

# UNIVERSITY OF MEDICAL SCIENCES, ONDO

## CURRICULUM VITAE

### A. Personal Data

- |                                                |                                       |
|------------------------------------------------|---------------------------------------|
| 1. Full Name (Surname first):                  | OGUNDELE, Lasun Tunde                 |
| 2. Date of Birth:                              | 09 July, 1976                         |
| 3. Details of Contact Address:                 | 5A/BC, FLCH Estate, Ita Osa, Ile Ife. |
| (a) E-mail address:                            | logundele@unimed.edu.ng               |
| (b) Mobile Phone Number(s):                    | +2348062541661                        |
| 4. Nationality:                                | Nigerian                              |
| 5. State of Origin:                            | Oyo State                             |
| 6. Senatorial District:                        | Oyo Central                           |
| 7. Local Government Area:                      | Ibarapa East LGA                      |
| 8. Permanent Home Address:                     | 10, St. Micheal Rd, Oke Ola, Eruwa.   |
| 9. Marital Status:                             | Married                               |
| 10. Number of Children and their Ages:         | Three: 11 years, 6 years, 3 years     |
| 11. Next of Kin:                               | Mrs Ogundele Oluwakemi                |
| 12. Details of Contact Address of Next of Kin: | 5A/BC, FLCH Estate, Ita Osa, Ile Ife. |
| (a) E-mail address                             | ogundelebami@gmail.com                |
| (b) Mobile Phone Number(s):                    | +2347036783011                        |
| 13. Date of Assumption of Duty:                | 16 January, 2017.                     |
| 14. Rank/status on First Appointment:          | Lecturer I                            |
| 15. Present Status:                            | Reader                                |
| 16. Date of Last Promotion:                    | 1st October, 2023                     |
| 17. Present Salary, Grade Level and Step:      | CONUAS 06 Step 01                     |
| 18. Date of Confirmation of Appointment:       | 4 February, 2021                      |
| 19. Faculty/Directorate:                       | Science                               |
| 20. Department/Unit:                           | Physics                               |

### B. Educational Background

1. Higher Educational Institutions Attended with Dates:

1. Obafemi Awolowo University, Ile-Ife	Sept. 2002 – Dec.2007
2. Obafemi Awolowo University, Ile-Ife	Feb. 2009 – Dec.2011
3. Obafemi Awolowo University, Ile-Ife	Feb. 2013 – Feb. 2016
  
2. Academic/Professional Qualifications and Distinctions Obtained with Dates:

Qualifications	Field	Date
1. B. Sc. (Physics)	Physics	January, 2008
2. M.Sc. (Engineering Physics)	Environmental Physics	May, 2012.
3. Ph.D (Physics)	Environmental Physics	September, 2016
  
3. Other Distinctions and Awards with Dates:
  - (a) Scholarship: Nil
  - (b) Fellowship: Nil
  - (c) Research Grants: TEFUND Research TETFund/DR&D/CE/NRF/TI/23VOLI.
  - (d) National Awards: Nil
  - (e) International awards: Nil

### **C. Work Experience with Dates**

#### **1. Previous Work Experience Outside the University System with Dates:**

(i). Research Assistant, Environmental Research Laboratory, Physics Department, OAU, Ile Ife, September, 2009 to May, 2012.

#### **2. Previous Work Experience in Other Universities:**

Assistant Lecturer, Wesley University, Ondo. April, 2013 - January, 2017.

#### **3. Work Experience in University of Medical Sciences, Ondo**

Lecturer I, University of Medical Sciences, Ondo. January, 2017 till date

#### **4. Courses Taught Within the Current Academic Session**

##### **(i) Undergraduate**

##### **First Semester**

1. PHY 112 (2 unit):	General Physics II	(shared)
2. PHY 113 (1 unit):	Practical Physics I	(shared)
3. PHY 212 (3 unit):	Thermal Physics	(shared)
4. PHY 215 (3 unit):	Material Science	(shared)
5. PHY 223 (1 unit):	Experimental Physics	(shared)
6. PHY 318 (3 unit):	Mathematical Physics	(shared)
7. PHY 413 (3 unit):	Solid State Physics II	(shared)

##### **Second Semester**

1. PHY 121 (3 unit)	General Physics III	(shared)
2. PHY 122 (1 unit)	Practical Physics II	(shared)
3. PHY 221 (3 unit)	Waves and Optics	(shared)
4. PHY 227 (3 unit)	Biophysics	(shared)
4. PHY 321 (3 unit)	Electromagnetic Theory II	(shared)
5. PHY 424 (2 unit)	Semiconductor Technology	(shared)
6. PHY 429 (2 unit)	Material Science II	(shared)
7. PHY 421 (3 unit)	Nuclear and Particle Physics II	(shared)
8. EHS 580 1 (unit)	Radiation Safety and Environment	(shared)

##### **(ii) Postgraduate**

1. PHY 813 (3 unit)	Fundamental of Nuclear Physics
2. ECP 820 (3 unit)	Optical Fibers Principles and Application
3. PHY 820 (2 unit)	Research Seminar
4. PHY 816 (3 unit)	Electromagnetic theory
5. ECP 814 (2 unit)	Electronic Conduction in Solid
6. EVP 811 (3 unit)	Environmental and Impact Assessment

#### **8. Graduate Student Supervision within Current Session:**

**9. Akinlade Rhoda (M.Sc.) – Ongoing**

#### **6. Undergraduate Supervision (Complete):**

1. Obawolu Idowu Mariam	PHY/16/0346
2. Adejayan Joyline Onaopemipo	PHY/16/0326
3. Adepoju Glory Imisioluwa	PHY/16/0326
4. Fatukasi Yemisi Blessing	PHY/16/0310
5. Akindele Oluwademilade A	PHY/17/0809
6. Bello Oluwatolani Faith	PHY/17/0813
7. Sasere Ebenezer Abiodun	PHY/18/1353

**D. Membership of Professional Bodies:** Member, Nigerian Institute of Physics (NIP)

**E. Publications:**

**1. Thesis/Dissertation**

1. Trace Elemental Concentration of Harmattan Dust in Ile-Ife. B. Sc. Dissertation submitted to Department of Physics and Engineering Physics, Obafemi Awolowo University, Ile-Ife (2008).
2. Variability of Mass and Elemental Concentrations of Airborne Particulate Matter with Atmospheric Parameters. M. Sc. Thesis Submitted to the Department of Physics and Engineering Physics, Obafemi Awolowo University, Ile – Ife (2012).
3. Source Identification of Particulate Matter in an Iron and Steel Smelting Factory Environment using Positive Matrix Factorization Receptor Modeling. Ph.D Thesis Submitted to the Department of Physics and Engineering Physics, Obafemi Awolowo University, Ile-Ife (2016).

**4. Published Journals Articles**

1. Oyediran K. Owoade, Felix S. Olise, **Ogundele L. Tunde**, Olusegun G. Fawole, .Hezekiah B. Olaniyi (2012). Correlation between Particulate Matter Concentrations and Meteorological Parameters at a site in Ile-Ife, Nigeria. *Ife Journal of Science*. 14(1): 83-93
2. Owoade, O K, Jegede O O, Ayoola M A, Fawole O G, Bashiru M I, Olise F S, **Ogundele, L. Tunde**. (2013). Concentrations of Particulate Matter from an Iron-Smelting Plant located along a busy highway in Southwestern Nigeria. *Ife Journal of Science* 15(1): 31- 39.
3. Owoade, O K, Fawole O G, Olise F S, **Ogundele, L. Tunde**, Olaniyi H B, Almeida S M, Ho M D. (2013). Characterization and Source Identification of Airborne Particulate Loadings at Receptor Site-Classes of Lagos Mega-City, Nigeria. *Journal of Air and Waste Management Agency* 25(2): 89 – 97.
4. Kayode O. Owoade; Felix S. Olise; **Ogundele, L. Tunde**; Olusegun G. Fawole; Bamidele H. Olaniyi; Olugbenmiga O. Jegede; Muritala A. Ayoola; Muniru I. Bashiru (2015). Chemical compositions and source identification of particulate matter (PM<sub>2.5</sub> and PM<sub>2.5-10</sub>) from a Scrap Iron and Steel Smelting Industry along the Ife-Ibadan Highway, Nigeria. *Atmospheric Pollution Research* 6: 107-119
5. Kayode O. Owoade, Philip K. Hopke, Felix S. Olise, Olanisun O. Adewole, **Ogundele, L. Tunde**, Olusegun G. Fawole. (2016). Source apportionment analyses for fine (PM<sub>2.5</sub>) and coarse (PM<sub>2.5-10</sub>) mode particulate matter (PM) measured in an urban area in Southwestern Nigeria (2016). *Atmospheric Pollution Research* 7: 843-857

6. **Ogundele, L. Tunde**, Kayode O. Owoade, Felix S. Olise, Philip K. Hopke (2016). Source Identification and Apportionment of PM<sub>2.5</sub> and PM<sub>2.5-10</sub> in Iron and Steel Scrap Smelting Factory Environment Using PMF, PCFA and UNMIX Receptor Models. *Environmental Monitoring and Assessment*, 188: 571-595
  
7. **Ogundele, L. Tunde**, Kayode O. Owoade, Philip K. Hopke; Felix S. Olise (2017). Heavy Metals in Industrially Emitted Particulate Matter in Ile-Ife, Nigeria. *Environmental Research* 156: 320 - 325.
  
8. **Ogundele, L. Tunde**, Tosin R. Olasinde, Oyediran K. Owoade, Felix S. Olise. (2018). Composition and source identification of chemical species in dust from selected indoor environments in Ile Ife, Nigeria. *Earth System and Environment*. 2: 323 - 330.
  
9. Ayeku P. Oluwagbenga, **Ogundele, L. Tunde**, and Adeniyi, I. Funsho. (2019). A Study of Heavy Metals Pollution in the Coastal Marine Sediment of Ondo State, Nigeria. *Current Journal of Applied Science and Technology*. 34 (1). 1 – 10.
  
10. **Ogundele L. Tunde**, Isaiah A. Adejoro, Patrick O. Ayeku (2019). Health risk assessment of heavy metals in soil samples from an abandoned industrial waste dumpsite in Ibadan, Nigeria. *Environmental Monitoring and Assessment*. 191: 290 – 300
  
11. Olaitan Pelumi Abiodun, Oyediran Kayode Owoade, Olaniran Temitope Oladipo, Oludare Oladipo Agboola, Akinwumi Johnson, Akinloye, **Ogundele L. Tunde**, Olusegun Gabriel Fawole, Felix Samuel Olise, (2019). Morpho-Physiological Characteristics of *Vigna unguiculata* [L.] Walp grown in a Controlled Environment using Effluents from a Beverage Bottling Company. *Environmental Science and Pollution Research*. 26: 28775 - 28786.
  
12. **Ogundele L. Tunde**, Patrick O. Ayeku, Samuel O. Inuyomi, Oluwakunle M. Ogunsakin, Isaiah A. Adejoro (2019). Assessment of naturally occurring <sup>40</sup>K, <sup>232</sup>Th and <sup>238</sup>U and their associated radiological hazard indices in soils used for building in Ondo West Local Government Area, Southwestern, Nigeria. *An International Journal: Environmental Quality and Assessment* 37:11-17.
  
13. Felix S. Olise, **Ogundele L. Tunde**, Mudasiru A. Olajire, Oyediran K. Owoade, Fatai A. Oloyede, Olusegun G. Fawole, Godwin C. Ezech. (2019). Biomonitoring of environmental pollution in the vicinity of iron and steel smelters in southwestern Nigeria using transplanted lichens and mosses. *Environmental Monitoring and Assessment*, 199: 691 – 704.
  
14. **Ogundele L. Tunde.**, Oladejo O. Felix, Akintola A. Caleb (2020). Concentrations, source identification and human health risk of heavy metals in the road dust collected from busy junctions in Osogbo Southwest, Nigeria *An International Journal: Environmental Quality and Assessment* 38: 24 – 36.

15. Olubusayo. F. Oladejo, Stephen. F. Olukotun, **Ogundele L. Tunde**, Sejlo. T. Gbenu, Mutiu. A. Fakunle (2020). Radiological Risk Assessment of Naturally Occurring Radioactive Materials (Norms) From Selected Quarry Sites in Edo State, South-South, Nigeria. *Environmental Earth Science* 79: 93-101.
16. **Ogundele L. Tunde**, Patrick O. Ayeku, Adebisi S. Adebayo, Ayodele P. Olufemi, Isaiah A. Adejoro (2020), Pollution Indices and Potential Ecological Risks of Heavy Metals in the Soil: A case study from Municipal Wastes Site in Ondo State, Southwestern, Nigeria *Polytechnica* doi: 10.1007/s41050-020-00022-6.
17. **Ogundele L. Tunde**, Ayeku, Patrick Oluwagbenga (2020). Assessment of Heavy metals Contamination and Sediment quality in Ondo coastal marine area, Nigeria. *Journal of African Earth Sciences* <https://doi.org/10.1016/j.jafrearsci.2020.103903>
18. Oyediran K. Owoade, **Ogundele L. Tunde**, Felix S. Olise, Abigail T. Odekunle, Pelumi O. Abiodun, Godwin C. Ezech, Philip K. Hopke (2020). Contamination and Source Identification of the Elemental Contents of Soil Samples from Municipal and Medical Waste Dumpsites in Ile-Ife, Nigeria. *An International Journal: Environmental Quality and Assessment*, 40: 31 – 41. doi:10.6092/issn.2281-4485/10599.
19. Felix S. Olise **Ogundele L. Tunde**, Olajire M. Ademola, Oyediran K. Owoade (2020). Seasonal variation, Pollution Indices and Trajectory Modeling of bio-monitored airborne particulate around two smelting factories in Osun State, Nigeria. *Aerosol Science and Engineering* doi: 10.1007/s41810-020-00070-6.
20. **Ogundele L. Tunde**, Patrick O. Ayeku (2020) Source apportionment and associated potential ecological risk assessment of heavy metals in coastal marine sediment samples in Ondo, Southwest, Nigeria. *Stochastic Environmental Research and Risk Assessment* doi: 10.1007/s00477-020-01848-3.
21. Felix S. Olise, **Ogundele L. Tunde**, Ifeoluwa O. Ogungbile, Samuel A. Adejo, Oyediran K. Owoade, Olumuyiwa S. Falade. (2020). PIXE characterisation of some natural and industrial spices: A nutritional assessment study *Ife Journal of Science and Technology* 4(2): 1 – 15.
22. **Ogundele L. Tunde**, Oladotun Afolabi Oluwajana, Abimbola Chris Oguntimele, Samuel Oluwagbenga Inuyomi, (2021). Heavy metals, radionuclides activity and mineralogy of soil samples from an artisanal gold mining site in Ile-Ife, Nigeria: Implications on human and environmental health. *Environmental Earth Sciences* 80: 202- 217.
23. Olubusayo F. Oladejo., **Ogundele L. Tunde.**, Samuel O., Inuyomi., Olusegun O. Alabi. (2021). Heavy metals concentration and naturally occurring radionuclides in soil affected by

solid wastes in Osogbo metropolis, Nigeria. *Environmental Monitoring and Assessment* doi.org/10.1007/s10661-121-09480-6. (Switzerland)

24 .Ayeku P. Oluwagbenga, Adeniyi F. Israel, **Ogunddele L. Tunde**, Adefemi O. Ajibare, Aigbadon O. Godwin (2021). Textural Characteristic and Geochemical composition of Tropical Coastal Marine Sediment: A case study of Transgressive mud beach, Bight of Benin, Nigeria. *Environmental Monitoring and Assessment*.193, 729 - 741

25.**Ogundele L. Tunde.**; Okunlola O A; Mohannad .; Istvan Sucs; Yacouba K. (2022). Sources and Sectorial Trend Analysis of CO<sub>2</sub> Emission Data in Nigeria Using a Modified Mann-Kendall and Change Point Detection Approaches. *Energies*. 15, 766- 788.

26.Adebisi S. Adebayo · Ayodele P. Olufemi · **Lasun T. Ogundele** · Omowunmi Q. Okunnuwa · Adekunle B. Toyeye · Christopher J. Olowookere (2022) Ecological and human health risk assessments of metals in soil and tailing from Ife-Ijesha gold mining area, Southwest Nigeria. *Environmental Earth Sciences* <https://doi.org/10.1007/s12665-022-10581-9>.

27. Raymond L. Njinga, **Ogundele L. Tunde**, Adebayo S. Adebisi, Michael A. Olatunji, Olufemi P. Ayodele, Olowookere J. Christopher, Aladeniyi Kehinde, Alcides Pereira, Arogunjo A. Muiywa Victor M. Tshivhase.(2022). Distribution Dynamics and Descriptive Statistical Analysis of Radionuclides in the Farmland Soils Near Mining Areas in Southwestern Nigeria. *Environmental Geochemistry and Health* DOI: <https://doi.org/10.21203/rs.3.rs-2092463/v1>.

28\* Olubusayo F. Oladejo, Stephen F. Olukotun, Sejlo T. Gbenu, **Ogundele L. Tunde** Samuel O. Inuyomi, Mutiu A. Fakunle (2023) Evaluation of Natural Radioactivity and Associated Radiological Risks of Farmland Soil: A Study of a Campus Farmland of Osun State University, Nigeria Polytechnica <https://doi.org/10.1007/s41050-023-00043-x>.

29\* **Ogundele L. Tunde**, Oladejo Olubasyo. Felix, Ayeku Patrick. Oluwagbenga (2024) Concentrations and Probable Health risks of Potentially Toxic Metals (Pb, Cd and Cr) in Some Nigerian lipstick products. *Journal of Trace Elements and Minerals* 8 (2024) 100142 <https://doi.org/10.1016/j.jtemin.2024.100142>

(\* published after the last promotion)

#### 5. Manuscript Submitted for Publication:

1. Ogundele L Tunde, Adejayan Joyline Onaopemipo, (2024) Radionuclides (<sup>226</sup>Ra, <sup>232</sup>Th and <sup>40</sup>K). Activity and associated Radiological indices of two commonly used brands of Nigerian Cements. Manuscript submitted to *Ife Journal of Science and Technology*

#### 8. Current Research:

(i Determination of water soluble ionic species in sediment samples

(ii) Biomonitoring of heavy metals along traffic corridors in Ondo City

9. Technical Reports: Nil

10. Papers and Work in Progress: Heavy metals in the Indoor Environment.

#### **F. Professional Accomplishment:**

- (i) Identify specific emission sources around the smelting factoring
- (iii) Health risks estimation of the exposed local resident around smelting environment.
- (iii) Ecological risk assessment of soil and sediment samples
- (iv) Radiological risk assessment some building materials

#### **G. Contribution to Knowledge**

In general, my research work has been on the application of Nuclear and Atomic based analytical techniques to various environmental samples such as soil, sediment and particulate matter in various environments. The nuclear analytical techniques being routinely used are X-ray Fluorescence (XRF), Particle Induced X-ray Emission (PIXE), Atomic Absorption Spectroscopy (AAS), Instrumental Neutron Activation Analysis (INAA) techniques due to their versatility and multi-elemental capability. Apart from these, a major area of my research activity covers the application of factor analysis receptor models such as Principal Component Factor Analysis (PCFA) and non-negativity constrained Positive Matrix Factorization (PMF) to source identification and apportionment of the instrumental elemental data. I had also applied receptors models to elemental data of the coastal sediments and soil impacted by the municipal and medical waste. A major research output had also been major in air pollution meteorology and trajectory of the airborne particulate pollutants. These had led to research articles published in highly referenced local and international journal and they are frequently cited.

#### **H. Conferences, Seminars and Workshops Attended with Dates:**

- (1) 34<sup>th</sup> Annual National Conference, Nigerian Institute of Physics, held at the University of Ibadan, 9-13 November, 2010.
- (2) Faculty of Science Annual International Conference, Obafemi Awolowo University Ile-Ife, Nigeria. October 14 – 16, 2012.
- (3) Workshop on Ion Beam Analysis, Principles and Applications Centre for Energy Research and Development, Obafemi Awolowo University, Ile-Ife, Nigeria. November, 11 – 13, 2014.
- (4) 37<sup>th</sup> Annual National Conference, Nigerian Institute of Physics, held at the Oduduwa University, Ipetumodu, Ile-Ife, 22 - 25 September, 2014.
- (5) Faculty of Science Annual International Conference, Obafemi Awolowo University, Ile-Ife, Nigeria. September, 4 - 8, 2016.
- (6) A2-day workshop on Best Practices in Academics/Clinical Department Administration and Scholarship. University of Medical Sciences, Ondo. 9-10, July, 2018.
- (7) Advanced Digital Appreciation Programme for Tertiary Institutions (Statistical Packages for Social sciences), University of Medical Sciences, Ondo. 26 – 30 November, 2018
- (8) Faculty of Science Annual International Conference, Obafemi Awolowo University, Ile-Ife, Nigeria. October 2 - 4, 2019.

- (9) 12<sup>th</sup> Institute of Ecology and Environmental Studies, Obafemi Awolowo University, Ile Ife. 5 -7 June, 2023.
- (10) 44th Annual National Conference, Nigerian Institute of Physics, held at the Lagos State University, Ikorodu Lagos State 8 -12 May, 2023.
- (11) 1st Faculty of Science Conference, held at University of Medical Sciences, Ondo, 28th – 31st, 2023
- (12) 2<sup>nd</sup> Faculty of Science Conference, held at University of Medical Sciences, Ondo, 23 -26 September, 2024

#### **I. Current Research Activities:**

- (i) Biomonitoring of heavy metals along the heavy-traffic corridors in Ondo City, Southwest, Nigeria
- (1) Measurement of Noise level in different environments in Ondo, City

#### **G. Current Relevant Information**

1. Services within the Department
  - i. Coordinator, Department of Physics, August, 2017 – April, 2019
  - ii. Part-Adviser 200L Physics Students
  - iii. Departmental SIWES Coordinator,
  - iv. Acting HOD. August, 2021 till date
  - v. Chairman, Departmental Review Committee
  - vi. Departmental Coordinator, Postgraduate Programme
2. Services within the Faculty:
  - i. Member, Faculty Welfare Committee
  - ii. Chairman, Faculty Research Seminar Committee
  - iii. Member, Faculty Curriculum Review Committee
  - iv. Member, Committee of Head of Department
  - v. Representative of Faculty of Sciences in Faculty of Allied Health Sciences
3. Services within the University:
  - i. Member, Board of Postgraduate School Committee.
  - ii. Member, Interview Panel (10 - 11, July, 2018).
  - iii. Member, Interview Panel (14, October, 2018).
  - iv. Coordinator, Physics, Department of Science Laboratory Technology.
  - v. Associate Lecturer, Department of Environmental Health Sciences
  - vi. Member, Board of Postgraduate School Curriculum Committee
  - vii. Member, University Senate
4. Services outside UNIMED:
  1. i. Resource Person, Peace House Ile-Ife.
  - ii. Treasurer, Federal Low Cost Housing Estate, Ita Osa, Ondo Road, Ile Ife.
  - iii. Public Relation Officer. NIP Ondo Chapter.
  2. Reviewers
    - i. International Journal of Environmental Analytical Chemistry
    - ii. Euro-Mediterranean Journal of Environmental Sciences.
    - iii. Journal of Geosciences and Environmental Protection



iv	Toxins Review
v	Stochastic Environmental Research and Risk Assessment
vi	Environmental Earth Science