

UNIVERSITY OF MEDICAL SCIENCES, ONDO, NIGERIA

CURRICULUM VITAE

A. Personal Data

- 1. Full Name (Surname first):** ADEYEMI Adewale Fatai
- 2. Details of Contact Address:**
- (a) E-mail addresses:** adeadeyemi@unimed.edu.ng;
adeyemiwale2011@yahoo.com
- (b) Mobile Phone Numbers:** +2348037275906;
+2348130725126
- 3. Nationality:** Nigerian
- 4. Marital Status:** Married
- 5. Date of Assumption of Duty:** 1st December, 2015
- 6. Rank/ Status on First Appointment:** Lecturer II
- 7. Present Status:** Senior Lecturer
- 8. Date of Last Promotion:** 1st October, 2021
- 9. Faculty:** Science
- 20. Department:** Chemistry

B. Educational Background

1. Higher Educational Institutions Attended (with dates)

- (i).** Obafemi Awolowo University, Ile-Ife: 2013 – 2017
- (ii).** Obafemi Awolowo University, Ile-Ife: 2010 – 2013
- (iii).** Obafemi Awolowo University, Ile-Ife: 2003 – 2008

2. Academic/Professional Qualifications and Distinctions Obtained with Dates:

- (i).** Ph.D. Applied Chemistry 2017
- (ii).** M.Sc. Chemistry 2013
- (iii).** B.Sc. Chemistry (2nd Class (Upper Division)) 2008

3. Other Distinctions and Awards with Dates:

(a) Scholarships:

- (i).** Federal Government Scholarship Award: 2001
- (ii).** Ondo State Government Scholarship Award: 2005 – 2007

(b) Research Grants: TWAS/COSMOTTECH grant awarded to F.M. Adebiyi (supervisor) and A.F. Adeyemi (Student/Mentee) as financial research grant for Scientists (RGANO:11-081RG/CHE/AF/AC_1-UNESCOFR:3240262666) for the execution of my Ph.D work

C. Work Experience with Dates

1. Previous Work Experience in Other Universities:

(i). Lecturer II – Wesley University Ondo (2014 – 2015)

2. Work Experience in University of Medical Sciences, Ondo:

(i). Lecturer II 2015 – 2018

(ii). Lecturer I 2018 – 2021

(iii). Senior Lecturer 2021 Till Date

3. Courses Taught Till Date (UNIMED)

| Course Code | Course Title | Unit(s) |
|--------------------|---|----------------|
| CHM 111 | General Chemistry I | 3 |
| CHM 121 | General Chemistry II | 3 |
| CHM 112 | Practical Chemistry I | 1 |
| CHM 122 | Practical Chemistry II | 1 |
| CHM 211 | Physical Chemistry I | 2 |
| CHM 213 | Inorganic Chemistry I | 2 |
| CHM 214 | Experimental Physical & Inorganic Chemistry | 1 |
| CHM 222 | Organic Chemistry I | 2 |
| CHM 223 | Experimental Organic Chemistry I | 1 |
| CHM 314 | Petrochemistry | 2 |
| CHM 316 | Colour Chemistry & Technology | 3 |
| CHM 317 | Industrial Chemical Process I | 3 |
| MCM 311 | The Medicinal Chemistry of Drug Development | 3 |
| CHM 321 | Atomic & Molecular Structure & Symmetry | 3 |
| CHM 322 | Inorganic Chemistry II | 3 |
| CHM 323 | Organic Chemistry II | 3 |
| CHM 328 | Experimental Organic Chemistry | 1 |
| CHM 329 | Experimental Inorganic Chemistry | 1 |
| ICH 321 | Unit Operation | 2 |
| ICH 322 | Process Science | 2 |
| CHM 412 | Reactions Kinetics | 2 |
| CHM 416 | Seminar | 1 |
| CHM 417 | Industrial Training (SIWES) | 6 |
| CHM 413 | Electrochemistry | 2 |
| CHM 421 | Research Project | 6 |

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| CHM 424 | Organic Synthesis | 2 |
| CHM 426 | Industrial Chemical Process II | 3 |
| POT 212 | Biomaterials | 2 |
| CHM 834 | Atmospheric Pollution Chemistry | 2 |
| CHM 828 | Analytical Environmental Toxicology | 2 |
| CHM 841 | Separation Methods of Analysis | 3 |
| MCH 816 | Separation and Systematic Identification of Organic Compounds in Laboratory | 2 |

5. Graduate Student Supervision within the Current Session:

(i). Kazeem AFEN (SPGS26238)

6. Current Undergraduate Supervision:

(i). Moyinoluwa Tolulope ABIOYE (CHE/19/1863)

D. Membership of Professional Bodies:

(i). Member, Chemical Society of Nigeria

E. Publications

1. Theses/Dissertations:

- (i). Investigation of the Performance of a Locally Fabricated Packed Bed Reactor for the Re-refining of Used Lubricating Oil (2017) — Ph.D.
- (ii). Determination of the Contamination Profile of Groundwater in the Vicinity of Petroleum Products Retailing Stations in Nigeria (2013) — M.Sc.
- (iii). Characterization of Physicochemical and Petroleum Hydrocarbon of Oil-impacted Soils around a Refined Petroleum Products Depot in Nigeria (2008) — B.Sc.

2. Published Journals Articles:

- (i). Adebisi, F.M. and **Adeyemi, A.F.** (2010). Characterization of Petroleum Hydrocarbon-Contaminated Soils around a Petroleum Products Depot. *Chemistry and Ecology, Taylor & Francis, UK*, **26**(2): 137–146.
- (ii). Oluyemi, E.A., **Adeyemi, A.F.** and Olabanji, I.O. (2012). Removal of Pb²⁺ and Cd²⁺ Ions from Waste Waters Using Palm Kernel Shell Charcoal (PKSC), *Research Journal in Engineering and Applied Sciences, USA*, **1**(5): 307–313.
- (iii). Adebisi, F.M., Oluyemi, E.A., **Adeyemi, A.F.**, Akande, A.A. and Ajayi, O.S. (2015). Measurement of Selected Polycyclic Aromatic Hydrocarbons in Petroleum Products

Contaminated Soils Using Gas Chromatography. *Petroleum Science and Technology*, Taylor & Francis, USA, **33**: 62–71.

- (iv). Adebisi, F.M. and **Adeyemi, A.F.** (2015). Determination of the Contamination Profile of Groundwater in the Vicinity of Petroleum Products Retailing Stations in Nigeria. *Management of Environmental Quality: An International Journal*, Germany, **26**(2): 250–269.
- (v). Adebisi, F.M., Ezech, G.C., **Adeyemi, A.F.** and Oboh, I.B. (2015). Trace Elements in Particulate Matter of Ambient Air at Petroleum Filling Stations. *Environmental Chemistry and Toxicology*, Taylor & Francis, UK, **97**(7): 847-856.
- (vi). Adebisi, F.M., **Adeyemi, A.F.**, Koya, O.A., Mastrolitti, S. and Santoro, A. (2017). Composition Changes During Re-refinement of Used Lubricating Oils Using Fabricated Packed-Bed Reactor. *European Chemical Bulletin*, **6**(10): 445-455.
- (vii). **Adeyemi, A.F.**, Adebisi, F.M. and Koya, O.A. (2017). Evaluation of Physico-chemical Properties of Re-refined Lubricating Oils Obtained from Fabricated Packed-bed Reactor. *Petroleum Science and Technology*, Taylor & Francis, **35**(16): 1712-1723.
- (viii). Adebisi, F.M., **Adeyemi, A.F.** and Koya, O.A. (2018). Removal of Metals from Flat Lubricating Oils Using a Fabricated Packed-bed Reactor. *Petroleum Science and Technology*, Taylor & Francis, **36**(6): 419-428.
- (ix). Oahimire, J.I., **Adeyemi, A.F.**, and Oloja, S.V. (2021). Computational Analysis of Entropy Generation and Heat Transfer on Oscillatory MHD Blood Flow in the Presence of Thermal Radiation, *Journal of NAMP*, **59**: 89-94.
- (x). **Adeyemi, A.F.**, Afolabi, A.O., Usman, Z.A. and Adesina, I.A. (2021). Solvents Fractionation, Characterization and Evaluation of Antimicrobial Activities of Beeswax from *Apis mellifera*. *International Journal of Research and Innovation in Applied Science*, **6**(4): 82-89.
- (xi). Ololade, Z.S., Anuoluwa, I.A., **Adeyemi, A.F.** and Uyaboerigba D.I. (2021). Synergistic Efficacy of Phytochemical, Antioxidant and Bactericidal Properties of the Aerial Essential Oil of *Laggera crispate*, *Pharmacognosy Journal*, **13**(5): 1304-1311.
- (xii). Adebayo, S.A., Akinola, B.S. and **Adeyemi, A.F.** (2021). Groundwater Contamination and Human Health Risk Assessment from a Point Source Pollution in Ikire Community, Osun State Nigeria, *Sustainable Water Resource Management*, Springer, 7(5). Available online at <https://doi.org/10.1007/s40899-021-00565-1>

Publications after the Last Promotion

- (i).** **Adeyemi, A.F.** and Olasunkanmi, L.O. (2022). Evaluation of the Efficiency of ZnCl₂ Activated Cocoa Pod Husk Charcoal on the Removal of Cu²⁺, Cd²⁺ and Pb²⁺ Ions from Aqueous Solution, *Journal of Dispersion Science and Technology, Taylor & Francis*, Ahead-of-print: 1-10. Available online at <https://doi.org/10.1080/01932691.2022.2050253>
- (ii).** **Adeyemi, A.F.** (2022). Evaluation of Sodium and Potassium Soaps Prepared from Beeswax: Adding Value to Material, *International Journal of Chemistry and Materials Research, Conscientia Beam*, **10**(1):1-10. DOI: 10.18488/64.v10i1.3076.
- (iii).** Oladebeye, A.O., Adebayo, J.O., **Adeyemi, A.F.** and Osungbemi, W.B. (2023). Potential Phytoremediation of Designated Heavy Metal-contaminated Soils by Jute (*Corchorus capsularis*) and Scent Leaf (*Ocimum gratissimum*), *IOSR Journal of Environmental Science Toxicology and Food Technology*, 17(1): 01-09. DOI: 10.9790/2402-1701020109

3. Articles Accepted for Publication:

4. Manuscript Submitted for Publication:

- (i).** Oladebeye, A.O., Margaret Moji Nomiye, Miracle Osisike, Kabirat Omotoyosi Gbadamosi, **Adeyemi, A.F.**, Adeleke Omodunbi Ashogbon and Aderonke Adenike Oladebeye (2022). Functional Properties of Co-precipitated Jack Bean Starch-Based Magnetic Nanoparticles Derivatives, *Journal of Applied Polymer Science*

5. Papers and Work in Progress:

- (i).** Investigation of the Quality of Dye from Henna Leaves under Temperature, pH and Mordant Variation.
- (ii).** Efficacy of Ethanol Production from Cocoa Pod Husk
- (iii).** Evaluation of Varieties of Soaps Prepared from Methylacetate Fraction of Beeswax for Industrial and Domestic Uses.
- (iv).** Study on the Production of Biodiesel from Methylacetate Fraction of Beeswax Via Transesterification.
- (v).** Chromatographic Fractionation and Characterisation of Beeswax.
- (vi).** Efficacy of Balm Production from Beeswax

F. Professional Accomplishment:

As a Chemist and Researcher, my areas of specialization span Analytical, Organic and physical Chemistry with special interest in Waste Management, Natural Products, Synthesis and Applications. I have successfully fabricated an efficient small scale packed-bed reactor for recycling of used lubricating oils. This will serve as basis for making efforts towards optimising the operational conditions of the reactor for better recycling of used oils as well as increasing its capacity for large scale used oils recycling. I have also done some findings towards making wealth out of waste materials. Additionally, I have worked on the impacts of anthropogenic influences on water, food and waste management. These studies reveal the impending dangers in consumption of contaminated water and/or food items and proffer means of reducing the attendant negative consequences. Up to press, I have fifteen publications in peer reviewed international and local journals.

G. Conferences, Seminars and Workshops Attended with Dates:

- (i).** UNIMED Library Research Workshop, 22nd June, 2022 (2nd batch)
- (ii).** Workshop on Pedagogy Teaching and Learning in Higher Education for Academic Staff Members held at the University on the 23rd to 25th November, 2021 (2nd batch)
- (iii).** Workshop on Ethical Issues in Academia, Research and Publication, UNIMED, 19th May, 2021
- (iv).** UNIMED Library Workshop, 2nd March, 2021
- (v).** Training on Courseware Development, Organised by Faculty of Science, UNIMED, 19th January, 2021
- (vi).** Faculty of Science, Obafemi Awolowo University International Conference: 2nd – 5th October, 2018
- (vii).** 6th APIEXPO Africa International Conference, Abuja 2018: Beekeeping Industry for Sustainable Development, Wealth Creation & Economic Diversification (25th – 29th September, 2018)
- (viii).** Workshop on Advanced Digital Appreciation Programme for Tertiary Institutions – Statistical Package for Social Sciences (SPSS), *Digital Bridge Institute*, held at the University of Medical Sciences, Ondo (20th – 24th November, 2017)
- (ix).** Workshop on Advanced Digital Appreciation Programme for Tertiary Institutions – Microsoft Office, *Digital Bridge Institute*, held at the University of Medical Sciences, Ondo (28th November – 2nd December, 2016).

H. Current Relevant Information

1. Services within the Department

- (i). Regular Attendance at the Departmental Board Meetings (2016 to Date)
- (ii). Laboratory Coordinator (2020 Till Date)
- (iii). Secretary, Committee on Curriculum Review and Establishment of programmes (June – July, 2020)
- (iv). Departmental Examination Officer (2016 – 2020)
- (v). Departmental SIWES Coordinator (2018 – 2021)
- (vi). Member, Departmental Committee on Curriculum Review and Laboratory Requirements: (September – October, 2017)
- (vii). Secretary, Committee on Re-evaluation of CHM 112 & CHM 122 Practical Manuals & Workbooks and Assessment of Used Chemicals & Broken Glassware during the Classes (November – December, 2017)

2. Services within the Faculty

- (i). Regular attendance at the Faculty Board of Science Meetings (2015 to Date)
- (v). Member, Faculty Committee on SIWES (2018 –2021)
- (ii). Member, Faculty Welfare Committee (2017 Till Date)
- (iii). Member, Faculty Research and Proposal Committee (2017 – 2018)
- (ii). Member, Faculty Research and Development Committee (2016 – 2017)

3. Services within the University:

- (i). Examination Invigilation (2016 Till Date)

4. Services outside UNIMED

- (i). Reviewer of Manuscript, Chemistry Africa (CHAF), Springer (2022)
- (ii). Reviewer of Manuscript, Annals of Science and Technology (the Journal of the Nigerian Young Academy) (2022)

I. Contributions to Knowledge

As an Applied Chemist, my research interests have focused mainly on three aspects of Chemistry viz; Environmental, Physical and Organic Chemistry with bias to Petroleum, Fuel, Natural Product and Industrial Chemistry. Some of the findings have put more light on the impacts of anthropogenic activities on the ecosystem and also on the risks of exposure to petroleum products via drinking and domestic water, food, air and soil. The developed small scale environmental friendly method for recycling of used oils will serve as basis for

the development of large capacity and efficient reactor as well as save the environment from degradation caused by discharge of used oil to the environment and the used of toxic chemicals in treatment of the oil. My recent works on beeswax have thrown light on adding value to this natural material via its conversions into useful products as well as its fractionation into simpler components.