

UNIVERSITY OF IBADAN
DEPARTMENT OF PHYSICS
CURRICULUM VITAE

I. Personal Data

- (a) Name: AYoola Adeolu Olusola
(b) Date of Birth: 20 July, 1983
(c) Department: Physics
(d) Faculty: Science
(e) Contact Details:
(i) Address: Department of Physics,
University of Ibadan,
Ibadan.
(ii) E-mail: ao.ayoola@mail1.ui.edu.ng;
ayoolaadeolu2010@gmail.com
(iii) Telephone: +2348153061113, +2348052390162
(f) Present Post: Lecturer II
(g) Area of Specialization: Condensed matter Physics

II. University Education (with dates)

- (a) University of Ibadan, Ibadan, Nigeria 2019 – Till date
(b) University of Ibadan, Ibadan, Nigeria 2016 – 2017
(c) University of Ibadan, Ibadan, Nigeria 2011 – 2015

III. Academic Qualifications (with dates and granting bodies)

- (a) Ph.D. [Condensed Matter Physics], University of Ibadan In view
(b) M. Sc. Physics [Solid State Physics], University of Ibadan
Distinction 2017
(c) B.Sc. Physics, University of Ibadan
First Class 2015

IV. Professional Qualifications and Diplomas (with dates)

V. Scholarships, Fellowships and Prizes (with date, in respect of Undergraduate and Postgraduate work only)

- (a) ASESANET Intra-Africa Mobility Grant 2024: A Research visit award to the University of Ghana, sponsored by the International Centre for Theoretical Physics (ICTP), Italy.
(b) Award of scholarship as a “University Scholar” (2013/2014 session)
University of Ibadan
(c) Seyi Makinde Scholarships Award for Oyo State Students 2015.

VI. Honours, Distinctions and Membership of Learned Societies

- (a) Best teacher of the year (2018) Royal Diadem School, El-Shadai, Alapata, Ojoo, Ibadan

- (b) Best staff of the year (2008), Obasanjo Breeder Farms Nigeria Limited, Hatchery Section Igboora.

VII. Details of Teaching/Work Experience

(a) Number of Years of Teaching at the University Level: 5 years.

(b) Work Experience

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| (i) Lecturer II | 31 October, 2023-Till date |
| (ii) Assistant Lecturer, Department of Physics,
(iii) University of Ibadan. | 31 October, 2019 – 30 October, 2023 |
| (iv) Teaching Assistant, Department of Physics,
University of Ibadan. | March 2016 – September, 2018 |

(b) Teaching Experience at University of Ibadan

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| (i) Participated in teaching the following courses: | |
| PHY 118 – Experimental Physics I | 2021 – Till date |
| PHY 103 – Introductory Heat and Thermodynamics | 2021 – Till date |
| PHY 271 – Physics for Biology I, | 2021 – Till date |
| PHY 409 – Modern Optics, | 2021 – Till date |
| PHY 408 – Electromagnetic Theory | 2024 – Till date |

(c) Details of Teaching/Work Experience (outside University of Ibadan)

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| Physics and Mathematics teacher
Royal Diadem School, El-Shadai, Alapata, Ojoo, Ibadan | November, 2015-July, 2018 |
| Hatchery attendant
Obasanjo Breeder Farms Nigeria Limited,
Hatchery Section Igboora | November, 2005- October, 2010 |
| Bakery Attendant
Owotutu Investment Nigeria Limited, Igboora. | April, 2005-November, 2005 |

(d) Administrative Responsibilities

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| (i) Secretary, Department of Physics, Accreditation Committee | (2024) |
| (ii) Secretary, Department of Physics Research and Innovation Committee | (2024 – Till date) |
| (iii) Member, Department of Physics, Quality Assurance | (2024 – Till date) |
| (iv) Member, Department of Physics Information technology Committee | (2024 – Till date) |
| (v) Secretary, Department of Physics Academic Staff Committee | (2023 – Till date) |
| (vi) Member, Department of Physics Seminar Committee | (2023 - Till date) |
| (vii) Secretary, Department of Physics Student and staff Disciplinary Committee (SSDC) | (2022 – Till date) |
| (viii) Member, Department of Physics Disciplinary Committee | (2021 - till date) |
| (ix) Member, Faculty of Science Workplace Wellness Committee | (2020 – Till date) |

(e) Community Service

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| (i) LOC: Mini African School for Electronic Structure Methods and Applications (Mini-ASESMA),
Density Functional Theory and Automation, University of Ibadan, 05 – 09 August, 2024.
Introduction to R for Data Science and Data Analytics organized by Osun R user Group, Nigeria
01 – 03 June 2023. | |
| (ii) Member, Faculty of Science Workplace Wellness Committee | (2020 – Till date) |

- (iii) Member, Audit Team, University Teachers' Cooperative, UI-Chapter 2024 – Till date
- (iv)

VIII. Research

(a) Completed

- (i) First Principle Investigation of Thermoelectric Properties of $\text{Bi}_2(\text{S}_{1-x}\text{Te}_x)_3$ via density Functional Theory (DFT)
- (ii) Effect of strain Engineering on the Band Gap, Fermi Energy and The effective mass of GaX (X= P, N, As, Sb and Bi)
- (iii) Formulation of a New Exchange-Correlation potential Functional for better band gaps in Density Functional theory (DFT).

(b) In progress

- (iv)
- (a) Atomistic Simulation of Metal-ion Batteries using Ab Initio Data.
- (b) Photo-catalysis materials for water-splitting
- (c) Investigation of Thermoelectric Properties of $\text{Bi}_2(\text{S}_{1-x}\text{Se}_x)_3$ via Density Functional Theory (DFT).
- (d) Investigation of Thermoelectric Properties of $\text{Bi}_2(\text{S}_{1-x}\text{Se}_x\text{Te}_x)_3$ via Density Functional Theory (DFT).
- (e)

(c) Project, Dissertation and Thesis

Formulation of a New Exchange-Correlation potential Functional for better band gaps in Density Functional theory (DFT).
(M. Sc. project, University of Ibadan, Ibadan) 2017.

IX. Publications

- (a) Books already published Nil
- (b) Chapters in books already published Nil
- (c) Articles that have already appeared in Refereed Conference Proceedings
- (d) Patents Nil
- (e) Articles that have already appeared in Learned Journals Nil
- (f) Books, Chapters in Books and Articles already accepted for Publication Nil
- (g) Technical Reports and Monographs Nil

X. Major Conferences Attended with Paper(s) Read

1. LOC: Mini African School for Electronic Structure Methods and Applications (Mini-ASESMA), Density Functional Theory and Automation, University of Ibadan, 05 – 09 August, 2024.
2. Introduction to R for Data Science and Data Analytics organized by Osun R user Group, Nigeria 01 – 03 June 2023.
3. Wentworth School of Computing and Data Science's Open house and AI Workshop for Africa organized by Wentworth Institute of Technology, USA 10 December, 2022.

4. Poster Presentation in 2022 Recent Developments in Electronic Structure (E22) organized by Columbia University, New York, 7 June, 2022.
5. Workshop on Electrochemical Energy and Storage: Theory, Experiments and Application organized by ICTP (online) 5-26 may, 2022.
6. Young Researchers' Workshop on Machine Learning for Materials organized by ICTP Italy, 9-13 May, 2022.
7. Machine Learning in Electronic Structure and Molecular Dynamics organized by East African Institute for Fundamental Research (EAI FR), Rwanda, October 2021- May 2022 (with certificate).
8. International Workshop on Computational Physics and Materials Science: Total Energy and Force Methods organized by ICTP, Italy 23-25 February, 2021 (with certificate).
9. The Book Publishing Process: An Elsevier Author Workshop 3rd June, 2020 (with certificate).
10. A Virtual Training on PedaL Online: Technology for Transformative Pedagogy, organized by the Partnership for Pedagogical Leadership in Africa (PedaL) in conjunction with the Partnership for African Social and Governance Research (PASGR), held on 27 July – 17 August, 2020.
11. Workshop on “Improving your research productivity”, organized by the Postgraduate College, University of Ibadan, in conjunction with the University of Johannesburg, South Africa, 23 - 24 May, 2019.
12. Capacity Building Workshop for Early Career and Postgraduate Researchers in Science and Technology (Sci-Tech), organized by the University of Ibadan & MacArthur Foundation, 14 – 16 May, 2019.
13. Training Workshop on Computational Studies and Molecular Dynamics Simulation in Scientific Research organized by the Postgraduate College, University of Ibadan, Ibadan, Nigeria, 29 April - 10 May, 2019

AYOOLA, Adeolu Olusola



Signature