

## CURRICULUM VITAE, DR. JOSHUA O. BABAYEMI

1. **FAMILY NAME:** BABAYEMI
2. **GIVEN NAMES** Joshua Olajiire
3. **PROFESSION:** Associate Professor;  
Environmental Management  
and Toxicology, University of Medical  
Sciences, Ondo, Nigeria
4. **NATIONALITY:** Nigerian
5. **PHONE NUMBER:** +2348150609949; +2348060709930
6. **E-MAIL:** jbabayemi@unimed.edu.ng  
[babayemola@gmail.com](mailto:babayemola@gmail.com)

### 7. KEY EXPERTISE:

- Inventories and action plans for plastics
- Circular economy of plastics
- Persistent organic pollutants (POPs) in the environment
- Material and substance flow analysis (MFA/SFA) of POPs in E-waste
- MFA/SFA of POPs in the transport sector (Motor vehicles)
- Transboundary movement of hazardous materials/ substances
- Country case studies for POPs
- Assessment of POPs in aquatic environment (water, sediment and fish)
- Sustainable production and consumption and related chemicals and waste management
- Research on chlorinated, brominated & fluorinated POPs and other persistent toxic substance
- Best Available Techniques (BAT) and Best Environmental Practice (BEP) for reduction of POPs

### 8. EDUCATIONAL BACKGROUND

Institution	Dates	Qualification	Year of award
University of Ibadan	2009-2015	Ph.D. (Environmental Chemistry)	2015
University of Ibadan	2006-2008	M.Sc. Environmental Chemistry and Pollution Control	2008
Federal University of Agriculture, Abeokuta	1999-2005	B.Sc. Environmental Management and Toxicology	2005
Baptist High School, Okeho	1989-1994	Senior Secondary School Certificate	1995
Araromi Baptist Primary School, Okeho	1982-1988	Primary School Leaving Certificate	1988

## 9. WORK EXPERIENCE

Status	Dates	Institutions
Visiting Scholar	Sept-Oct 2022	Technical University, Vienna, Austria
Associate Professor	2022 till Date	University of Medical Sciences Ondo
Senior Lecturer	2019-2022	Anchor University Lagos
Lecturer I	2015-2019	Bells University of Technology, Ota
Lecturer II	2012-2015	Bells University of Technology, Ota
Assistant Lecturer	2009-2012	Bells University of Technology, Ota

## 10. ADMINISTRATIVE AND MANAGEMENT EXPERIENCE

- i. Acting Head of Department, University of Medical Sciences, Ondo 2022 till Date
- ii. Assistant Head, Anchor University Centre for Global Health 2021-2022
- iii. Acting Head of Department, Chemical Sciences, Anchor University 2020-2022
- iv. Anchor University Research and Development Committee (Chairman) 2020-2022
- v. Anchor University Community Development Committee (Chairman) 2020-2022
- vi. Senate Business Committee, Anchor University (member) 2020-2022
- vii. Managing Editor, Anchor University Journal of Science and Technology (AUJST) 2020-2022
- viii. Managing Editor, Bells University Journal of Applied Sciences and Environment (BUJASE) 2017-2019
- ix. Managing Director, Bells University Consultancy Services 2016-2019

## 11. Professional Qualifications

- i. English Proficiency, University of Ibadan (**Distinction**) 2016
- ii. French Proficiency, Bells University of Technology (**Grade A**) 2011
- iii. Musical Society of Nigeria: Grade 3 Theory of Music (**Merit**) 2009

## 13. SCHOLARSHIP

Federal Government of Nigeria Scholarship 2002-2003

## 14. MEMBERSHIP OF PROFESSIONAL BODIES

Society for Environmental Toxicology and Pollution Mitigation (SETPOM) – member

## 15. SELECTED PUBLICATIONS

- i. Adebisi T.G., Babayemi B.A. and Babayemi J.O. (2023). Microbiological Quality and Potential Exposure to Aflatoxins from Consumption of Street-Vended Snacks in Lagos. *American Journal of Food Technology*, 18: 45-52. DOI: 10.3923/ajft.2023.45.52
- ii. Babayemi, J.O., Nnorom, I., Weber, R. (2022). Initial assessment of imports of chlorinated paraffins into Nigeria and the need of improvement of the Stockholm and Rotterdam Conventions. *Emerging Contaminants* 8: 360-370. <https://doi.org/10.1016/j.emcon.2022.07.004>

- iii. Guida, Y., Capella, R., Kajiwara, N., Babayemi, J.O., Torres, J.P.M., Weber, R. (2021). Inventory approach for short-chain chlorinated paraffins for the Stockholm Convention implementation in Brazil. *Chemosphere*, <https://doi.org/10.1016/j.chemosphere.2021.132344>
- iv. Babayemi, J.O., Nnorom, I., Weber, R. and Osibanjo, O. (2019). Ensuring sustainability in plastics use in Africa: consumption, waste generation, and projections. *Environmental Science Europe* 31:60. DOI: <https://doi.org/10.1186/s12302-019-0254-5>
- v. Babayemi, J.O., Ogundiran, M.B., Weber, R. and Osibanjo, O. (2018). Initial Inventory of Plastics Imports in Nigeria as a Basis for More Sustainable Management Policies. *Journal of Health and Pollution* 8 (18): 6-20.
- vi. Babayemi, J.O., Osibanjo, O., Sindiku, O. and Weber, R. (2016). Inventory and substance flow analysis of polybrominated diphenyl ethers in the Nigerian transport sector - basis for end-of-life vehicles policy and management. *Environmental Science and Pollution Research*, DOI: 10.1007/s11356-016-6574-8
- vii. Babayemi, J.O., Sindiku, O., Osibanjo, O., Weber, R. (2014). Substance flow analysis of polybrominated diphenyl ethers in plastic from EEE/WEEE in Nigeria in the frame of Stockholm Convention as a basis for policy advice. *Environmental Science and Pollution Research*, 22 (19): 14502-14514. DOI 10.1007/s11356-014-3228-6.
- viii. Sindiku, O., Babayemi, J.O., Tysklind, M., Osibanjo, O., Weber, R., Watson, A., Schlummer, M. and Lundstedt, S. (2015). Polybrominated dibenzo-p-dioxins and dibenzofurans (PBDD/Fs) in e-waste plastic in Nigeria. *Environ Science and Pollution Research*, DOI: 10.1007/s11356-015-5260-6
- ix. Babayemi, J.O., Osibanjo, O. and Weber, R. (2016). Material and substance flow analysis of mobile phones in Nigeria: a step for progressing e-waste management strategy. *Journal of Materials Cycle and Waste Management*. DOI: 10.1007/s10163-016-0472-5.
- x. Ogundele, D., Ogundiran, M.B., Babayemi, J.O. and Jha, M.K. (2020). Material and substance flow analysis of used automobile lead acid batteries in Nigeria: Implications for recovery and environmental quality. *Journal of Health and Pollution* 10 (27): 1-12.
- xi. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2018). Selected Persistent Organic Pollutants (POPs) in water of River Niger: Occurrence and distribution. *Environmental monitoring and assessment* 190 (6): <https://doi.org/10.1007/s10661-017-6378-4>

## 16. OTHER PUBLICATIONS

- i. Chigbundu, C.E., Babayemi, J.O. and Egbanu, C.P. (2020). Bio-adsorption of Heavy Metal Ions from Aqueous Solution Using Uziza (Piper guineense) Stem:

Characterization, Equilibrium and Thermodynamic Studies. *Singapore Journal of Scientific Research*,10: 282-292

- ii. Azeez, R.M. and Babayemi, J.O. (2020). Levels of Heavy Metals in Commonly Consumed Vegetables Obtained from Some Markets in Ota, Nigeria. *Anchor University Journal of Science and Technology*, 1 (1): 96-101.
- iii. Nwude, D.O., Babayemi, J.O., Ajibode, C.P. (2020) Heavy Metals Level in *Clarias gariepinus* (Catfish), *Oreochromis niloticus* (Tilapia) and *Chrysichthys nigroditatus* (Bagrid catfish) collected from Ogun River, Ogun State, Nigeria. *Journal of Applied Sciences and Environmental Management* 24 (8): 1433-1440
- iv. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2019). Concentration and Distribution of Organochlorine Pesticides in Sediments of the Niger River, Nigeria. *Journal of Health and Pollution*: 9 (22): 190606. <https://doi.org/10.5696/2156-9614-9.22.190606>
- v. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2018). Levels of organochlorine pesticides in brackish water fish from Niger River, Nigeria. *Journal of Environmental and Public Health*. <https://doi.org/10.1155/2018/2658306>
- vi. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2018). Polychlorinated Biphenyls in Brackish Water Fish in the River Niger, Nigeria. *Journal of Health and Pollution* 8 (17): 31-42.
- vii. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2018). Selected Persistent Organic Pollutants (POPs) in water of River Niger: Occurrence and distribution. *Environmental monitoring and assessment* 190 (6): <https://doi.org/10.1007/s10661-017-6378-4>
- viii. Unyimadu, J.P., Osibanjo, O. and Babayemi, J.O. (2017). Polychlorinated biphenyls (PCBs) in River Niger, Nigeria: occurrence, distribution and composition profiles. *Toxicology and Industrial Health* 34 (1): 54-67.
- ix. Babayemi, J.O., Olafimihan, O.H. and Nwude, D.O. (2017). Assessment of Heavy Metals in Waterleaf from Various Sources in Ota, Nigeria. *Journal of Applied Sciences and Environmental Management* 21 (6): 1163-1168.
- x. Babayemi, J.O., Ogundiran, M.B. and Osibanjo, O. (2017). Current levels and management of solid wastes in Nigeria. *Environmental Quality Management* 26 (3): 29-53.
- xi. Babayemi, J.O., Ogundiran, M.B. and Osibanjo, O. (2016). Overview of environmental hazards and health effects of pollution in developing countries: a case of Nigeria. *Environmental Quality Management* 26 (1): 51-71.
- xii. Babayemi, J.O. (2016). Overview of Levels of Organochlorine Pesticides in Surface Water and Food Items in Nigeria. *Journal of Environment and Earth Science*, 6 (8): 77-86.

- xiii. Adeyeye, J.A., Adekunle, I. M., Babayemi, J.O. and Adeofun, C.O. (2016). Effects of Elevated Ambient Temperature on *Telfairia Occidentallis* was Mitigated by Conservative Agriculture: A Demonstration of Global Warming and Adaptation Measures. *Journal of Environment and Earth Science*, 6 (1): 109-119.
- xiv. Sindiku, O., Babayemi, J.O., Tysklind, M., Osibanjo, O., Weber, R., Watson, A., Schlummer, M. and Lundstedt, S. (2015). Polybrominated dibenzo-p-dioxins and dibenzofurans (PBDD/Fs) in e-waste plastic in Nigeria. *Environ Science and Pollution Research*, DOI: 10.1007/s11356-015-5260-6
- xv. Ogundiran, M.B., Buluku, T.G., Babayemi, J.O. and Osibanjo, O. (2015). Waste rechargeable electric lamps: characterisation and recovery of lead from their lead-acid batteries. *Journal of Material Cycles and Waste Management*. DOI: 10.1007/s10163-015-0394-7.
- xvi. Babayemi, J.O., Osibanjo, O., Weber, R. (2014). Assessment of use, reuse, and end-of-life disposal and X-Ray Fluorescence Analysis screening of waste mobile phones in Nigeria. *Environmental Quality Management*, 23(4): 1-12.
- xvii. Ogundiran, M.B., Oyetade, O., Babayemi, J.O., Osibanjo, O. (2014). Potential environmental hazards of non-rechargeable electric torch wastes in Nigeria. *International Journal of Environment and Waste Management*, 13(2): 115-130
- xviii. Fakankun, O.A., Babayemi, J.O. and Utiaruk, J.J. (2013). Variations in the mineral composition and heavy metals content of *Moringa oleifera*. *African Journal of Environmental Science and Technology* 7(6), pp. 372-379.
- xix. Babayemi, J.O., Ololade, Z.S., Onipede, O.J. and Dauda, K.T. (2012). Evaluation of Livestock Dung for Potash Alkali and Metal contents. *International Journal of Applied Research and Technology*. 1(8): 107 – 112.
- xx. Nwude, D. O., Babayemi, J. O. and Owonifari, W. (2012). Comparison of Phosphoric and Nitric Acid Digestion Procedures for the Determination of Metals in Cow Parts by Atomic Absorption Spectrophotometry. *International Journal of Applied Research and Technology*. 1(8): 100 – 106.
- xxi. Fakankun, O.A., Babayemi, J.O. and Akosile, S.O. (2012). Evaluation of fish gills as potential target organ for accumulation of heavy metals. *African Journal of Animal and Biomedical Sciences* 7(1): 15-18.
- xxii. Kayode, A A A., Babayemi, J. O., Abam, E. O. and Kayode, O. T. (2011). Occurrence and health implications of high concentrations of Cadmium and Arsenic in drinking water sources in selected towns of Ogun State, South West, Nigeria. *Journal of Toxicology and Environmental Health Sciences*, 3(15): 385-391.
- xxiii. Ogundiran, M.B., Babayemi, J.O. and Nzeribe, C.G. (2011). Application of Waste Cashew Nut Shell Ash Showed Significant Reduction in Mobility of Pb and Cd in Waste Battery Contaminated Soil. *Pacific Journal of Science and Technology*, 12(2): 472-478.

- xxiv. Nwude D.O., Babayemi J.O., Abhulimen I.O. (2011). Metal quantification in cattle: a case of cattle at slaughter at Ota abattoir, Nigeria. *Journal of Toxicology and Environmental Health Sciences*, 3(9): 271-274.
- xxv. Ogundiran, M.B., Babayemi, J.O., Nzeribe, C.G. (2011). Determination of metal content and an assessment of the potential use of waste cashew nut ash (CNSA) as a source for potash production. *BioResources*, 6(1): 529-536.
- xxvi. Nwude, D.O., Okoye, P.A.C., Babayemi, J.O. (2011). Assessment of heavy metal concentrations in the liver of cattle at slaughter during three different seasons. *Research Journal of Environmental Science*, 5(3): 288-294. ISSN 1819-3412.
- xxvii. Babayemi, J.O., Adewuyi, G.O., Dauda, K.T., Kayode, A.A.A. (2011). The ancient alkali production technology and the modern improvement: a review. *Asian Journal of Applied Sciences*, 4(1): 22-29. ISSN 1996-3343.
- xxviii. Babayemi, J.O., Adewuyi, G.O. and Obiegbedi, N.O. (2011). Evaluation of options in wood waste management: burning and consequent alkali production. *Journal of Sustainable Development and Environmental Protection* 1 (2): 98-109.
- xxix. Adewuyi, G.O., Babayemi, J.O., Olabanji, A.A. (2010). Assessment of toxicity of effluents discharged into waterways by some industries in Nigeria: a case study of Ibadan. *The Pacific Journal of Science and Technology*, 11(2): 538-543.
- xxx. Nwude, D.O., Okoye, P.A.C., Babayemi, J.O. (2010). Assessment of accumulation of heavy metals in the kidney of cattle as a function of seasonal variation. *African Journal of Animal and Biomedical Sciences*, 5(3): 1-8.
- xxxi. Nwude, D.O., Okoye, P.A.C., Babayemi, J.O. (2010). Blood heavy metal levels in cows at slaughter at Awka abattoir, Nigeria. *International Journal of Dairy Science*, 5(4): 264-270. ISSN 1811-9743.
- xxxii. Nwude, D.O., Okoye, P.A.C., Babayemi, J.O. (2010). Heavy metal levels in animal muscle tissue: a case study of Nigeria raised cattle. *Research Journal of Applied Sciences*, 5(2): 146-150. ISSN: 1815-932X.
- xxxiii. Babayemi, J.O., Dauda K.T., Nwude, D.O., Kayode, A.A.A. (2010). Evaluation of the composition and chemistry of ash and potash from various plant materials – a review. *Journal of Applied Sciences*, 10(16): 1820-1824. ISSN 1812-5654.
- xxxiv. Babayemi, J.O., Adewuyi, G.O. (2010). Assessment of combustion and potash production as options for management of wood waste. *Journal of Applied Sciences and Environmental Management*, 14(1): 73-75. ISSN: 1119-8362.
- xxxv. Babayemi, J.O., Dauda, K.T., Kayode, A.A.A., Nwude, D.O., Ajiboye, J.A., Essien, E.R., Abiona, O.O. (2010). Determination of potash alkali and metal contents of ashes obtained from peels of some varieties of Nigeria Grown *Musa species*. *BioResources*, 5(3): 1384-1392.

- xxxvi. Babayemi, J.O., Dauda, K.T. (2009). Evaluation of solid waste generation, categories and disposal options in developing countries: a case study of Nigeria. *Journal of Applied Sciences and Environmental Management*, 13(3): 83-88. ISSN: 1119-8362.

#### **Book/ Book Chapters:**

- xxxvii. Babayemi, J.O. (2016). Panorama of e-waste and waste arising from the transport sector of Nigeria: material/substance flow analysis approach. In: P.C. Onianwa and G.U. Adie (Eds.), *Chemical Environmental Pollution – A Selection of Reviews and Studies* (Pp. 26-40). Ibadan, Nigeria: Depet Publishers.

#### **Articles in Referred Conference Proceedings:**

- xxxviii. Babayemi, J.O., Sindiku, O., Osibanjo, O., Lundstedt, S. and Weber, R. (2014). Material flow and substance flow analysis of POP-PBDEs in Nigeria and the risk of dioxin formation and release. *Organohalogen Compounds*, Vol. 76: 1453-1456. 34th International Symposium on Halogenated Persistent Organic Pollutants (POPs) Analysis held at Melia Castilla Hotel, Spain on the 11th August 31st – September 5th, 2014.
- xxxix. Sindiku, O., Tysklind, M., Osibanjo, O., Babayemi, J.O., Schlummer, M., Weber, R., Lundstedt, S. (2013). Polybrominated dioxins and furans (PBDD/Fs) in e-waste polymers in Nigeria. *BFR 2013*. ([http://www.bfr2013.com/upload/abstract-download/2013//Abio/148125\\_Sindiku\\_PBDDF.pdf](http://www.bfr2013.com/upload/abstract-download/2013//Abio/148125_Sindiku_PBDDF.pdf)). Brominated Flame Retardants Conference, 6th International Symposium on Flame Retardants, held at Sir Francis Drake Hotel, San Francisco, California, USA on April 7 – 10, 2013.
- xl. Mellendorf, M., Alvarez, J., Arndt, R., Babayemi, J.O., Cueva Jacome, A.H., Eisa, M., Li, L., Lim, M., Osibanjo, O., Ovuike, S., Posner, S., Säll, L., Schlupe, M., Turner, B., Voleník, J., Weber, R. and Iino, F. (2012). PBDE and PFOS inventory guidance for the Stockholm Convention. *Organohalogen Compounds*, Vol. 74, 564-567. Dioxin Conference, 2012, 32nd International Symposium on Halogenated Persistent Organic Pollutants (POPs), held on 26 – 31 August, 2012 in Cairns, Queensland, Australia.
- xli. Babayemi, J.O., Osibanjo, O., Badejo, B., Mojekwu, S., Sindiku, O. and Weber, R. (2012). PBDE inventory in the transport sector of Nigeria – a step for Stockholm Convention implementation. *Organohalogen Compounds*, Vol. 74, 568-571. Dioxin Conference, 2012, 32nd International Symposium on Halogenated Persistent Organic Pollutants (POPs), held on 26 – 31 August, 2012 in Cairns, Queensland, Australia.
- xlii. Sindiku, O., Babayemi, J.O., Osibanjo, O., Schlummer, M., Schlupe, M. and Weber, R. (2012). Assessing BFRS and POP-PBDEs in e-waste polymers in Nigeria. *Organohalogen Compounds*, Vol. 74, 1320-1323. Dioxin Conference, 2012, 32nd International Symposium on Halogenated Persistent Organic Pollutants (POPs), held on 26 – 31 August, 2012 in Cairns, Queensland, Australia.
- xliii. Sindiku, O., Babayemi, J.O., Osibanjo, O., Schlummer, M., Schlupe, M. and Weber, R. (2011). Screening e-waste plastics in Nigeria for brominated flame retardants using XRF – towards a methodology for assessing POPs PBDEs in e-waste exports. *Organohalogen Compounds*. Vol. 73: 785-788. Dioxin Conference,

2011, 31st International Symposium on Halogenated Persistent Organic Pollutants, held on 21st – 25th August, 2011 in Brussels, Belgium.

#### **17. EXTRA CURRICULAR ACTIVITIES**

- i. Music
- ii. Language study (French)

#### **ACADEMIC LINKAGES**

**ORCID:** <https://orcid.org/0000-0001-8509-7101>

ResearchGate: <https://www.researchgate.net/profile/Joshua-Babayemi>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=36182078600>