

Joseph Kweku Adjei

Senior Lecturer · Department of Chemistry
University of Cape Coast

ORCID [0000-0003-0342-7432](https://orcid.org/0000-0003-0342-7432) · Google Scholar scholar.google.com/citations?user=SEIDCyUAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/a398626f-5473-4cbf-b123-d2204dc4e492

RESEARCH

Interests Environmental and Analytical Chemistry · Food and Chemical Toxicology · Bioremediation · Chemical Weapon Prohibition · Bioanalytical · Environmental/Analytical Chemistry · Chromatographic methods · Semi-volatile Organic pollutants · Xenoestrogens · Pharmaceuticals & personal care products in water

Areas Health, Toxicology and Mutagenesis · Pollution · Atmospheric Science · Water Science and Technology · Analytical Chemistry · Building and Construction

RESEARCH SUMMARY

20	614	13	13	1.59	22%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 20 publications listed below, 2012–2025. Field-weighted impact is the mean over the 18 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 18 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer
Chemistry, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD (Chemistry)
Department of Chemistry, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 20

1. Joseph K. Adjei, Thomas Ahenguah, Anita Asamoah, John K. Bentum, David K. Essumang (2025). Distribution paradigm, ecological risk assessment and source apportionment of multiclass pesticides in the aquatic environment. *Ecotoxicology*. <https://doi.org/10.1007/s10646-025-02992-8>
2. John K. Bentum, Albert Eshun, David K. Essumang, Patrick Boakye, Joseph Kweku Adjei, Obed O. Ohene-Kwayisi, Jonathan N. Hogarh (2025). Fingerprints of Polychlorinated Biphenyl (PCB) Congener and Homologous Profile of the Pra River Basin Sediment. *OALib*. <https://doi.org/10.4236/oalib.1113166>
3. John K. Bentum, Albert Eshun, David K. Essumang, Patrick Boakye, Joseph Kweku Adjei, Justice Wiston Armstrong Jonathan, Obed O. Ohene-Kwayisi (2025). Polychlorinated Biphenyls Contamination of Drinking Water Source of the Pra River: Congener Distribution and Associated Risk. *OALib*. <https://doi.org/10.4236/oalib.1113293>
4. Rahmat Quaigrane Duker, Noble Kwame Asare, Edward Adzesiwor Obodai, Joseph Kweku Adjei, Emmanuel Acheampong, Ernest Obeng Chuku (2024). Ecotoxicological and health risks associated with sediment-bound polycyclic aromatic hydrocarbons in peri-urban closed and open coastal lagoons. *Marine Pollution Bulletin*. <https://doi.org/10.1016/j.marpolbul.2024.116351>
5. Charity Owusu, Albert Ofori, Frank Adusei-Mensah, Joseph Kweku Adjei, George Yaw Hadzi, John Kwesi

Bentum, Reginald Quansah, David K Essumang (2024). Health Risk Assessment of Occupational Exposures of Polycyclic Aromatic Hydrocarbons, Phthalates, and Semi-Volatile Chlorinated Organic Compounds in Urine of Commercial Fish Smokers, Ghana. *Environmental Health Insights*. <https://doi.org/10.1177/11786302241306932>

6. Joseph K. Adjei, Henrietta Acquah, David K. Essumang (2024). Occurrence, efficiency of treatment processes, source apportionment and human health risk assessment of pharmaceuticals and xenoestrogen compounds in tap water from some Ghanaian communities. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e31815>
7. Joseph K. Adjei, Alberta D. Dayie, Justice K. Addo, Anita Asamoah, Ernest O. Amoako, Benedicta Y. Egoh, Ebenezer Bekoe, Nathaniel O. Ofori, George A. Adjei, David K. Essumang (2022). Occurrence, ecological risk assessment and source apportionment of pharmaceuticals, steroid hormones and xenoestrogens in the Ghanaian aquatic environments. *Toxicology Reports*. <https://doi.org/10.1016/j.toxrep.2022.06.011>
8. Nathaniel Thompson, Joseph Kweku Adjei, John Kwesi Bentum, David Kofi Essumang, Godfred Odame Duodu, George Hadzi, George Alimo Adjei (2022). Vehicular influence on atmospheric concentrations and source apportionment of polycyclic aromatic hydrocarbons in some major cities in three regions of Ghana using epiphytic lichens. *Toxicology Reports*. <https://doi.org/10.1016/j.toxrep.2022.08.002>
9. Joseph Kweku Adjei, Albert Ofori, Harry Kwaku Megbenu, Thomas Ahenguah, Alex Kissi Boateng, George Alimoh Adjei, John Kwesi Bentum, David Kofi Essumang (2021). Health risk and source assessment of semi-volatile phenols, p-chloroaniline and plasticizers in plastic packaged (sachet) drinking water. *The Science of The Total Environment*. <https://doi.org/10.1016/j.scitotenv.2021.149008>
10. Joseph Kweku Adjei, Vigil Ahormegah, Alex Kissi Boateng, Harry Kwaku Megbenu, Samuel Owusu (2020). Fast, easy, cheap, robust and safe method of analysis of Sudan dyes in chilli pepper powder. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2020.e05243>
11. Joseph Kweku Adjei, David Kofi Essumang, Evelyn Twumasi, Eric Nyame, Ishmael Muah (2019). Levels and risk assessment of residual phthalates, polycyclic aromatic hydrocarbons and semi-volatile chlorinated organic compounds in toilet tissue papers. *Toxicology Reports*. <https://doi.org/10.1016/j.toxrep.2019.11.013>
12. Samuel Tetteh, Anna Monney, Ruphino Zugle, Joseph Kweku Adjei (2019). Quantification of Imipramine, Amitriptyline and their Major Metabolites in Urine Samples of Depressed Patients by Gas Chromatography-Mass Spectrometry. <https://doi.org/10.22034/fcr.2019.37149>
13. DW Aheto, CA Adinortey, J Adjei (2017). Microbiological and polycyclic aromatic hydrocarbons (PAHs) analysis of fish from selected areas from central and western regions of Ghana. *The USAID/Ghana Sustainable Fisheries Management Project (SFMP)*. <https://scholar.google.com/scholar?cluster=11383025854995630585&hl=en&oi=scholar>
14. David K. Essumang, Albert Eshun, Jonathan N. Hogarh, John K. Bentum, Joseph K. Adjei, Junya Negishi, Shihori Nakamichi, Md Habibullah-Al-Mamun, Shigeki Masunaga (2016). Perfluoroalkyl acids (PFAAs) in the Pra and Kakum River basins and associated tap water in Ghana. *The Science of The Total Environment*. <https://doi.org/10.1016/j.scitotenv.2016.11.035>
15. DK Essumang, DK Dodoo, JK Adjei (2016). Polycyclic aromatic hydrocarbons in settled dust particles in selected Ghanaian environments: levels, source characterization, and assessment of inhalational health risks. *Indoor and Built Environment*.
16. George Yaw Hadzi, David Kofi Essumang, Joseph Kwaku Adjei (2015). Distribution and Risk Assessment of Heavy Metals in Surface Water from Pristine Environments and Major Mining Areas in Ghana. *Journal of Health and Pollution*. <https://doi.org/10.5696/2156-9614-5-9.86>
17. D. K. Essumang, J. Ofori, D. K. Dodoo, J. K. Adjei (2014). Polycyclic aromatic hydrocarbons in settled dust particles in selected Ghanaian environments: Levels, source characterization, and assessment of inhalational health risks. *Indoor and Built Environment*. <https://doi.org/10.1177/1420326x14544530>
18. D.K. Essumang, D.K. Dodoo, J.K. Adjei (2013). Effect of smoke generation sources and smoke curing duration on the levels of polycyclic aromatic hydrocarbon (PAH) in different suites of fish. *Food and Chemical Toxicology*. <https://doi.org/10.1016/j.fct.2013.04.014>

19. D.K. Essumang, D.K. Dodoo, J.K. Adjei (2013). Effective reduction of PAH contamination in smoke cured fish products using charcoal filters in a modified traditional kiln. *Food Control*. <https://doi.org/10.1016/j.foodcont.2013.06.045>
20. D.K. Essumang, D.K. Dodoo, J.K. Adjei (2012). Polycyclic aromatic hydrocarbon (PAH) contamination in smoke-cured fish products. *Journal of Food Composition and Analysis*. <https://doi.org/10.1016/j.jfca.2012.04.007>