

Curriculum Vitae



PERSONAL INFORMATION

First name(s) / Surname(s) **CHARLES OTIENO OCHIENG**
Address(es) P.O Box 333, -40105-, Maseno, or P.O Box 159, -40222- Oyugis, Kenya
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Nationality Kenyan ID.No. 21500505 Passport No. BK086963
Date of birth 4th December 1977 Gender Male

EDUCATION AND TRAINING

Dates 2009-2012
Title of qualification awarded **Doctor of Philosophy in Chemistry (PhD)**
Principal subjects Research skills in Chemistry of Natural Product, Synthetic and Analytical Chemistry; Screening of biologically active compounds.
Institution Maseno University, Kenya
Dates 2004-2007
Title of qualification awarded **Master of Science in Chemistry (MSc)**
Principal subjects Chemistry, Research Skills and Dissemination of Research findings
Institution Maseno University, Kenya
Dates 1999-2003
Title of qualification awarded **Bachelor of Science Education (1st Class Honours)**
Principal subjects Chemistry, Biology and Teaching skills in Science Subjects
Institution Maseno University, Kenya
Dates 1994-1997
Certification **Kenya Certificate of Secondary Education(K.C.S.E) B (plain)**
Name of School Wang'apala High School in Homa-Bay County, Kenya

WORK EXPERIENCE

Dates	October 2012- To date	Feb, 2009 – Oct, 2012	July 2008 - Jan 2009
Occupation or position held	Lecturer	Assistant Lecturer	Tutorial Fellow
Administrative roles and programme development:	<ol style="list-style-type: none">1. Departmental Examination and Time Tabling Coordinator2. Coordination of Research Projects for undergraduate students (SCH 413 & SIC 417)3. Training module on Agrochemical Safety and Security4. Curriculum development for Industrial and Analytical Chemistry Programmes for Maseno University5. Review of academic programmes: Reviewed the MSc programme for the Department of Chemistry, Maseno University		

Membership to Professional Organisation

Organization	Dated from	<u>Achievement</u>
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Kenya Chemical Society as Deputy Secretary	2012	<ol style="list-style-type: none"> 1. Organized the 9th International KCS Conference at United State International University-Africa, Nairobi 2. Successful organized workshop on Chemical safety and security vulnerability for Institutions in western Kenya at Kisumu Royal City Hotel in July 2017 3. Successful organized training workshop on Agrochemical Safety and Security for Agro-Vet technicians and Extension officers at Kisumu in June 2017 4. Assistant Secretary, The Kenya Chemical Society 5. Developed training module on Agrochemical Safety and Security
Kenya Chemical Society-western chapter as Secretary	2012	<ol style="list-style-type: none"> 1. Secretary to Kenya Chemical Society- Western Chapter 2. Coordination of the chapter's activities e.g Chemistry workshops, Annual General Meetings 3. Organized the Kenya Chemical Society 7th international Conference held at Maseno University, sponsored by PACN and OPCW
Scholarships Grants & Awards		<ol style="list-style-type: none"> 1. DAAD funding for small alumni activities in East Africa 2019 – funding amount 13,408 EUR to conduct a workshop on gaps and lapse in laws and policies of chemical management systems towards responsible production and consumption at Maseno University. 2. TWAS Research Grant Award RGA No. 18-192 RG/CHE/AF/AC_G-FR3240303660 – Grant amount USD 25,581.00. Project of 2018-2020. 3. SPHEIR-DFID project for transformation of the Pharmacy and Chemistry curriculum in selected Kenyan Universities in collaboration with Nottingham University – Grant cost for Maseno University £ 251,000. Award date April 2018 4. Chemical security training grants (KEN-61 CST Agrochemical Safety and security) by U.S. Department of State's Chemical Security Program (CSP) of US\$ 17,000.00. June 2017 5. National commission for Science, Technology and Innovation Council (NACOSTI/RCD/ST & I, 7th CALL/MSC/2016) grant to my MSC student of up to KES 200,000.00 6. African German Network of Excellence in Science (AGNES) Grant for Junior Researchers 2013 – supported by Alexander von Humboldt (AvH) and TWAS of US\$ 10,000.00 7. DAAD IN-COUNTRY scholarship for PhD in Chemistry of Maseno University. 8. TWAS-CSIR Postgraduate Sandwich Fellowship Award, Lucknow India.
List of publications		<ol style="list-style-type: none"> 1. Ochieng, C.O., Opiyo, S.A., Mureka, E.W., Ishola, I.O. (2017) Cyclooxygenase inhibitory compounds from <i>Gymnosporia heterophylla</i> aerial parts. <i>Fitoterapia</i>, 119 (2017) 168–174. 2. Ochieng, C.O., Shrivastava, A., Chaturvedi, U., Kanna, A.K., Owuor, P.O., Manguro, L.A.O., Asthna, R.A. (2017). Antioxidant activities of triacontanyl-E-cinnamoate metabolites from <i>Caesalpinia volkensii</i> root bark extracts. <i>Journal of Kenya Chemical Society</i>. 10, 3-9. 3. Samita F., Ochieng, C.O., Owuor, P.O., Manguro, L.O.A., Midiwo. (2016). Isolation of a new β-carboline alkaloid from aerial parts of <i>Triclisia sacleuxii</i> and its antibacterial and cytotoxicity effects. <i>Natural Product Research</i>. DOI:10.1080/14786419.2016.1201666

4. Opiyo, S. A., Manguro, L.A.O., Akinyi, D., Ochung, A.A., **Ochieng, C.O.** (2015). Biospesticidal Extractives and compounds from *Warburgia ugandensis* against maize weevil (*Sitophilus zeamais*). *Nat. Prod. J.* 5 (4) 236-243.
5. Ishola IO, **Ochieng CO**, Olayemi SO, Jimoh MO, Lawal SM. (2014). Potential of novel phytoecdysteroids isolated from *Vitex doniana* in the treatment of depression: Involvement of monoaminergic systems. *Pharmacology Biochemistry and Behaviour.* 127, 90-100.
6. Ishola IO., Olufunsho A, Olusayero AM, and **Ochieng CO.** (2014). Mechanisms of Analgesic and Anti-Inflammatory Properties of *Annona muricata* Linn. (Annonaceae) Fruit Extract in Rodents. *Journal of Medicinal Food.*, 17(12): 1375-1382. doi:10.1089/jmf.2013.0088
7. Samita, F., **Ochieng, C.O.**, Owuor, P.O., Manguro, L.A.O., (2014): New ceramide from the aerial part of *Tinospora oblongifolia* with cytotoxic activities. *Natural Product Research.* 28 (9); 661-666.
8. **Ochieng C.O.**, Atul S., Upma C., Ravi., Ashok, K., Gitika B., Rakesh K.A., Owuor, P.O., Manguro, L.A., Saxena A.K. (2013) Effects of *Senna didymobotrya* Root Extract and Compounds on Tri-ton-induced Hyperlipidemic Rats and Differentiation of 3T3-Li Preadipocytes. *The J. Nat. Prod.*, 3 (3), 212-217.
9. **Ochieng, C.O.**, Manguro, L.A.O., Owuor, P.O., Akala, H., (2013). Voulkensin C-E, New 11-Oxocassane-Type Diterpenoids and a Steroid Glycoside from *Caesalpinia volkensii* Stem Bark and Their-Antiplasmodial Activities, *Bioorganic & Medicinal Chemistry Letters*, 23, 3088-3095.
10. **Ochieng', C.O.**, Ishola I. O Opiyo, S.A., Mang'uro, L.O.A., Owuor, P.O., Wong, K-C. (2012). Phytoecdysteroids from *Vitex doniana* stem bark and their Anti-inflammatory Activities. *Planta Medica*, 79 (1), 52-59.
11. **Ochieng', C.O.**, Owuor, P.O., Mang'uro, L.O.A., Akala H, Ishola I.O. (2012) Antinociceptive and Antiplasmodial Activities of Cassane Furanoditerpenes from *Caesalpinia volkensii* H. root bark. *Fitoterapia*, 83, 74-80.
12. Opiyo, S.A., Lawrence O.A. Manguro, L.O.A., Owuor, P.O., **Ochieng, C.O.**, Ateka, E.M, Lemmen, P. (2011). Antimicrobial compounds from *Terminalia brownie* against Sweet potato patho-gens. *The Nat Prod. J.*, 1, 116-120.
13. Echeverry, C., Arredondo, F., Dajas, F., Midiwo, J., **Ochieng, C.O.**, Kerubo, L. (2010). Pretreatment with natural flavones and neuronal cell survival after oxidative stress: a structure activity relationship study. *J. Agric and Food Chem.*, 58(4), 2111-2115.
14. **Ochieng, C.O.**, Owuor, P., Midiwo, J. (2010). Anti-plasmodial activities of surface accumulated compounds of *Gardenia ternifolia* aerial parts. *Res. J. Pharmacol.*, 4(2), 45-50.
15. **Ochieng, C.O.**, Nadwa, B.O., (2010). Proximate composition, phenolic content and antioxidant activities of three black plums (*Vitex* species). *J. Food Technol.*, 8(3), 118-125.
16. Ishola, I.O., Akindele, A.J., Agbaje, E.O., **Ochieng, C.O.**, Adeyemi, O.O. (2014) Anticonvulsant effect of methanolic extract and isolation of active constituents from *Cnestis*

ferruginea Vahl ex DC (Con-naraceae). *West African Journal of Pharmacy* (2014) 25 (1) 9-19

Seminar/Conference presentation

1. Exploring Biophysics Diversity for Sustainable Industrial and Economic development conference at Masinde Muliro University of Science and Technology on July 3rd-4th, 2019.
2. Research capacity building conference at Kisumu Hotel, Maseno University on June 6th – 7th, 2019. By Maseno University Partnership, Research and Innovations.
3. Sustainable chemical security and substitution workshop at Great Rift Valley Lodge in Naivasha, on April 30-May 2, 2019. By CRDF-Global and KCS
4. Workshop on graduate supervision in the 21st century for DAAD alumni at Technical University of Kenya, Nairobi, 22nd to 23rd May 2019.
5. Workshop on the role of supervisors in Quality research and proposal writing at Kisumu Hotel, Maseno University 18th and 19th October 2018.
6. Chemical Inventory Management System for Professionals and Technicians from Universities in Western Kenya Region in Kisumu Date: December, 2017, By CRDF-Global and KCS
7. Workshop on exploring “Kenyan Biodiversity: Chemistry, Pharmacology and commercialization” and gave oral presentation entitled “Isolation and characterization of bioactive phytochemicals from different East African plants for management of human pathophysiological conditions. Workshop organized by NRF, Newton Fund, British Council and Researcher Link at the Great Rift Valley Lodge, Naivasha, 10th-14th September 2017
8. 9th International Conference of the Kenya Chemical Society: “The role of chemistry in inventing a sustainable future” in 9th-12th May 2017: oral presentation titled “Cyclooxygenase inhibitory of dihydro- β -agarofuran sesquiterpene alkaloids and triterpenoids from *Gymnosporia heterophylla*, Oral presentation at the 9th KCS international Conference at USIU-Africa in Nairobi.
9. Chemical safety and security training workshop for Somalis and Kenyan organized by Kenya Chemical Society at University of Nairobi, Chiromo Campus 21st July to 24th July 2016.
10. Poster presentation of bioactive phytoecdysteroids from *Vitex doniana*. (10th Oct 2014) Poster presentation. Alexander von Humboldt (AvH) colloquium at Safari Park Hotel, Nairobi
11. Charles O. Ochieng (3rd-10th Dec 2013). 11-oxocassane-type diterpenoids and other compounds from *Caesalpinia volkensii* H. And their antiplasmodial and antinociceptive activities. 15th symposium of the natural Products Research Network for Eastern and Central Africa (NAPRECA) at National Telecom Corporation Tower, Khartoum, Sudan.
12. Ochieng, C. O., Ishola I.O., Opiyo, S.A., Manguro, L.A.O., Owuor, P.O., Wong, K-C. (15th- 18th October 2012). Phytoecdysteroids from the stem bark of *Vitex doniana* with anti-inflammatory activities. 7th International Conference of the Kenya Chemical Society at Maseno University, Kenya.

	<p>13. Ochieng, C.O., Owuor, P.O., Manguro, L.O.A., Akala, H., Ishola, I.O. (12th-14th August 2011). Antinociceptive and Antiplasmodial active compounds from from <i>Caesalpinia volkensii</i> H. root bark. ICIPE HQS, Kasarani Nairobi, Kenya</p> <p>14. Ochieng, C.O., (3rd-5th March 2011) Structure-activity study of natural flavones against oxidative insulted neuron cells. 3rd CDRI-NIPER (RBL) symposium on Medicinal Chemistry and Pharmaceutical Sciences. Central Drug Research Institute, Lucknow, India.</p> <p>15. Ochieng C.O. (17th-21st July 2007) Anti-plasmodial activities of surface accumulated compounds of <i>Gardenia ternifolia</i> aerial parts Poster presentation at 12th NAPRECA, Kampala Uganda.</p>
Postgraduate students supervised	<p>1. Edward W. Mureka (2016): Isolation and characterization of active compounds from <i>Maytenus heterophylla</i> (Celestraceae) against convulsion.</p> <p>2. Daniel N. Wasiali (2019): Chemical analysis of α-amylase and α-glucosidase inhibitory principles from <i>Zathoxylum chalybeum</i> stem and root bark</p> <p>3. Michael O. Ooko (2019): phytochemical analysis of antihyperglycemic compounds from <i>Lannea schweinfurthii</i> stem bark and <i>Schkhuria pinnata</i>.</p>
Thesis examination (internal at Maseno University)	<p>1. <u>Phytochemical investigation of three plants in the family Fabaceae for antimalarial, antifungal and antibacterial agent. For Angeline Ochung (PG/PhD/0116/10) (Ph.D thesis)</u></p> <p>2. <u>Relationship between mites' infestation levels in Kenyan tea to overhead volatile organic compounds and their variation with selected agronomic practices for Jenipher Akinyi Odak (PG/PhD/041/11) (PhD Thesis)</u></p> <p>3. Evaluation of mineral contents in different indigenous vegetables consumed in western Kenya by Grace Makhoa (PG/MSc/013/07) (MSc thesis).</p> <p>4. Effect of anthropogenic activities on water quality of Amala and Nyangores tributaries of River Mara in Kenya by Winnie Nyairo (PG/MSc/067/10) (MSc Thesis).</p> <p>5. The efficacy of Diclorodiphenyltrichloromethane (DDT) and chlorpyrifos against mosquito Larvae and their dissipation from Mosquito Larvae habitat in Maseno by Charles Orimbo (PG/MSc/087/08) (MSc thesis).</p>
Technical skills and competences	<p>1. Training Workshop on Chemical safety and security organized by Kenya Chemical Society in collaboration with U.S Department of State's Chemical Security program (CSP) and Pacific Northwest National Laboratories (PNNL) in Nairobi, Kenya on the 21st -23rd June 2016.</p> <p>2. One-year training at Central Drug Research Institute, India as Research Fellow on TWAS-CSIR fellowship award, May 2010-May 2011.</p> <p>3. Technical skills in teaching Science and interpretation of results from analytical instruments of Chemistry (GC-MS, HPLC-MS, NMR, MS, IR, UV e.t.c)</p>

	<p>4. 13th NAPRECA Summer School at University of Botswana, Gaborone, Botswana, March, 2010.</p> <p>5. Training workshop on NMR, Separation techniques and Taxonomy at Makerere University, Kampala Uganda in 17th-21st July 2007.</p> <p>6. NAPRECA; Natural Production Research Network for Eastern and Central Africa Summer School at Chemistry Department UON, KEMRI, AND ICIPE in April, 2005.</p>		
Referees	<p>Prof: Philip Okinda Owuor Tel No: +254-722789005 or +254-072072070 Department of Chemistry Maseno University, Private Bag, -40105-Maseno E-mail address; pokindao@gmail.com</p>	<p>Prof. Lawrence A O Manguro, Tel No: +254-715880085 Maseno University, P.O Box 333 -40105-, Maseno e-mail: kamanguro@yahoo.com</p>	<p>Prof. Chrispin Kowenje Tel No; +254-710184204 Department of Chemistry Maseno University Box 333-40105-, Nairobi, Kenya E-mail address: ckowenje@gmail.com</p>