

CURRICULUM VITAE

Dr. Joanne Atieno Ogunah

1. Personal details:

Contact Address: University of Embu
P. O. Box 6 - 60100, Embu, Kenya,
Cell Phone: +254 721 750 946
Email: ogunah.joanne@embuni.ac.ke
Email: ogunahj@gmail.com

Nationality: Kenyan

2. Academic Qualifications:

2012 - 2016 Ph.D. (Chemistry) Maseno University, Maseno, Kenya.

2008 - 2011 M.Sc. (Chemistry) Maseno University, Maseno, Kenya.

2002 - 2006 B.Ed. (Science) Maseno University, Maseno, Kenya.

3. Administrative Experience:

i. Chairman of Department (2017 - 2022)

Key responsibilities:

- The Administrative and Academic head of the department
- Prepare annual budget and expenditure plans
- Manage expenditure as per budgetary allocation
- Initiate staff recruitment
- Foster internal partnerships among departments and initiate external linkages

ii. School Examinations Coordinator (December 2015- November 2016)

Key responsibilities:

- Prepare and consolidate all departmental exam results every semester
- Prepare and compile all exam results for presentation to the Senate
- Dealing with all student's matters in relation to examinations.
- Prepare and issue provisional examination results

iii. Departmental Examination Coordinator (Feb 2015 - Nov 2016)

Key responsibilities:

- Ensure lecturers submit draft examinations and arrange for moderation
- Ensure all Departmental course assessment are done accordance to examination policies

- Prepare and compile all examination result for presentation at School Academic Board
- Dealing with all student's matters in relation to examinations.

4. Teaching & Research Experience

A. Teaching - March 2013 to date

B. Research and Postgraduate Students' Supervision

Completed supervision:

- ▶ MSc - Microplastic abundance, composition and distribution in the endorheic Lake Naivasha, Kenya. **Francis Migwi Kigera, University of Embu.** Graduated in December 2020.
- ▶ MSc - Isolation and characterization of anti-cancer secondary metabolites of cola minor brenan. **Teresia Kerubo, University of Embu.** Graduated in September 2021.

Ongoing supervision:

- ▶ MSc - Physico-chemical properties of mortar with *Bacillus megaterium* packaged in select media. **David Munyao, University of Embu.** Registered in September 2020.
- ▶ MSc - Removal of zinc (II), cadmium (II), copper (II) and lead (II) cations from wastewater using synthetic chelating ligands. **Kelvin Wambugu, University of Embu.** Registered in September 2020.
- ▶ MSc - Effects of *lysini bacillus sphaericus* and fly ash dosage on selected physico-chemical and mechanical properties of portland pozzolana mortars. **Kelvin Mwangi, University of Embu.** Registered in September 2020.
- ▶ MSc - Effects of operating parameters on biogas production and organic fertilizer quality from anaerobic co-digestion of food and farm wastes. **Florence Kiptoo, University of Embu.** Registered in September 2021.
- ▶ PhD- Removal of heavy metals from wastewater using schiff-base functionalized solid-phase adsorbents. Cecilia Wahinga, **University of Embu.** Registered in September 2021.

Thesis Examinations:

- ▶ MSc - Heavy metal contamination in soil and vegetables irrigated using sewage effluent: a case study of Embu sewerage treatment plant, Kenya. **Sussy Sayo, University of Embu.**

Review of Journal articles

- ▶ Environmental Toxicology and Chemistry.
- ▶ The African Journal of Food, Agriculture, Nutrition and Development

Review of proposals for funding Agencies

- ▶ Meru University of Science and Technology (2016 – date)

5. Memberships of Professional Bodies:

- ▶ Kenya Chemical Society (KCS)
- ▶ The Chemical Weapons Convention Coalition (Under the UN Organization for the Prohibition of Chemical Weapons (OPCW))
- ▶ Organization of Women in Science for the Developing World (OWSD)

6. Grants and Awards:

- ▶ Alexander von Humboldt (AvH) Foundation young researcher short visit in Germany. Aug 2019 - Oct 2019. **EUR 7,785.**
- ▶ Kenya Education Network Trust (KENET). Binding of Heavy Metal Cations-Ethylenediamine (Modified) Maize Tassel Complexes: Insights from the Density Field Theory -Molecular Dynamics Simulations". 2019 – 2020. **USD 15,000.** Lucy Kiruri (PI, Kenyatta University), Isaac Mwangi (Co-PI, Kenyatta University), **Joanne Ogunah (Co-PI, University of Embu).**
- ▶ National Commission for Science, Technology and Innovation. Postgraduate Funding for PhD studies. **KES 960,000.** 2013 – 2016.
- ▶ The German Academic Exchange Service (DAAD) – Postgraduate support grant on “Fate of chlorsulfuron on the wheat growing soils within the Mara Basin, Kenya.” 2013 – 2014. **KES 1,618,200.**

7. Publications:

- ▶ Mwangi Wanjiku, K., Muthengia, J. W., **Ogunah, J.**, Mutitu, D. K., Kinuthia, J., Mwirichia, R., ... & Musyoki Munyao, D. (2022). Effects of *Lysinibacillus sphaericus* on Physicomechanical and Chemical Performance of OPC Blended with Natural Tuff and Pulverized Fly Ash. *Advances in Materials Science and Engineering*, 2022.
- ▶ Musyoki, D. M., Muthengia, J. W., **Ogunah, J.**, Mutitu, D. K., Kinuthia, J., Mwirichia, R., ... & Genson, M. (2022). Effect of Immobilizing *Bacillus megaterium* on the Compressive Strength and Water Absorption of Mortar. *Journal of Chemistry*, 2022.
- ▶ Kelvin Wambugu, George S. Nyamato, **Joanne Ogunah** & Stephen O. Ojwach (2021) Phenoxy-imino ligands: coordination chemistry and binding properties with copper(II) cations, *Journal of Coordination Chemistry*, 74:17-20, 2850-2862, DOI: 10.1080/00958972.2021.2015581
- ▶ Mokaya, T.K., Omosa, L.K., **Ogunah, J** & Nyamato, G.S. (2021). Isolation and characterization of secondary metabolites from *Cola minor* stem extracts. *Tropical Journal of Natural Products Research*, 5(4):621-625
- ▶ **Ogunah, J. A.**, Lalah, J. O., & Schramm, K. W. (2020). Malaria vector control strategies. What is appropriate towards sustainable global eradication? *Sustainable Chemistry and Pharmacy*, 18, 100339.

- ▶ Migwi, F. K., **Ogunah, J. A.**, & Kiratu, J. M. (2020). Occurrence and Spatial Distribution of Microplastics in the surface Waters of Lake Naivasha, Kenya. *Environmental Toxicology and Chemistry*, 39(4), 765–774.
- ▶ **J.A. Ogunah**, P.O Owuor, C. O. Kowenje, J.O. Lalah. Adsorption and desorption of chlorsulfuron in agricultural soils of Mara River Basin, Kenya. *AJEA*, 2016:12 (6) 1-10.
- ▶ **J.A. Ogunah**, P.O Owuor, C. O. Kowenje, J.O. Lalah. Effects of copper (II) on the sorption/desorption of chlorsulfuron in five wheat growing regions of the Mara River Basin, Kenya. *AJEA*, 2016:10 (5)1-9.
- ▶ **J. A. Ogunah**, C. O. Kowenje, E. T. Osewe, J. O. Lalah, D. A. Jaoko, R. N. Koigi, Effects of zeolites X and Y on the degradation of malathion in water, *Sci. J. Chem. MM* 2013; 1 (1): 7-13.
- ▶ D.O. Agoro, C. O. Kowenje, E. T. Osewe, J. O. Lalah, **J.A. Ogunah**. Effects of zeolite X on dissipation of Hexazinone from agricultural waste waters in Western, Kenya. *IJERT*,2013; 2(10).

8. Conference, Workshop and Seminar Paper Presentations:

- ▶ **J.A Ogunah** (2022). Interaction of copper (II) ions and chlorsulfuron in wheat growing soils in Mara Basin. The 16th JKUAT Scientific, Technological and Industrialization Conference from 24-25th March 2022.
- ▶ **J.A Ogunah** (2020). Are Kenyan Fresh Water Lakes safe? First Evidence of Microplastic Pollution in Lake Naivasha. The 13th Egerton University Virtual International Conference from 24th -26th November 2020.
- ▶ Kenya EU, Muturi, MW, **Ogunah, JA.** and Cherutich, AK (2018). *Policies on chemical weapons usage – A case of Africa*. The 23rd Session of the Conference of State Parties (CSP-16) to the Organization for the Prevention of Chemical Weapons (OPCW). The Hague, Netherlands. 18th to 25th November 2018.
- ▶ **J.A. Ogunah**, P.O Owuor, C. O. Kowenje, J.O. Lalah (2017). Effects of copper (II) ions on the adsorption and desorption of chlorsulfuron on the Mara River Basin Soils in Kenya at the 2nd Kenya DAAD Scholars International Conference at Meru University of Science and Technology from 4th to 6th October 2017.
- ▶ **J.A. Ogunah**, C. O. Kowenje and J.O. Lalah. Effects of zeolites X and Y on the degradation of Malathion in aqueous medium on the EXCEED and UNESCO - DAAD conference on sustainable water management in African Countries at Kisumu Hotel, Kenya.
- ▶ Omwoma, S, J.A. Ogunah, C. O. Kowenje, J.O. Lalah. Decontamination of water bound pesticide by use of zeolites on the Inaugural Conference of Nanotechnology and Material Science development in Kenya at the Kenyatta University July, 2012.
- ▶ J.A. Ogunah, C. O. Kowenje and J.O. Lalah Effect of zeolites on degradation in fresh water to the Bondo University and Cape Peninsula University of Technology conference on food security and environmental sustainability in a world of changing climates. February, 2011.
- ▶ Attended a DAAD/NCST workshop on research proposal writing at Masinde Muliro University of Science and Technology. July, 2012.

10. Referee:

1. Prof. Eucharía Kenya, PhD

Deputy Vice-Chancellor (Planning, Administration and Finance)

University of Embu

P. O. Box 6 – 60100, Embu

Cell phone: +254 722 721 435

Email: kenya.eucharía@embuni.ac.ke and eucharía.kenya2012@gmail.com

2. Prof. Joseph Lalah , PhD

Director, Postgraduate Studies

Technical University of Kenya

P. O. Box 90420 – 80100, Mombasa

Cell phone: +254 723 521 644

Email: jlalah@tukenya.ac.ke and lalahjoseph@yahoo.com