodies and around us can either affect us in either way hence its importance. Advances in nano-technological techniques have led to improved systems that lower costs of production and efficiency. Water purification, sensors and fabrication are major areas of my concern.

Selected publications

1. **Shisia K. Silvanus**, Naumih N., Nyambaka H and Andala D.M (September, 2016). Efficiency of Fabricated CNT-IPSF/Fe₃O₄ Nanocomposites in Removal of Phenanthrenes from Contaminated Water. International Journal of scientific and Technology Research IJSTR: IJSTR; VOL 5, ISSUE 09, **September 2016** ISSN 2277-8616
2. **Shisia K. Silvanus** and Andala M. Dickson (September, 2016). Sorption of Lead(II) ions from Aqueous Solution by Fabricated Magneto responsive CNT-IPSF/Fe₃O₄ Nanocomposites. IOSR Journal of Applied Chemistry ISSN: 2278-5736. Volume 9, Issue 9 Ver. I (Sep. 2016), PP 17-27
3. **Shisia K. Silvanus** and Andala M. Dickson (August, 2016). Fabrication and Characterization Of Magneto responsive Carbon Nanotube Infused Polysulfone Nanocomposites. International

Journal of Innovative Research and Advanced Studies (IJIRAS): ISSN: 2394-4404. Volume 3 Issue 9, August 2016

4. V. Ngure, N. Sitati, S. Shisia, G. Kinuthia (2015). Assessment of Heavy Metals Pollution in Urban Soils and the Implications to Consumers Health. *Journal of Natural Sciences Research*. ISSN 2224-3186. Vol.5, No. 17, 2015.
5. V. Ngure, T. Davies, **G. Kinuthia**, N. Sitati, **S. Shisia** and Oyoo-Okoth (2014). Concentration levels of potentially harmful elements from gold mining in Lake Victoria region, Kenya: environmental and health implications. *Journal of Geochemical Explorations*. doi.org/10.1016/j.explo.2014.04.004 [Volume 144, Part C](#), September 2014, Pages 511-516
6. **Shisia K. Silvanus**^{1*}, NgureVeronica¹, Nyambaka Hudson². Mineral-Mineral Interactions as a possible limiting factor to livestock production in Uasin Gishu County, Kenya. *International Journal of Scientific & Engineering Research*, Volume 5, Issue 3, March-2014. ISSN 2229-5518. IJSER © 2014. <http://www.ijser.org>
7. **Shisia K. Silvanus**^{1*}, Ngure Veronica², Nyambaka Hudson³ Jumba Isaac⁴, Oduor Fredrick⁴. Assessment of mineral deficiencies among grazing areas in Uasin Gishu County, Kenya. *International Journal of Nutrition and Food Sciences* **2014; 3(2): 44-48**. Published online **February 20, 2014**. <http://www.sciencepublishinggroup.com/j/ijnfs> doi: 10.11648/j.ijnfs.20140302.15
8. Veronica Ngure^{1*} Noah Sitati², **Silvanus Shisia**³, Gelas Simiyu⁴, Geoffrey Kinuthia,⁵ and Festus Kelonye: Health implications of heavy metals in soil, scalp hair and selected food crops within Eldoret Municipality, Kenya *IOSR Journal Of Environmental Science, Toxicology And Food Technology (IOSR-JESTFT)*. e-ISSN: 2319-2402,p- ISSN: 2319-2399. Volume 7, Issue 3 (Nov. - Dec. 2013), PP 47-55. www.iosrjournals.org
9. **K.S.Shisia**^{1*}, V.Ngure², H.Nyambaka³, and F.D.O.Oduor⁴ : Effect of pH and Forage Species on Mineral Concentrations in Cattle breeds in Major Grazing Areas of Uasin Gishu County, Kenya *Int.J.Curr.Microbiol.& Appl.Sci (Dec 2013) 2(12): 247-254. December, 2013*.

Research Interest

I am nanoscience based researcher particularly in the area of fabrication of nanostructured nanocomposites for application in various fields e.g. water purification, sensors and drug action delivery and tracking etc.

WORKSHOPS PAPERS

1. Enhancement of organic dyes remediation using TiO₂ nanofibres decorated with Au nanoparticles nanocomposites Experts workshop on Sustainable use of water resources by EXCEED@2016 Pg 51
2. Fabrication and characterization of magnetoresponseive CNT-IPSF nanocomposites for water purification Experts workshop on Sustainable use of water resources by EXCEED@2016 Pg 71