

CURRICULUM VITAE

01. PERSONAL

- (i) Name in Full: ALAYAKI Funmilayo Modupe
- (ii) Date of Birth: 13th April, 1972
- (iii) Place of Birth: Lagos, Nigeria
- (iv) Age: 49 years
- (v) Sex: Female
- (vi) Marital Status: Married
- (vii) Nationality: Nigerian
- (viii) Town and State of Origin: Irawo, Oyo State
- (ix) Contact Address: Department of Civil Engineering, College of Engineering, Federal University of Agriculture, P. M. B. 2240, Abeokuta, Ogun State, Nigeria
- (x) Phone Number: +234 8056511993
- (xi) E-mail Address: alayakifm@funaab.edu.ng
- (xii) Present Post and Salary: Senior Lecturer (CONUASS 5 Step)

02. EDUCATIONAL BACKGROUND

(i) Educational Institutions Attended with Dates:

- (a) University of Cambridge, United Kingdom 2011 - 2017
- (b) University of Lagos, Nigeria 2000 - 2002
- (c) University of Lagos, Nigeria 1994 - 1998
- (d) Federal Polytechnic Ilaro, Nigeria 1990 - 1992
- (e) Wahab Folawiyo High School, Ikoyi, Lagos, Nigeria 1984 - 1989

(ii) Academic and Professional Qualifications with Dates

- (a) Ph.D. Civil Engineering (Geotechnical & Environmental Engineering) 2017
- (b) M.Sc. Civil Engineering (Highway and Traffic) 2002
- (c) B.Sc. Civil Engineering- (Second Class Upper) 1998
- (d) ND Civil Engineering – (Distinction) 1992
- (e) West African School Certificate 1989
- (f) Registered Engineer by COREN (R. 19916) 2011
- (g) Corporate Member, Nigerian Society of Engineers (21478) 2009

(iii) Prizes, Awards and Scholarships, National and International

- (a) Tertiary Education Trust Fund (TETFUND) - National Research Fund (NRF) 2019 award for 'Innovative Geotechnical Solutions to Infrastructure Failures in Nigeria: Case Study of Lagos and River States'.
Designation: Research team member 2020 - date
- (b) Tertiary Education Trust Fund (TETFUND) - Institution Based Research Fund (IBR) 2019-2020 award for 'Investigation of the Use of Selected Nano-structured Agricultural and Industrial Wastes in Soil Stabilisation for Pavement Construction'.
Designation: Principal Investigator 2021 - 2022

- (c) Tertiary Education Trust Fund (TETFUND) - Institution Based Research Fund (IBR) 2019-2020 award for 'Production of Low-cost Asphalt and Plastic Tiles Using Selected Agricultural Wastes as Aggregates and Nanostructured Ashes as Fillers'.
Designation: Co-Principal Investigator 2021 - 2022
- (d) Cambridge-Africa Alborada Research Fund Award for research on 'Trial road construction in the Niger Delta, Nigeria' 2013 – 2014
- (e) Scholarship Award for Ph.D. programme at University of Cambridge, United Kingdom by Schlumberger Foundation for Women in Science and Engineering 2011 – 2015
- (f) Graduate Teaching Assistant – University of Lagos award 2001
- (g) Scholarship Award for B.Sc programme by Chief Wahab Iyanda Folawiyo Foundation 1994 – 1998
- (h) Best OND graduating student – Federal Polytechnic Ilaro 1992
- (i) Best female student in WASC at Wahab Folawiyo High School 1989

03. WORK EXPERIENCE

(i) Present appointment

- (a) Senior Lecturer
Federal University of Agriculture Abeokuta, Nigeria. Jan 2021 - till date
- (b) Lecturer I, Department of Civil Engineering,
Federal University of Agriculture Abeokuta, Nigeria. Oct 2017 – Dec 2021
- (c) Lecturer II, Department of Civil Engineering,
Federal University of Agriculture Abeokuta, Nigeria. 2011 – 2017
- (d) Assistant Lecturer, Department of Civil Engineering,
Federal University of Agriculture Abeokuta, Nigeria. 2008 – 2011

ii. Undergraduate Student Supervision

25 undergraduate students supervised from 2009 to date. 7 postgraduate students from 2015 to date

iii. Reviewer

- (a) Nigerian Journal of Engineering, Faculty of Engineering, Ahmadu Bello University, Zaria. Oct 2018 - date

iv. Professional Experience

- (a) Project Engineer (Contract staff)

Lagos State Ministry of Works, Alausa, Lagos state.

Jan 2007 – Dec 2007

- (b) Project Engineer
Guffanti Nigeria Plc. 493/495, Agege Motor Rd., Oshodi, Lagos state. 2004 – 2006
- (c) Project Engineer (Contract staff)
Remo North LGA, Isara- Remo, Ogun state. Oct – Dec 2000
- (d) Site Engineer
Akey Construction Company, 195 Igboosere Road, Lagos state. 1992 – 1994

04. SPECIAL ASSIGNMENT/COMMUNITY SERVICES

- (i) Vice-Chairman, Association of Professional Women Engineers (APWEN) Abeokuta Chapter August 2021
- (ii) Member of Committee on Ogun State Infrastructure Score Card of Nigeria Society of Engineers (NSE), Abeokuta Chapter Feb 18, 2021
- (iii) Member 2021 Engineering Week Planning Committee member of Nigeria Society of Engineers (NSE), Abeokuta Chapter Jan 6, 2021
- (iv) Member of Task-force on Sustainable Usage of University Brick Making Machine, FUNAAB Jan 6 – 31, 2020
- (v) Examination Officer, Civil Engineering Department, FUNAAB 2019 - 2021
- (vi) Examination Officer, Civil Engineering Department, FUNAAB 2017 – till date
- (vii) Member of University Library Committee 2016 – till date
- (viii) Member of User's Committee on UNAAB Ceremonial Road Reconstruction 2010
- (ix) Member of College of Engineering Farm Committee 2009
- (x) Member of Department of Civil Engineering Welfare Committee 2008 – till date
- (xi) Member of College of Engineering Welfare Committee 2008 – till date
- (xii) Member of Association of Professional Women Engineers in Nigeria (APWEN) 2008 – till date
- (xiii) Assistant Pastor in the Redeemed Christian Church of God 2019 - till date
- (xiv) Deaconess in the Redeemed Christian Church of God 2008 - 2019
- (xv) Sunday School Teacher in RCCG 1999 – till date
- (xvi) Good Women Leader in RCCG 1999 – till date

05. TRAINING/WORKSHOP/CONFERENCES ATTENDED WITH DATES

- (i) A 3-day Academic Retreat on University Ethics, Pedagogy and Examination Matters. Organised by Federal University of Agriculture, Abeokuta, June 21 - 23, 2021.
- (ii) Advanced Digital Appreciation Programme for Tertiary Institutions: Data Analysis Using SPSS 23. Organized Digital Bridge Institute and Nigerian Communications Commission in Federal University of Agriculture, Abeokuta, July 9 – 13, 2018.
- (iii) Capacity Building Workshop on Modern Methods of Teaching and Learning in Higher Education. Federal University of Agriculture, Abeokuta. January 25 – 26, 2016.
- (iv) Technical meeting on 'The Use of Sand and Laterite in Road Construction', Crown Agents for Overseas Governments and Administrations, Johannesburg,

South Africa, October 23 – 24, 2013.

- (v) Workshop on Regional Scientific Writing, Publishing and Oral Communication, at Federal University of Agriculture Abeokuta, Sponsored by DFID, UK and Association of African Universities, June 23 – 25, 2010.
- (vi) Workshop on Web 2.0, at Federal University of Agriculture Abeokuta. Organized by The Centre for Internationalization and Partnerships (CENIP) in collaboration with Information and Communication Technology Resource Centre (ICTREC). November 1- 4, 2010.
- (vii) Workshop on Ethics and Ethos of Teaching in the University, organized by the Federal University of Agriculture Abeokuta, April 9 – 10, 2008.

06. COMMENDATION

- (i) Letter of commendation on the success of COREN accreditation, Civil Engineering Department, FUNAAB, Nigeria (28th July 2008)

07. MEMBERSHIP OF PROFESSIONAL BODIES

- (i) Registered Engineer by COREN (R. 19916) 2011
- (ii) Corporate Member of Nigerian Society of Engineers (21478) 2009
- (iii) Member of Association of Professional Women Engineers in Nigeria (APWEN) - Membership No. 0280 2008

08. RESEARCH INTEREST

Completed

Construction of stabilised trial road sections in Sampou, Bayelsa State: stemmed from PhD research on the ‘Characterisation and Binder Stabilisation of Problematic Niger Delta Soils and Field Performance Evaluation in Nigeria’. Sponsored by Cambridge-Africa Alborada Fund (2015).

In-progress

- i. Research team member on ‘Innovative Geotechnical Solutions to Infrastructure Failures in Nigeria: Case Study of Lagos and River States’. Sponsored by Tertiary Education Trust Fund (TETFUND) - National Research Fund (2019).
- ii. Investigations on the use of agriculture and industrial wastes and the nano-structured variants as binders/enhancers of soils and concrete.
- iii. Investigation of the use of various agro wastes and plastic in the production of pavement tiles.
- iv. Investigation of the use of agro wastes as substitutes of aggregates in asphalt concrete
- v. Investigation of the use of geofoam in soil stabilisation including field performance evaluation.

09. UNIVERSITY EXTENSION ACTIVITY

- i. University Calender Review for College of Engineering on-going

10. OTHER ACTIVITIES WITHIN THE UNIVERSITY

- i. Member of Committee on Gender Policy, FUNAAB August 2021
- ii. Member of COVID-19 Compliance Committee, FUNAAB Jan 27, 2021
- iii. Member of Committee on Review of Rules and Regulations of the University, FUNAAB Feb 18, 2020

11. PUBLICATIONS

- i. **Alayaki, F. M.** (2015): Characterisation and Binder Stabilisation of Problematic Niger Delta Soils and Field Performance Evaluation in Nigeria. Unpublished Ph.D. Thesis, submitted to the Department of Engineering, University of Cambridge. United Kingdom, 347pp.
- ii. **Alayaki, F. M.** (2002): Stabilisation of Laterite Soils with Cement, Lime and Terralite for Base Course Application. Unpublished M.Sc. Dissertation, submitted to Department of Civil Engineering, University of Lagos, 120pp.
- iii. **Alayaki, F. M.** (1998): Analysis and Design of Prestressed Concrete Bridge using BS 8110. Unpublished B.Sc. Project, submitted to the Department of Civil Engineering, University of Lagos, 80pp.

Papers in Journals

1. **Alayaki, F. M.**, Gbadewole, O. A., and Otubu, S. O. (2020): Investigation of the Influence of Cow Dung Ash as Filler and Polyethylene Terephthalate as Bitumen Replacement in Asphalt Concrete. *LAUTECH Journal of Engineering and Technology*, 14 (1): 98 – 106. Published by Faculty of Engineering, Ladoke Akintola University of Technology, Nigeria.
2. Gbadewole, O. A., **Alayaki, F. M.**, Adekunle, A. A. and Dada, P. O. (2020): Evaluation of Palm Kernel Shell and its Nano-variant as Aggregates in Asphalt Concrete. *Egyptian Journal for Engineering Sciences and Technology*. 32(4): 43 - 48. Published by Faculty of Engineering, Zagazig University.
3. Igba, U. T., Akinyele, J. O., **Alayaki, F. M.**, Kuye, S. I. (2019): Causes of Failure in Concrete Elements Buried in Lagoon Water. *Engineering Failure Analysis*. 102: 425 – 432. <https://doi.org/10.1016/j.engfailanal.2019.04.067>. Published by Elsevier.
4. Igba, U. T., **Alayaki, F. M.**, Akinyele, J. O., Cosmas, C. A., Olalere, H. A. and Oyebisi, S. O. (2019): Compressive Strength of Concrete with Partial Replacement of Coarse Aggregate with Seashell using Unwashed Sea and River Sand. *Journal of Civil Engineering*, 11 (3): 37 – 46. ISSN 01897691. Published by Nigerian Institution of Civil Engineers.
5. **Alayaki, F. M.**, Al-Tabbaa, A. and Ayotamuno, M. J. (2019): Stabilisation of Niger Delta Fat Clay with Blend of Binders for Subgrade Application (Part 3) - Trial Stabilised Road Sections in Sampou, Niger Delta. *LAUTECH Journal of Engineering and Technology*, 13 (1): 45 – 54. Published by Faculty of Engineering, Ladoke Akintola University of Technology, Nigeria.
6. **Alayaki, F. M.**, Al-Tabbaa, A. and Ayotamuno, M. J. (2018): Stabilisation of Niger Delta Fat Clay with Blend of Binders for Subgrade Application (Part 2) – Assessment of Durability. *Umudike Journal of Engineering and Technology (UJET)*, 4(2): 113 – 119. Published by Michael Okpala University of Agriculture, Umudike.

7. Sobanke A.O., **Alayaki F.M**, and Ikponmwosa E. (2018): Assessment of the Micro-Structure of Compacted Soils Using Varied Compactive Efforts: A Case Study of Some Selected Areas in Port Harcourt, Nigeria. *LAUTECH Journal of Engineering and Technology*, 11 (1): 32 – 38. Published by Faculty of Engineering, Ladoko Akintola University of Technology, Nigeria.
8. Igba, U. T., Akinyele, J. O., **Alayaki, F. M.**, Adetiloye, A., Oluwatudimu, O. E. and Ehikhuenmen, S. O. (2018): Effects of Lagoon and Fresh Waters on the Compressive and Split Tensile Strength of Grade 40 Concrete. *FULafia Journal of Science and Technology*, 4: 30 – 34. Published by Faculty of Engineering, Federal University Lafia, Nigeria.
9. **Alayaki, F. M.**, Al-Tabbaa, A. and Ayotamuno, M. J. (2017): Use of Drill Cuttings Ash as a Stabilising Agent for some Selected Niger Delta Soils for Road Construction. *J. Nat. Sci. Engr. & Tech. (ASSET)*, 16(2): 88-103. Published by Federal University of Agriculture Abeokuta, Nigeria.
10. **Alayaki, F. M.**, Al-Tabbaa, A. and Ayotamuno, M. J (2017): Stabilisation of Niger Delta Fat Clay with Blend of Binders for Subgrade Application – Part 1. *Nigerian Journal of Technology (NIJOTECH)*, 36(3): 740 -748. Published by Faculty of Engineering, University of Nigeria, Nsukka.
11. Adekunle, A. A., Adekunle, I. M., Badejo, A. A., **Alayaki, F. M.** and Olusola, A. O. (2017): Laboratory Scale Bioremediation of Crude Oil Impacted Soil Using Animal Waste Compost. *Technical Journal* 11(2): 45 – 49. Published by University of North, Croatia.
12. **Alayaki, F. M.**, Emeh, C. J. and Ayotamuno, M. J (2014): Effect of Drill Cutting Ash and Saltwater on Niger Delta Soils. *International Journal of Emerging Technology and Engineering* 4 (9): 1 – 5. Published by National Science Library, New Delhi, India.
13. **Alayaki, F. M.** (2012): Water Absorption Properties of Laterite Soils in Road Pavement: A case Study of Ife-Ilesha Highway Southwestern Nigeria. *International Journal of Emerging Technology and Advanced Engineering*, 2 (11): 51 - 57. Published by National Science Library, New Delhi, India.
14. Meshida, E. A., **Alayaki, F. M.** and Akanbi, E. O. (2011): A Comparative Study of Portland Cement, Hydrated Lime and Laterite as Stabilizing Agents of Quaternary Coastal Plain Sands of North of Lagos Metropolis as Road Construction Material. *Africa Geoscience Review*, 18 (4): 137 – 142. Published by RockView International, Paris, France.

Conference Proceedings

15. **Alayaki, F. M.** and Ayotamuno, M. J. (2016): Identification of Self-Stabilisation of Laterite Soils in Predicting Field Performance in Road Construction in some Prominent Nigerian Regions. *Proceedings of International Conference on Sustainable Engineering and Technology (SET)*. Adewumi, J. K., Adekunle, A. A., Olayanju, T. M. A., Ismaila, S. O. and Dairo, O. U. (Eds.). Published by College of Engineering, Federal University of Agriculture, Abeokuta, 225 – 234.

16. **Alayaki, F. M.** and Bajomo, O. S. (2011): Effect of Moisture Variation on Lateritic Soils as Base Course Material in Road Construction: A Case Study of Abeokuta Metropolis. *Proc. of the Environ. Manage. Conf.*, Published by Federal University of Agriculture, Abeokuta, 178 – 184.

Technical Reports

17. Manheche, F., Endale, A., **Alayaki, F. M.**, Banda, S., Geddes, R., Leta, N., Netterberg, F., Paige-Green, P., Motswagole, K., Mukura, K., Mike Pinard, M. (2013): Presenters on: (1) Development of Guidelines for the Use of Sands in Road Construction in the SADC Region. Phase 2 - Additional Investigations; (2) Verification of Specifications for the Use of Laterite in Road pavements. Phase 1 – Literature Survey and Awareness Raising. Submitted to **Crown Agents for Overseas Governments and Administrations**, St. Nicholas House, St. Nicholas Road, Sutton, Surrey SMI IEL, UK. Published by Africa Community Access Programme (AFCAP).
18. Daramola, J. O., Adekunle, M. F., Olaniyi, M. O. and **Alayaki, F. M.** (2010): Diagnostic Survey Report of Ondo State Agricultural Production (2009): UNAAB-IFSERAR, ISBN 978-978-50092-1-7. Published by **Federal University of Agriculture Abeokuta, Nigeria.**

Asterisks are those appeared since last promotion

12. MAJOR CONFERENCES ATTENDED

- (i) 3rd International Conference (COLENG 2021) - Innovations as a Catalyst for Rapid Economic Growth, Federal University of Agriculture, Abeokuta, May 24 - 26, 2021.
- (ii) College of Engineering International Conference (COLENG 2018) - STEM: A driving force for sustainable development, Federal University of Agriculture, Abeokuta, May 14 - 17, 2018.
- (iii) College of Engineering International Conference (COLENG 2016) - SET: A driving force for sustainable development, Federal University of Agriculture, Abeokuta, March 7-11, 2016.
- (iv) NSE Annual General Meeting and UNESCO African Engineering Week, Uyo, Akwa Ibom State, November 21 – 25, 2016.

13. EXTRA-CURRICULAR ACTIVITIES

- i. Counselling and Visiting
- ii. Singing

14. REFEREES

Prof. O. S. Awokola
Department of Civil Engineering
College of Engineering
Federal University of Agriculture Abeokuta, Nigeria.
E-mail: osawokola@yahoo.co.uk
Phone No: +234 8037151917

Prof. O. D. Akinyemi
Department of Physics
College of Physical Sciences
Federal University of Agriculture Abeokuta, Nigeria.
E-mail: akinyemiod@funaab.edu.ng
Phone No: +234 8062937241



Signature

Prof Peter Guthrie
Engineering Department,
University of Cambridge,
United Kingdom,
E-mail: pmg51@cam.ac.uk
Phone No: + 44 (0) 1223765627

07/10/2021

Date