DR. AKINYINKA AKINNUSOTU E Mail: <u>akinnusotuakinyinka@gmail.com, aakinnusotu@unimed.edu.ng</u> Tel.:+2348032209692; Skype Address: AKINYINKA.AKINNUSOTU

No. 55 Road A, Gadson Estate, Akure, Ondo State, Nigeria

	Faculty Member		
	Department of Science Laboratory Technology		
	Environmental Chemistry & Toxicology Research Group, ECTRG		
	University of Medical Sciences, Ondo-City		
	PROFESSIONAL PREPARATION		
2023	Ph.D. in Environmental Chemistry		
	University of Benin (UNIBEN), Benin – City, Edo State, Nigeria		
2021	Visiting Scholar, The Institute of Environmental and Human Health (TIEHH), Department of Environmental Toxicology, Texas Tech University, Lubbock, TX, USA. June - November		
2012	M.Sc. in Environmental Science Olabisi Onabanjo University (OOU), Ago-Iwoye, Ogun State, Nigeria		
2013	B.Sc. in Industrial Chemistry Joseph Ayo Babalola University (JABU), Ikeji-Arakeji, Osun State, Nigeria		
2012	Postgraduate Diploma in Food Science and Technology Federal University of Technology, Akure (FUTA), Ondo State, Nigeria		
2008	Postgraduate Diploma in Education Usman Danfodiyo University, Sokoto, Nigeria		
2008	Postgraduate Diploma inApplied Biochemistry Federal University of Technology, Akure (FUTA), Ondo State, Nigeria		
2005	Higher National Diploma inChemistry/Biochemistry Federal University of Technology, Akure (FUTA), Ondo State, Nigeria		
2001	Diploma in Computer Studies Don Bosco Computer Training Center, Akure, Ondo State, Nigeria		

PROFESSIONAL MEMBERSHIPS

- Member, Chemical Society of Nigeria (CSN)
- Member, Institute of Chartered Chemist of Nigeria (ICCON)
- Member, Nigerian Society for Experimental Biology (NISEB) Reg. No 517
- •Member, Nigerian Environmental Society (NES)
- •Member, Nigerian Institute of Science Laboratory Technology (AISLT) Reg. No A. 3623 Registered Laboratory Scientist /Technologist

PROFESSIONAL EXPERIENCE

2024 – Date	Lecturer/Faculty	University of Medical Sciences (UNIMED), Ondo-City, Nigeria.
2013-2023	Lecturer/Faculty	Rufus Giwa Polytechnic (RUGIPO), Owo, Ondo State, Nigeria
2011-2013	Lab Technologist	Rufus Giwa Polytechnic (RUGIPO), Owo, Ondo State, Nigeria Leader of the Central Analytical Laboratory
2005-2011	Plant Chemist	Olam Nigeria Ltd. (Cocoa Factory), Akure, Ondo, State, Nigeria
1999-2004	QA/QC Officer	Coop Cocoa Products Limited, Akure, Ondo State, Nigeria

TEACHING EXPERIENCE

STB 426 Environmental Impact Assessment & Monitoring STC 412 Physical Chemistry II				
STB 326 Environmental Chemistry	GLT 301 Laboratory Management			
STC 324 Industrial Chemistry	STC 424 Food Chemistry and Brewery			
STC 416 Computer Applications in Chemistry	GLT 303 Biological &Xcal Instrumentation			
STC 111 Physical Chemistry I	STC 211 Inorganic Chemistry II			
STC 121 Organic Chemistry I	GLT 111 General Laboratory Techniques I			
GLT 121 General Laboratory Techniques II				

WHAT I DO PRESENTLY:

- Teach courses in the field of Chemistry, Environmental Science, Laboratory Techniques, and Management, Science, and Public Health Education.
- Initiate, execute, and complete research projects with undergraduate, postgraduate, and adult students taking into consideration their level of education. These projects are also presented in seminars at various levels.
- I also mentor these students (as a counselor and advisor with the highest levels of integrity and excellence).
- Apply for research grants, and collaborate with other researchers.
- Involved in consultancy projects in Environment, Health, and Safety, including education.

PRESENT RESEARCH PROJECTS

- Assessment of Persistent Organic Pollutants (POPs) Organochlorine pesticides (OCPs), Polycyclic aromatic hydrocarbons (PAHs), Polychlorinated biphenyls (PCBs), and other emerging contaminants in various matrices (water, sediments, soil, and biota);
- Characterization of the ambient aerosol, indoor and outdoor air quality, and particulate matter (PM) using low-cost sensors; water and soil quality assessment. Environmental impact assessment studies and environmental audit.

SCHOLARSHIPS, SPONSORSHIP, AND RESEARCH GRANTS

- Principal Investigator (PI): TETFund Institutional Base Research Grant. Project Title: Assessment of some persistent organic pollutants (POPs) in Urban-road dust from three cities (Owo, Akure, and Ore of Ondo State), Ondo State, Nigeria. Award: №1,750,000:00/\$4,864:00 (2024).
- Scholarship to Texas Tech University (TTU), Institute of Environmental and Human health (TIEHH), Lubbock, Texas, USA. By TETFUND for six (06) months as a visiting researcher (2021).

- Principal Investigator (PI): TETFund Institutional Base Research Grant. Project Title: Assessment of Organochlorine Pesticide (OCPs) Residues in Water, Sediment and Fish samples from Ogbese River, Ondo State and Owan River of Edo State, Nigeria. Award: №1,994,000:00/\$4,864:00 (2019).
- Co-Investigator: TETFund Institutional Base Research Grant. Project Title: Forms of Labile Metals in the Soil and Their Concentrations in *Amaranthus hybridus* from Municipal Dumpsites in Ondo State, Nigeria. Award: N806,150:00/\$ (2017).
- Co-Investigator: TETFund Institutional Base Research Grant. Project Title: Development and evaluation of a nutrient-dense snack made from indigenous crops (Maize/Cowpea/Moringa seed flour blend). Award: N506,150:00/\$ (2014).

CONSULTANCY AND VOLUNTEER WORK EXPERIENCE

- United Nations Volunteers work with Morobe Development Foundation Inc. (2022).
- Latosmon Environmental Consultant, Km 4/5 Sustainable House, Akure North, Akure, Ondo State, Nigeria (Technical Consultant) 2014 – Date.
- Sustainable Agrotech Nigeria limited, Km 4/5, Sustainable house, Ilesa/Benin Expressway, Akure, Ondo State, Nigeria (Technical Consultant) 2004 – 2015.

Job specification as Environmental Technical Consultant

- Environmental Impact Assessments (EIA)
- Environmental Baseline Study (EBS)
- Environmental Management System (EMS)
- Environmental Audit Assessment (EAA)
- Prepare Standard Operating Procedures (SOP)
- Environmental Action Plan (EAP)
- Awareness & Training on various Environmental Policies & Issues
- Health & Safety Education (HSE), Presentation of Report during Public Hearing
- Mediate between Proponents and Stakeholders on Key Issues
- Reconnaissance Survey
- Field Works & Sampling, Laboratory Analysis of Environmental Samples
- Result Analysis & Report writing.
- Bethel College of Education, Ijare Akure, Ondo State, Nigeria (Lecturer)
 - Job specification: Teaching and research (Academics)
- College of Education, Ero Akure, Ondo State, Nigeria (Lecturer)
 - Job specification: Teaching and research (Academics)

PUBLICATIONS

Peer-Reviewed Journal Articles

- Abulude, F. O., **Akinnusotu, A.,** Bello, L., and Feyisetan, A. O. (2024). Assessment of AQI, PM10, PM2. 5, NO2, O3: The Case of Owo, Nigeria. *ASEAN Journal of Science and Engineering*, *4*(1), 15-24.
- Akinnusotu, A., Abulude, F.O., Adeoya, E.A., Adeyemi, O.O., Jiddah-Kazeem, S.B., Arifalo, K.M., Awogbidin, E. and Sunday, A. (2023). Comprehensive Air Quality Index Assessment Incorporating NO2, PM2.5, PM10, And O3 In Ondo State, Nigeria. *Jurnal Geografi Gea*, 23(2), pp.91-106.
- Akinnusotu, A., Ukpebor, J. E., and Okieimen, F. E. (2023). Source, distribution, and risk assessment of polycyclic aromatic hydrocarbons in sediment and fish samples from River Owan, Edo State, Nigeria. *Front. Toxicol.* 5:1250943. doi: 10.3389/ftox.2023.1250943.
- Abulude, F. O., Suriano, D., Oluwagbayide, S. D., **Akinnusotu, A.,** Abulude, I. A., & Awogbindin, E. (2023). Study on indoor pollutants emission in Akure, Ondo State, Nigeria. *Arab Gulf Journal of Scientific Research*.
- Abulude, F.O., Acha, S., Arifalo, K.M., Oluwagbayide, S.D., Akinnusotu, A., Shoumik, B.A. and Gbotoso, A.O. (2023). Monitoring of air quality with satellite-based sensor: The case of four towns in Southeast, Nigeria. ASEAN Journal of Science and Engineering. 3(1):39-47.
- Akinnusotu, A., Ukpebor, J.E., Okieimen, F. E., Opawale, B. O. and Komolafe, E. A. (2022). Assessment of organochlorine (OC) pesticides in sediment, soil, and fish samples from River Owan, Edo State, Nigeria. *Journal of Chemical Health Risks*. 12(4):545-555.
- Abulude, F. O., **Akinnusotu, A.,** Bello, L., and Awogbindin, E. (2022). Assessment of physico-chemical compositions of wet precipitation at a metropolis in Nigeria. *Water Utility Journal*, 30-31: 25-31.
- Abulude, F. O., Feyisetan, A. O., Arifalo, K. M., **Akinnusotu, A.**, and Bello, L. J. (2022). Indoor Particulate Matter Assessment in a Northern Nigerian Abattoir and a Residential Building. *Journal of Atmospheric Science Research*, Volume 5:4.
- Abulude, F. O., Ratford, V., Ratford, J., Seelam, R., **Akinnusotu, A.**, Olayinka, Y.V., Arifalo, K.M., Adamu, A., and Bello, L.J. (2022). Canāree, a novel low-cost sensor for indoor air quality monitoring: A case study of indoor assessments from Akure, Nigeria. Available at SSRN: <u>https://ssrn.com/abstract=4054652</u>
- Abulude, F.O., Ogunkoya, M.O., Adenibuyan, G.B., Arifalo, K.M., Akinnusotu, A., Adamu, A.S., Kenni, A.M., and Bello, L.J. (2022). Phytochemical assessment of the xxtracts of stem (bark) and leaves of theobroma cocoa materials: Experimental procedure and its comparison to literature, ASEAN Journal for Science and Engineering in Materials. 1(2):85-92.
- Akinnusotu, A., Ukpebor, J.E., Okieimen, F.E., Opawale, B.O. and Komolafe, E.A. (2021). Assessment of the physico-chemical characteristics and elemental properties of water and sediments from Owan river in Edo State, Nigeria. *International Journal of Energy and Water Resources*.DOI : 10.1007/s42108-021-00144-2.
- Ndamitso, M.M., Komolafe, E.A., Fagbayide, S., **Akinnusotu, A.**, Oguntuyi, O.A. and Abulude, F.O. (2021). Effect of salt applications on water absorption capacity (WAC) of mushroom varieties obtained in Akure, Nigeria. *Continental Journal Applied Sciences*. 16(2):1-15.
- Akinnusotu, A., Dada, I.B.O. and Abulude, F.O. (2021). Comparative analysis of phytochemical screening of some selected plant leaves from western Nigeria. *International Journal of Traditional and Natural Medicines*. 11(1):1-15.
- Abulude, F.O., Ndamitso, M.M., Akinnusotu, A., and Oluwagbayide, S.D. (2021). Characterization of halogen (Cl, Br, I) emissions from cooking fuels in Nigerian households using energy-dispersive x-ray fluorescence spectrometry. *International Journal of Environmental Quality*. 43:8-15.

- Abulude, F.O., Oluwagbayide, S.D., **Akinnusotu, A.,** Damodharan, U., (2021). Quality of life: The exposure of a football viewing center in a metropolitan area to noise pollution. *Techno-Science*. 4(1):7-17.
- Aladekoyi, G. and Akinnusotu, A. (2021). Forms of labile metals in the soil and their concentrations in Amaranthus hybridus from municipal dumpsites. Journal of Environmental Science, Toxicology and Food Technology. 15(1):55-63.
- Abulude, F. O., **Akinnusotu, A.,** Oluwagbayide, S. D., Damodharan, U., and Abulude, I. A. (2020). Coronavirus Pandemic: Situation in Nigeria. *Indonesian Journal of Medical Sciences and Public Health*, *1*(2), 44-50.
- Aladekoyi, G and Akinnusotu, A. (2020). Labile metal evaluation, speciation and accumulation in harvested plant from urban major dumpsites. *International Journal of Human Capital in Urban Management*. 6(2):185-192.
- Abulude, F. O., Oluwagbayide, S. D., **Akinnusotu**, **A**. (2020). Assessment of rainwater quality obtained from a suburban area in Nigeria based on the physico-chemical properties. *Techno-Science*. 3(2):50-58.
- Akinsanmi, S.K., Igbasan, F.A., Agbede, J.A. and Akinnusotu, A. (2020). Growth performance and carcass characteristics of broiler chickens fed graded levels of differently processed rubber seed meal based diets. *International Journal of Environment, Agriculture and Biotechnology*. 5(4).
- Abulude, F. O., Fagbayide, S. D., Akinnusotu, A., Elisha, J. J. and Makinde O. E. (2019). Particulate matter and source identification: A case study of Nigeria. *Engineering and Applied Science Research*, 46(2):151-169.
- Abulude, F.O., Fagbayide, S.D., Akinnusotu, A., Makinde O.E. and Elisha, J.J. (2019). Assessment of indoor air quality of Akure, south-west Nigeria. *Quality of Life*. 10(1-2):15-27.
- Akinnusotu, A., Akinsanmi, S.K., Aladekoyi, G. and Aladejimokun, A.O. (2018). Nutrients and anti-nutrient compositions of three different poultry feeds in Ondo State, south western Nigeria. *Journal of Environmental and Agricultural Sciences*. 14:46-53.
- Abulude F. O., Fagbayide S. A., and **Akinnusotu**, **A.** (2018). Assessments of noise levels from noise sources in Akure, Nigeria: A preliminary study. *Iraqi Journal of Science*. 59(4C):2195-2210.
- Arawande, J.O., **Akinnusotu, A.,** and Alademehin, J.O. (2018). Extractive value and phytochemical screening of ginger (*Zingiber officinate*) and turmeric (*Curcuma linga*) using different solvent. *International Journal of Traditional and Natural Medicines*. 8(1):13-22.
- Abulude F.O., Ndamitso M.M., **Akinnusotu A.,** Elisha J.J., Makinde, O.E. (2018). Proximate composition, mineral contents and the effects of sodium sulphate salts on emulsion capacity and stability of mushroom species obtained from Nigeria. *Iraqi Journal of Science*. 59(2C):986-997.
- Arawande, J.O. and Akinnusotu, A. (2018). Comparative study on extraction and characterization of castor seed and oil from three different state capitals in Nigeria. *American Journal of Food Science and Nutrition.* 5(2):37-42.
- Aladekoyi, G., Jide, A.O., Karimu, A.O., Akinnusotu, A., and Adetuyi, O.O. (2017). Physicochemical studies and fatty acid composition of oil extracted from black weevil larva from okitipupa area of Ondo State, Nigeria (*Rhynchophorus phoenicis*). *Chemistry Research Journal*. 2(3):11-15.
- Akinnusotu, A. and Arawande, J.O. (2016). Qualities of effluents from three cocoa processing factories in Ondo State, Nigeria. *International Journal of Environment and Bioenergy*. 11(1):24-35.

- Akinnusotu, A. and Arawande, J.O. (2016). Physicochemical characteristics and heavy metals concentration in sub surface soil at different dumpsites in rufus giwa polytechnic, Owo, Ondo State, Nigeria. *Journal of Environmental and Agricultural Sciences*. 8:21-28.
- Abulude, F.O. and **Akinnusotu**, **A.** (2016). Source characterization of metals in rainwater: case study of Akure, Ondo State, Nigeria. *International Journal of Modern Chemistry and Bioenergy*. 11(2):65-77.
- Aladekoyi, G., Seyifunmi, O.E. and **Akinnusotu, A.** (2016). Comparative study of the fractionation and evaluation of the physical properties of bitumen obtained from Agbabu and Loda in Ilaje Area of Ondo State. *Global Journal of Earth and Environmental Science*. 1:1-7.
- Aladekoyi, G., Ogundowole, O., Akinnusotu, A. and Adesuyi, A.T. (2016). Evaluation of physicochemical and antibacterial activity of oil from two varieties of mango seeds (*Magnifera indica*). Journal of Environmental Science, Computer Science and Engineering & Technology. 5(3).
- Akinnusotu, A., Abulude, F.O. and Abdulrasheed, Y. (2015). Determination of physico-chemical properties and metal concentrations of hand dug wells around a dumpsite in Akure, Ondo State, Nigeria. *Continental Journal Environmental Sciences*. 9(2):22-36.
- Arawande, J.O., Fasoto, T.S. and **Akinnusotu, A.** (2015). Antioxidative effect of chaya leaf extract on refined soybean oil. *Journal of Food Studies*. 5(4):59-69.
- Abulude, F.O., **Akinnusotu**, **A.** and Adeyemi, A. (2015). Global positioning system and its wide application. *Continental Journal Information Technology*. 9(1):22-32.
- Fasoto, T.S. Arawande, O.J. and **Akinnusotu**, **A.** (2014). Adsorption of zinc and chromium ions from aqueous solution onto sugarcane bagasse. *International Journal of Modern Chemistry*. 6(1):28-47.

Book Chapters

Abulude, F., Fagbayide, S., Akinnusotu, A. and Elemide, A. (2019). Ambient air quality assessment in Nigeria: Challenges and remedies. In: T. Umar, ed., Multifarious Issues in Nigeria Today: Multidisciplinary Approaches, 1st ed. Akure: Science and Education Development Institute, pp.124-132.

Non-Peer-Review/Preprints

Abulude, F.O., Fagbayide, S.D., and **Akinnusotu, A.** (2018). Quality of life: The contribution of a football viewing center to noise pollution in an urban city. (www.preprints.org).

Conference Presentations and Workshops

Abulude, F.O., Akinnusotu, A., Adeoya, E. A., Mabayoje, S. O., Arifalo, K.M., and Adamu, A. (2023). Quality

of Surface and Ground Water in Three States of Nigeria: Assessment of Physicochemical Characteristics

and Selected Contamination Patterns. Environmental Sciences Proceedings, 5xxxxx.

Akinnusotu, A., Ukpebor, J. E., Okieimen, F. E. (2022). Source, distribution, and risk assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in sediment samples from River Owan, Edo State, Nigeria. Atmospheric Composition & Chemistry Observations & Modelling Conference incorporating the Kennaook/Cape Grim Annual Science Meeting 2022. 22–24 November 2022 hosted by CSIRO Oceans and Atmosphere, Climate Science Centre Aspendale, Victoria, Australia.

Abulude, F.O., Arifalo, K.M., Adamu, A., Kenni, A.M., Akinnusotu, A., Oluwagbayide, S.D. and Acha, S.

(2022). Indoor Air Quality (PM2. 5 and PM10) and Toxicity Potential at a Commercial Environment in

Akure, Nigeria. Environmental Sciences Proceedings, 24(1), p.8.

Akinnusotu, A., Ukpebor, J. E., Okieimen, F. E., Opawale, B. O. and Komolafe, E. A. (2020). Organochlorine pesticides (OCPs) assessment of sediment, soil, and fish samples from River Owan in Edo State, Nigeria. Atmospheric Composition & Chemistry Observations & Modeling Conference incorporating the Cape

Grim Annual Science Meeting 2020 and 16th Australia and New Zealand Aerosol Assembly. 30th November to 4th December 2020.

- Akinnusotu, A., Ukpebor, J. E. and Okieimen, F. E. (2020). Assessment of polycyclic aromatic hydrocarbons (PAHs) in sediment and fish samples of River Owan, and agricultural soil around the same river in Edo State, Nigeria. <u>5th International Electronic Conference on Water Sciences</u>.
- Abulude, F. O., Ndamitso, M. M., **Akinnusotu, A.,** and Oluwagbayide, S. D. (2020). Characterization of halogens (Cl, Br, I) emissions from cooking fuels in Nigerian households using energy-dispersive x-ray fluorescence spectrometry. 8th Annual International Conference on Sustainable Development. September 21-22, 2020.

9th International Conference on Entrepreneurship, Management & Innovation, Kwara State University, Malete, Kwara State. Theme: COVID-19 as a complex adaptive challenge: A wake-up call for enterprising leaders. 25th& 26th August, 2020.

3rd Scientific Conference Faculty of Applied Sciences, Rufus Giwa Polytechnic, Owo, Ondo State. Theme: Science and Technology: A Veritable Tool for Sustainable National Development in the 21st Century. 17th -20th November, 2014.

30th Annual National Conference/Scientific Workshop of the Nigerian Institute of Science Laboratory Technology [NISLT]. Theme: The Laboratory: Foundation for National Science, Technology &Innovation System. 29th October – 1st November, 2014. "Akure 2014" FUTA

27th Annual National Conference/Workshop of the Nigerian Institute of Science Laboratory Technology [NISLT]. Prospects & Challenges of Science Laboratory Technology in Nigeria. 26th-29th October 2011.

26th Annual National Conference/Workshop of the Nigerian Institute of Science Laboratory Technology [NISLT]. Evolving a Science Laboratory Policy: A Tool for National Development. 3^{rd-6th} November, 2010.

22ND Annual National Conference/Workshop of the Nigerian Institute of Science Laboratory Technology [NISLT]. Science & Technology for Youth Empowerment. Quality Assurance in Laboratory Services. 1st-3rd November, 2007.

29th International Conference of Chemical Society of Nigeria [CSN] EKO-CHEM. Chemistry & Global Development-Environmental Concern.

30th International Conference of Chemical Society of Nigeria [CSN] ASO-CHEM. Chemistry a Driver for National Development & Growth. 25th-28th September, 2007.

CONTINUING EDUCATION AND TRAINING

• Training on **Pedagogy** by the University of Medical Sciences (UNIMED), Ondo–City, Nigeria. 2024.

• Training on Persistent Organic Pollutants (POPs) analysis at The Institute of Environmental and Human Health (TIEHH with Dr. Todd Anderson), Department of Environmental Toxicology, Texas Tech University, Lubbock, Texas, USA. (**Visiting Scholar**) June, 2021 – November, 2021

• Virtual Workshop on the Principles and Methods for the Risk Assessment of Chemicals in Food. 26th –29th January, 2021. Potchefstroom Campus, North West University, South Africa.

• Two-week training workshop on Laboratory Analytical Equipment at the Federal University of Technology [FUTA Step –B Centre of Excellence in Food Security] Akure. Between 13th- 22nd of May, 20013.

• Training workshop on **Chromatographic Techniques** at the Nigerian Institute of Science Laboratory Technology [**NISLT**] Samonda, Ibadan. Between 10th-16th June, 20012.

• 11THMandatory Training Workshop of Institute of Public Analyst of Nigeria [IPAN] on the Use of High Precision Instruments in Laboratory Analysis 27-28 April 2010.

• 1ST Mandatory Training Workshop of Institute of Chartered Chemists of Nigeria [ICCON] on Principles of Chemical Management, & Principles of Environmental Impact Assessment [EIA] 21-22nd October 2008. In-plant Training by Industrial Training Fund (ITF) 2000.

PERSONAL DATA

Date of birth: 17th June 1977, Citizenship: Nigerian, Marital status & the number of children: Married with 3 children.

REFEREES

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