

Email: silaslagat@yahoo.com

CURRICULUM VITAE

Dr. Cheruiyot Silah Lagat DMLT BSc, MSc PhD MRSC

BIO DATA		
Full Name	Cheruiyot Silah Lagat	
Citizenship/Year of Birth	Kenyan/3 rd March 1972	
Marital Status:	Married with Five children	
Postal Address:	P.O. Box 151-40105, Maseno, Kenya	
Cell phone:	+254-712-487-686	
Email:	silaslagat@yahoo.com	

CURRENT POSITION :SENIOR LECTURER

As a senior Lecturer I have the following duties. I have been teaching ,setting, the following courses:

Soil Metallurgy, Group Theory, Environmental pollution control, Water quality Analysis, S and P block Elements, Quantum Chemistry, Physical Chemistry, Introduction to Crystallography, Bioinorganic Chemistry, Medicinal Chemistry and Soil Analysis.

Setting and advancing the academic course outlines.

Supervising Post graduate students, examining and guiding

University Internal examiner.

Developing and sustaining appropriate communication structures with students.

Ensuring that all activities are carried out to the highest possible standards and putting in place the necessary evaluation and monitoring procedures to ensure both compliance and improvement: such procedures include teaching and research.

Complying with, quality assurance procedures as an internal examination officer.

PREVIOUS POSITION 2014-2020

Chairman of Department of Physical Sciences, Jaramogi Oginga Odinga University of Science and Technology and senior lecturer of Physical Chemistry.

RESPONSIBILITIES

As the chairman of the department

Setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans

Developing and sustaining appropriate structures for management, consultation, decisionmaking and communication with staff and students.

Promoting and representing the department both internally and externally.

Ensuring that all activities are carried out to the highest possible standards and putting in place the necessary evaluation and monitoring procedures to ensure both compliance and improvement: such procedures include teaching and research.

Complying with, quality assurance procedures both internal and external.

Day to day administrative work of the department.

PROFESSION

A chemist and a microbiologist

PRPOFESSIONAL SUMMARY

I was fortunate in the year 1991 to secure a Kenyan government scholarship to study Bsc General (Microbiology Zoology and Chemistry) at Dr. B.A Marathwada University in India. Upon my graduation with a BSc (honors) I was employed as a graduate assistant at Maseno University College. Thereafter I was able to Pursue a master's degree in Physical Chemistry. Having achieved a Master degree in Physical Chemistry, I taught Physical Chemistry classes at Maseno University college, Western University college as a tutorial fellow and lecturer for fourteen years.

I did my PhD at Maseno University and later was promoted to a senior lecturer in the year 2009. I have also had a feel in management as a head of department in both Universities and during my tenure I have managed to secure from Prof. Schramm from Helmholtz Zentrum Muenchen, a laboratory equipment worth 30 million Kenyan shillings in residual value. The market price of the donated items was above 300 million Kenyan shillings.

Through my guidance and leadership I have managed to be instrumental in writing the following programs Bsc Analytical Chemistry Bsc Chemistry, Bsc Physics Bsc Chemical Engineering; Bsc in Petroleum Chemistry and a Bachelor of Education Science program in Chemistry and Physics.

I have also attracted several international students from University of Malawi and University of Yaoundé, Cameroon and locally. I have established several collaborations and MOUs notably with EXCEED-SWINDON network with the main objective of student and staff development.

EDUCATION BACKGROUND		
PhD	Doctor of Philosophy (Physical Chemistry),	Awarded in 2011

	Maseno University	
Masters of Science	Master of Science in (Physical Chemistry), Marathwada University Aurangabad, India	Awarded 18 th January 1997 in Aurangabad
Bachelor of Science	Bachelor of Science: (Microbiology, Chemistry and Zoology); Marathwada University Aurangabad India	Awarded 28 th January 1995 <i>[Honors] in</i> Aurangabad
KCSE	Tambach High School	1990
KCPE	Kormaet Primary	1985
OTHER TRAININGS		-
Sabbatical leave	University of Kabianga	October 2013 to June 2014
Post-Doctoral Research Fellow	University of Kwazulu Natal, S.Africa	2011
Certificate	Financial management, planning and Budgeting for Civil Society Organisation –Sida/AMREF	Awarded in 2010
Certificate	Geographical Information Systems and Spatial Data Infrastructure in Climate Change Resilence	Awarded in 2015
Post Graduate Diploma	Post- graduate diploma in Education	Awarded in 2000
Post Graduate Diploma	Medical laboratory technology	Awarded in 1996
Certificate	Anglicanism	Awarded in 2021

EMPLOYMENT HISTORY			
SN	INSTITUTI	ON DURATION	POSITION
1.	Maseno University college Department of chemistry	October 1996 to November 1997	Graduate Assistant
2.	Maseno University college Department of chemistry	November 1997 to November 1999	Tutorial fellow

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Department of che 4. Western Univers later renamed M 5. Masinde Muliro U of science and Te 6. Jaramogi Oginga	echnology, Department of pure and applied chemistry, Odinga From June 2013 to date Senior Lecturer
University of scie	nce and Technology Senior Lecturer, Department of Physical science,
Organisation and Managerial Skills	Head of Department Physical science, Jaramogi Oginga Odinga University of Science and Technology Head of Department of Physical science Western University College Faculty of science representative Shows and Exhibition Faculty of Science representative in Senate Masinde Muliro University Expert in Water Management in River Volta Basin As a Team member to write and review the following programs. BSc and Msc Chemistry Masinde Muliro University of Science and Technology BSc and Msc Chemistry University of Kabianga Bsc Analytical Chemistry Bsc Chemistry, Bsc Physics Bsc Chemical Engineering; Bsc in Petroleum Chemistry and Bachelor of Education in Science option Chemistry and Physics Jaramogi Oginga Odinga University of Science and Technology
Responsibilities:	 Setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans. Developing and sustaining appropriate structures for management, consultation, decision-making and communication with staff and students. Promoting and representing the department both internally and externally. Ensuring that all activities are carried out to the highest possible standards and putting in place the necessary evaluation and monitoring procedures to ensure both compliance and improvement: such procedures include teaching and research.

	• Complying with, quality assurance procedures both internal and external.		
Courses Taught:	Soil Metallurgy, Group Theory, Environmental pollution control, Water quality Analysis , S and P block Elements , Quantum Chemistry, Physical Chemistry II, Introduction to Crystallography, Bioinorganic Chemistry, Medicinal Chemistry		
Responsibilities:	 Setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans. Developing and sustaining appropriate structures for management, consultation, decision-making and communication with staff and students. Promoting and representing the department both internally and externally. Ensuring that all activities are carried out to the highest possible standards and putting in place the necessary evaluation and monitoring procedures to ensure both compliance and improvement: such procedures include teaching and research. Complying with, quality assurance procedures both internal and external. 		
7. Computer skill:	S		
Responsibilities:	Computer skills-MS Office(Word,Excel, PowerPoint)Working knowledge of SPSS data analysis software and Origin Software.		
8. Quality Assura	ance Officer		
Responsibilities :	 Observation of Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) and International Organization of Standards (ISO) 9001:2000 principles. Trained as an Internal Quality Auditor and also on Documentation and Implementation of ISO 9001:2000 Quality Management System. 		
9. Director, Tenai Education Centre			
Responsibilities:	A guide and guardian of the smooth running of the school.A team leader in the sourcing and management of funds.		

	• Performing various forms of data analysis in school performance e.g. variance test, regression, correlation, standard errors/deviations and their interpretations.
10.Club President YMCA Y's Men Kisumu	A guide and guardian of the smooth running of the club.A team leader in the sourcing and management of funds
11.PTA Chairman Maseno Educational Centre Maria Soti Education Centre	 A team player with the management in day to day running of the school Proper use and management of finance
12.Board member Kormaet Secondary S igot Secondary	 A guide and guardian of the smooth running of the school. A team leader in the sourcing and management of funds
13.Managing Director, Cesy Oil Merchants Ltd	 A guide and guardian of the smooth running of the company. A team leader in the sourcing and management of funds

BOOKS AND THESES UNDERTAKEN		
soils (2011). I	ion Kinetics of Metribuzin in Kenyan tropical SBN: 978-3-8454-2108-7 (2011) Lambert blishing, Germany.	Academic Book
Like Father Like Son, (2012). ISBN: 978-3-8454-4764-3 (2012) Just Fiction Publisher, Germany.		Academic Book
Electro-hydro	-dynamic desalination of water	Post-Doctoral Research Project
Adsorption, desorption, leaching and field dissipation of Metribuzin in different tropical Kenyan soils and their relationship to Physico-chemical parameters		PhD Thesis
NEWS PAPERS		
My excellent j	presentation at a Alexander Von Humboldt	
Germany and	Technical University of Kenya International	On 12th December 2017
Workshop was noted on Daily Standard Newspaper ,		
PUBLICATIC	NS STATES S	
2022	Tiema Cleopa and Silas C. Lagat Traditional Water Divination/Dowsing Methods And Practices In Western Kenya. Springer A Book Chapter (In Press)	
2022	Ochieng Edwine Atego and Silas C. Lagat Water Divination/Dowsing Amongst The Luo Communities In Western Kenya. Springer A Book Chapter (In Press)	
2022	Joel .B Njewa, Silah C. Lagat , Ephraim Vunain,Timothy Biswick and Solomon Omwoma. Lugasi Synthesis And Characterization Of Activated Carbon Prepared From Agro Waste By Chemical Activation For Adsorption Of Acetic Acid. Hindawi	

	,Adsorption Science and Technology volume 2022 .Article ID 770128 13 pages
2020	Solomon Omwoma, Silah C. Lagat , Joseph O. Lalah, Stephen O. Adongo and Zablon Otieno, Layered Rare-Earth Hydroxide Unilameller Nanosheets Synthesis, Characterization, And Adsorption: Journal of Chemistry ID 8923871 11 pages Volume 2020.Number.2020
	Gertrude Estelle Yogback, Gideon Aghaindum Ajeagah , Lordon-
	Champlain Djieto, Silas Lagat Cheruiyot , Dickson Achuo Enah Mama Mbouoombouo, Chrispin Kowenje, Bilong Bilong Charles Felix
2019	Biodiversity Of Freshwater Shrimp Of The Genus Macrobrachium (Decapoda Palaemonidae) In The Nyong Basin Of Cameroon International Journal of Environment, Agriculture and Biotechnology (IJEAB), Vol-3, Issue-6, Nov-Dec- 2018 ISSN: 2456-18 pages 2067-2083
2018	Solomon Omwoma, Silah C. Lagat and Joseph O. Lalah Fine Tuning The Environment Of $[Euw_{10}o_{36}]^{9}$ Anion Leads To The Large Enhancement Of The Red Light Luminescence, Journal of Luminescence 196(2018) pages 294-301.
2017	Anastasiah Ngigi, Silah Lagat and Gershom Mutua Occurance Of Selected Triazine And Phenyl Urea Herbicides And Sorption Behavior In Soils And Water Drainage Basin, Western Kenya ISSN 798-3- 7369-9588-8 pages 135-149
2017	Solomon Omwoma, Silah C. Lagat , Joseph O. Lalah, Philip O. Owour and Karl-Werner Schramm Recent Advances On Mercury Speciation In Aquatic Ecosystems, Health Effects And Analytical Techniques: British Journal of Applied Science and Technology ISSN 2224-3186 19(1):1-37 Volume 6.Number. 2,2016
2017	Silah. C. Lagat, Collins Southway, Deogritus Jaganyi and Solomon Omwoma Dissipation Of The Broad-Spectrum Herbicide - Hexazinone - In Tropical Soils Under Controlled Laboratory Conditions : ISSN 978-3-7369-9453-9 pages 42- 51
2016	Jared Ouma Okungu, Patrick O. Hayombe and Silas C. Lagat .Optimization Of Ecotourism Opportunities Within Freshwater Environments: A Multi-Criterion Planning Outline For Water-Based Recreation At Lake Victoria, Kisumu County Journal of Natural Sciences Research. ISSN 2224-3186 Volume 6.Number. 2,2016
	Jared Ouma Okungu, Patrick O. Hayombe, Silas C. Lagat and Silas O.
	Maujih. Recreational Waters Under Multiple Stress Exemplifying Sources,
2015	Implications An Sustainability Options For Ecotourism Enhancement
	In Kisumu County, Asian Journal of Applied Science and Engineering ISSN 2305-915x(p):2307-9584(e) Volume 4.Number. 2,2015
	S. Omwoma, W.N Omwoyo, J.O.Alwala, D.M.K Ongeri, S.C Lagat and J.O.
2012	Lalah Nutrient Reduction In Runoff Water From Sugarcane Farms By

	Number 4 2 nd September, 2012. (Environmentalist (2012) 32:494-502. DOI 10.1007/s10669-012-9416-3)
2011	S.C. Lagat , J.O. Lalah, C.O. Kowenje and Z.M. Getenga. Metribuzin Mobility In Soil Columns As Affected By Environmental And Physico-Chemical Parameters In Mumias Sugarcane Zone Kenya. Journal of Agricultural and biological science ISSN 1990-6145 Volume 6 Number 3 March, 2011.
2011	S.C. Lagat , J.O. Lalah, C.O. Kowenje, Z.M Getenga and R.Chepkui. Metribuzin Sorption Dynamics In The Acid Surfaces Soils Of Nzoia Kenya. International Journal Of Disaster Management And Risk Reduction. ISSN 1992- 2744 Volume 3 Number 2 January, 2011, page 51-59.

Conferences Workshops and Academic Visits.	
ECS Develop Project Inception Meeting hosted at Makerere University	7 th November to 8 th June 2022
EXCEED-SWINDON-DAAD Plenary meeting 2021 held at Amman , Days Inn Hotel, Jordan. Funded by German Federal Ministry for Economic Cooperation and Development, EXCEED- SWINDON and DAAD	29 th November to 3 rd December 2021
The Royal Society of Chemistry on Riches of the Natural World: sustainable use of Africa's Natural products and Materials held at Addis Ababa , Ethiopia	5 th to 7 th November 2019
The EXCEED-SWINDON Regional Expert Meeting hosted at University KI-ZERBO ,Ougadhoughou, Burkina Faso	30 th to 31 st August 2019
The EXCEED-SWINDON Regional Expert Workshop on Modern and Traditional methods of Water Resource Management in Africa held at Kwazulu-Natal University ,Durban, South Africa	5 th to 9 th May 2019
EXCEED-SWINDON-DAAD Regional Training Workshop on Holistic Approach to Water Resources Management in Africa held at Giuko Hotel, Cameroon. The University of Yaoundé 1. Funded by German Federal Ministry for Economic Cooperation and Development, EXCEED- SWINDON and DAAD.	3 rd to 8 th June 2018
Alexander Von Humboldt Germany and Technical University of Kenya International Workshop held at Kisumu, Hotel Kenya	5 th to 9 th December, 2017
EXCEED-SWINDON-DAAD Teacher exchange program ,University of Malawi, Chancellor college ,Zomba Malawi	1 st to 9 th October, 2017.

Expert workshop on water security within the scope of the EXCEED project at TU Braunschweig held at Mekelle University, School of Civil Engineering ,Mekelle, Ethiopia	15 th to 20 th May 2017
Sub Saharan Africa EXCEED-SWINDON Network Project Regional Meeting Held in, Bahir Dar, Bahir Dar University Ethiopia	10 th to 14 th November, 2016
Expert Workshop on the Sustainable Use of Water Resource Excellent Centre for Development Cooperation In Sustainable Water Management In Developing Countries (EXCEED- SWINDON), Maseno University, Kisumu Kenya	4 th to 7 th July, 2016
PACN Congress on Biodiversity and Global challenges, Addis Ababa, The United Nations Ethiopia	November 30 th - 2 nd December 2014:
Regional Expert Workshop on the Implementation of Sustainable Water Management Curriculum at University Level, University of Ouagadougou and EXCEED, Ouagadougou, Burkina Faso	May 26 th - 1 st June 2014
Environmental and development conference, Linking Environmental Research To Kenya's Development Agenda and Vision 2030, Red court hotel Nairobi, The Technical University of Kenya in Collaboration with Humboldt Kolleg	April 9 th - 12 th 2013
The future of biodiversity research in Africa: Scope , Opportunities , Collaboration Access and Sharing Benefits, Sarova Taita Hills Lodge, Taita Taveta University college, Kenya in collaboration with Humboldt Kolleg	July 17 th -July 20 th 2012
Learning a 3-D NMR and HPLC analysis. A Workshop held at University of Kwazulu- Natal. Pietemerisburg, South Africa.	13-15 th March 2011

PROFFESIONAL ASSOCIATIONSKenya Chemical SocietySouth Africa Chemical InstituteChemical Society of KenyaRoyal Society of Chemistry Ref:559966An Expert Member in Water Management board in River Volta Basin Bukina Faso.**TEACHER EXCHANGE PROGRAMS**EXCEED-SWINDON-DAAD Teacher exchange program ,University of Malawi, Chancellor college ,Zomba Malawi 1st to 9th October, 2017

GRANTS AND AWARDS

Prof. Schramm From Helmholtz Zentrum Muenchen, A Laboratory Equipment Worth 30 Million Kenyan Shillings In Residual Value Jaramaogi Oginga Odinga University of Science and Technology	2018
National Commission for Science ,Technolgy and Inovation: Research Endowement Fund Jaramaogi Oginga Odinga University of Science and Technology	2014
Visiting scholar in the laboratory of Prof. DEOGRATIUS JAGANYI (PhD, MSc, DIC, and MRSC) of School of Chemistry, University of Kwazulu-Natal, Faculty of Science and Agriculture	2009-2011
National Research Foundation (NRF) scholar	2006-2008
NRF Post-Doctoral Fellow	2010
A Recipient of Kshs. 100,000/= for Ph.D. research Program from School of Graduate Studies Masinde Muliro University of Science and Technology	2006
Institute of Graduate Studies Education award of Kshs. 200,000/= Masinde Muliro University of Science and Technology	2009

STUDENT SUPERVISION	
Major advisor for 3 Masters and 4 Ph.D. students	PhD 2 completed Masters 3 completed
1. Dr. Gertrude Estelle, PhD Biochemistry, University of Yaoundé, Cameroon. Thesis Title: Diversity And Fortility Of Freshwater Shrimpa Magrobranchium (Herklets 1851)	

Title: Diversity And Fertility Of Freshwater Shrimps Macrobranchium (Herklots 1851) Decapoda: Palaemonidae In The Nyong Basin In Cameroon (2021)

2. Dr. Jared Okungu Ouma ,PhD Water Resources Management , Jaramogi Oginga Odinga University of Science and Technology Thesis Title: Opportunities In Recreational Ecotourism In Water Resources (2017)

3. Fanny Chivembere, MSc Chemistry, Chancellor College, University of Malawi. Thesis Title : Low-Cost Surface And Wastewater Purification: Synthesis And Characterisation Of Activated Carbon From Tobacco Stems And Groundnut Shells For Removal Of Amoxicillin And Cypermethrine (2021).

4. Joel, Njewa, MSc Chemistry, Chancellor College, University of Malawi. Thesis Title : Preparation And Characterization Of Activated Carbon From Agricultural Wastes In Removal Of Chromium Ions From Wastewater (2021).

5. Zedekiah Odira, PhD Environmental Sciences, Masinde Muliro University of Science and Technology, MMUST. Working Title: Environmental and Human Health Indicators of Chemical Pollution from Large Scale Farming and Industries in Kenya (ongoing).

7. Tiema Cleopas and Edwin Atego A Book Project, Jaramogi Oginga Odinga University of Science and Technology (ongoing)

(i) African water divination/dowsing amongst selected communities in Western Kenya.

(ii) The use of traditional African man made tools and methods in Water purification. A case

Study in Western Kenya.

DONATIONS

Instrumental in sourcing for Donated Research Equipment From Helmholtz Zentrum Munchen to Jaramogi Odinga University of Science and Technology worth 30Million Kenya Shillings.(2018)

Through My network with Royal Society of Chemistry .I did donate 640 books to Masinde Muliro University Library.

REFEREES	
Prof. Joseph.O.Lalah	Director of Research The Technical University of Kenya
	NAIROBI Mobile: +254723521644.
Prof. Deogratius Jaganyi <i>PhD, MSc, DIC,</i> <i>MRSC</i>	Vice Chancellor and a Professor Mount Kenya University, Kenya.

Prof. Tuikong David Kipchirchir Serem	Professor and a Former Vice Chancellor(Maseno, Massai Mara) Moi University ELDORET
	Mobile: +254722822533