

**UNIVERSITY OF IBADAN
CURRICULUM VITAE**

- I (a) Name: Titus Taofik Ogunseye
 (b) Date of Birth: 14 December, 1973
 (c) Department: Physics
 (d) Faculty: Science
- II (a) First Academic Appointment: Assistant Lecturer (1 April, 2009)
 (b) Present Designation Senior Lecturer
- III University Education (with dates):
 (a) University of Ibadan, Ibadan. 1993- 1998
 (b) University of Ibadan, Ibadan. 2004- 2008
 (c) University of Ibadan, Ibadan. 2009- 2016
- IV Academic Qualifications (with dates and granting bodies):
 (a) B.Sc. (Hons.) (Physics)- University of Ibadan, Ibadan. 1998
 (b) M.Sc. (Physics) - University of Ibadan, Ibadan. 2008
 (c) Ph.D. (Physics) - University of Ibadan, Ibadan. 2016
- V Professional Qualifications and Diplomas (with dates): Nil
- VI Scholarship, Fellowship and Prizes (with dates) in respect of Undergraduate and Postgraduate work only: Nil
- VII Honours, Distinction and Membership of Learned Societies:
 Member, Nigerian Institute of Physics
 Member, Science Association of Nigeria
- VIII. Details of Teaching/Work Experience:
 (a) Work Experience
 Assistant lecturer, University of Ibadan, Ibadan. 2009-2012
 Lecturer II, University of Ibadan, Ibadan. 2012- 2016
 Lecturer I, University of Ibadan, Ibadan. 2016 -2023
 Senior Lecturer, University of Ibadan, Ibadan. 2023 to date
- (b) Teaching Experience
 (i) Undergraduate:
 PHY 114: Basic Principles of Physics I (taught with 1 lecturer)
 PHY 202: Classical Physics I (taught alone)
 PHY 299: Experimental Physics III (taught with 3 lecturers)
 PHY 298: Experimental Physics II (taught with 3 lecturers)
 PHY 118: Experimental Physics I (taught with 8 lecturers)
 PHY 305: Numerical Computation in Physics (taught alone)
 PHY 312: Mathematical Methods for Physics II (taught alone)
 PHY 311: Mathematical Methods for Physics I (taught alone)
 PHY 313: Introduction to Special Relativity (taught alone)
 PHY 401: Classical Mechanics IV (taught alone)

	PHY 102: Basic Principles of Physics I	(taught with 1 lecturer)
	PHY 486: Geomagnetism	(taught with 1 lecturer)
(ii)	Postgraduate:	
	PHY 760: Laboratory & Field Experiments in Geophysics	(taught with 4 lecturers)
(iii)	Research Supervision	
	Completed:	
	B.Sc.	21
	M.Sc.	5
	Ongoing:	
	M.Sc.	1
c.	<u>Administrative Responsibilities:</u>	
(i)	400 level Coordinator, Department of Physics, University of Ibadan.	2013/2014 session
(ii)	Member, Department of Physics Counselling Team	2014/2015 to date
(iii)	Member, Department of Examination Results Committee	2014/2015 to date
(iv)	PHY 101 Laboratory Supervisor	2015/2016 to 2017/2018
(v)	Member, Faculty Board of Studies	2017/2018 session
(vi)	Member, Department of Physics Seminar Committee	2018/2019 session
(vii)	Member, Department of Physics Postgraduate Committee	2017/2018 session to date
(viii)	Chairman, Department of Physics Time-Table/Venue Committee	2020/2021 session to date
(ix)	400 L Students Adviser	2020/2021 session to date
d.	<u>Community Service:</u>	
(i)	Reviewer, Current Journal of Applied Science and Technology	2020
(ii)	Reviewer, Journal of Scientific Research and Reports	2021
(iii)	Faculty of Science Representative to ASUU Cooperative Society	2020 to date
(iv)	Editorial board, Journal of Earth Sciences	2022 to date

IX. Research

(a) Completed

- (i) Geophysical investigation of building foundation using electrical resistivity method.
- (ii) Development of a microcontroller based low distortion modified push-pull inverter.

(b) In Progress

(i) **Computation of speed of Topographic waves in homogeneous ocean**

Topographic Rossby waves are the waves generated in an ocean due to an effect of small bottom irregularities in the ocean. Topographic Rossby waves play an important role in the study of coastal ocean dynamics. Ocean model which is a representation in the form of equations or computer code is used to explain how the ocean works and to forecast how it may change in response to external forces. Studies on the dynamics of Topographic Rossby waves in an homogeneous ocean with different bottom slopes started in 2012 using numerical models. A software program and discretized equations will be used to compute the speed of propagation of Topographic Rossby waves in homogeneous ocean. This research is likely to terminate in 2024. The results obtained from this research work will be used for studying Open Ocean and coastal wave dynamics.

(ii) **Determination of The Thermodynamic Properties of The Earth's Interior**

An Adequate understanding of the Earth's interior requires determination of the Thermodynamic Properties of constituents minerals at very high temperatures and pressures. Seismic Earth models such as the Parametric Earth Model had been used for Thermodynamic Properties determination but these methods are only suitable for the Lower mantle. Thus, a better approach is needed for determining the Thermodynamic Properties of the Earth's interior. Research on the determination of the Thermodynamic Properties of the earth's interior started in 2009. Seismic data obtained from the Preliminary Reference Earth Model Database have been interpreted and analyzed to determine the Thermodynamic properties at each depth in the Earth's interior. Improved seismic models will be used to determine thermodynamic properties under extreme conditions. This research is likely to terminate in 2024. The results obtained from this research work will be applied to many other problems in the Earth's deep interior.

(c) Project, Dissertation and Thesis

- (i) **Ogunseye T.T.** (2008). Numerical modeling to study the effects of bottom irregularities on steady flows in an homogeneous ocean. M.Sc. Dissertation, University of Ibadan, 80pp.
- (ii) **Ogunseye T.T.** (2016).Computation of thermodynamic properties of earth's interior using selected models. Ph.D. Thesis, University of Ibadan, 131 pp.

X. Publications:

- (a) Books already published: Nil
- (b) Chapters in Books already published: Nil
- (c) Articles that are already appeared in Refereed Conference Proceedings: Nil
- (d) Patents and copyrights: Nil
- (e) Articles that have already appeared in learned journals:

1. **Ogunseye, T.T.** and Adewole, O.O. (2011). Computational analysis of the governing equations of the topographic waves in a homogeneous ocean. *International Journal of Computer Science and Telecommunication* Vol. 2:23-25.
2. **Ogunseye, T.T.**, Olurin, O.T., Adekunle, G.S. and Olowofela, J.A. (2015). Estimation of magnetic basement depth of Oyo area from aeromagnetic data. *Journal of the Nigerian Association of Mathematical Physics*. Vol. 30: 181-186.
3. Ogunseye, A.A. and **Ogunseye, T.T.** (2015). Development of a 12/24 volts push-pull inverter system. *Journal of Electrical and Electronics Engineering*. Vol. 10. No. 6: 16-21.
4. Ogunseye, A.A. and **Ogunseye, T.T.** (2016). Development of a microcontroller based low distortion modified push-pull inverter. *Journal of Communications Technology, Electronics and Computer Science*. Vol. 6. No.3: 12-16.
5. Ozegin, K.O., Adetoyinbo, A. A., Jegede, S. I. and **Ogunseye, T. T.** (2016). Troubled roads: Application to surface geophysics to highway failures of the sedimentary terrain (Irukekpen- Ifon Road) of Edo State, Nigeria. *International Journal of Physical Sciences*. Vol. 11. No. 22: 296- 305.
6. Bello, A. K., **Ogunseye, T. T.**, Adetoyinbo, A. A., and Ibrahim, A. H. (2018). Numerical modeling to study the effect of small bottom irregularities on steady flow in homogeneous ocean. *Journal of the Nigerian Association of Mathematical Physics*. Vol. 47: 111- 116.
7. **Ogunseye, T. T.**, Jibiri, N. N., and Akanni, V. K. (2018). Noise exposure levels and health implications on daily road side petty traders at some major roundabouts in Ibadan, Nigeria. *International Journal of Physical Sciences*. Vol. 13. No. 19: 257-264.
8. Egbeyale, G. B., **Ogunseye, T.T.** and Ozegin, K.O. (2019). Geophysical investigation of building foundation in part of Ilorin, Kwara State using electrical resistivity method. *Journal of Physics: Conference Series* Vol. 1299 No. 012064: 1- 9.
9. **Ogunseye, T.T.**, Popoola, O.I. and Awe, O.E. (2021). Seismically Determined Acoustic Gruneisen Parameter in the Earth's Core. *IOP Conference Series: Earth and Environmental Science* Vol. 655 No. 012089: 1-8.

10. Egbeyale, G.B., **Ogunseye, T.T.**, Ajani, A.S. and Bello, A.K.(2022). Interpretation of Aeromagnetic Data of Oyo Area, Southwestern Nigeria. *International Journal of Science Academic Research*, Vol.3, issue3, 3579-3587.
11. **Ogunseye, T.T.**, Egbeyale, G.B., Bello, A.K. and Ajani, A.S. (2022). Design and Construction of a Microcontroller Based Electronic Moving Message Display. *Open Journal of Applied Sciences*, Vol.12: 434-454.
12. Egbeyale, G.B., **Ogunseye, T.T.**, Ajani, A.S., Bello, A.K., Oyero P.O., and Odeyemi, C.S.(2022).Data Acquisition and Interpretation of Hydrogeological Survey in Parts of Malete, Southwestern Nigeria. *Journal of Applied Geology and Geophysics*, Vol. 10, issue 4, 1-11.
13. **Ogunseye, T.T.**, Bello, A.K., Ozegin, K.O. and Atpotor, J.N. (2022). Geochemical Soil Analysis for Groundwater Quality at Mokola Area, Ibadan, Southwestern Nigeria. *Journal of Applied Geology and Geophysics*, Vol.10, issue 4, 63-69.
14. Ozegin, K.O., Ilugbo, S.O., and **Ogunseye, T.T.** (2023). Groundwater exploration in a landscape with heterogeneous geology: An application of geospatial and analytical hierarchical process (AHP) techniques in the Edo north region in Nigeria. *Groundwater for Sustainable Development*, 20(100871), 1-13

Books, Chapters in Books and Articles already accepted for publication:

15. **Ogunseye, T.T.** (2019). *Basic Principle of Physics II- Introductory Electricity and Magnetism*. Ibadan University Press. 141pp. ISBN 978-021-801-7

Technical Reports and monographs:

16. Frederic B., Joseph A., Ogunrai, J., and **Ogunseye, T.T.** (June, 2022). United Nations Ocean Decade for Africa: The science we need for the ocean we want in Africa. A Technical Report submitted to the Western Indian Ocean Marine Science Association (WIOMSA)/ Intergovernmental Oceanographic Commission (IOC), WIOMSA/OIC UNESCO Press. 22-25pp. ISBN 9-789976-561920 (Tanzania)

XI. Major Conferences and Workshop Attended with Papers Read (in the last 5 years)

1. 4th International Conference on Scientific Research in Nigeria held at the Faculty of Science, University of Ibadan, 20- 23 May, 2019.
2. 3rd International Conference on Science and Sustainable Development (ICSSD) held at the Covenant University Canaan Land, Ota, Ogun state, 6- 8 May, 2019.

Paper read:

Ogunseye, T.T., Egbeyale, G. B., and Ozegin, K.O. Geophysical Investigation of Building Foundation in Part of Ilorin, North Central Nigeria Using Electrical Resistivity Method.

3. 4th International Conference on Science and Sustainable Development (ICSSD) held at the Covenant University Canaan Land, Ota, Ogun state, 3- 5 August, 2020.

Paper read:

Ogunseye, T.T., Popoola, O.I. and Awe, O.E. Seismically Determined Acoustic Gruneisen Parameter in the Earth's Core.

4. African Physical Society (AfPS) International Conference (online) held at the International Centre for Theoretical Physics, Italy, 18-20 November, 2020.
5. Multi-Disciplinary International Conference of the Education Dialogue Association (EDUDIA) held at the University of Professional Studies (UPSA), Accra, Ghana, 24-28 July, 2023.

Paper read:

Popoola, O.I., **Ogunseye, T.T.** and Oni, R.K. Geophysical Investigation of the Causes of Borehole Failure at Abdulsallam Abubakar Hostel, University of Ibadan, Nigeria.

OTHER USEFUL INFORMATION

<https://scholar.google.com/citations?hl=en&user=t8R8fGUAAAAJ> (Google scholar profile)

<https://www.researchgate.net/profile/Titus-Ogunseye> (Research gate profile)

<https://orcid.org/0000-0003-4138-4277> (orcid profile)

<https://www.linkedin.com/in/taofek-titus-596b8112/> (LinkedIn profile)

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Area of Specialization: Solid Earth Physics

