

CURRICULUM VITAE

A. GENERAL INFORMATION

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|---|---|
| 1. Name: | Mutiu Abiodun KAREEM |
| 2. Date and Place of Birth: | 1 st January, 1985, Ogbomoso |
| 3. Gender: | Male |
| 4. Nationality: | Nigerian |
| 5. State of Origin: | Oyo |
| 6. Local Government Area: | Ogbomoso North |
| 7. Marital Status: | Married |
| 8. Names and Ages of Children: | Mubarak (11), Marzuk (6) and Mardiyah (4) |
| 9. Names and Relationship of Next of Kin: | Mrs. Kareem Rukayat Opeyemi (Spouse) |
| 10. Permanent contact address | No. 2, Amole Street, Opposite Ola- Oluwa House, Aduin Area, Ogbomoso, Oyo State. |
| 11. E-mail Address: | mutiu.kareem@uniosun.edu.ng |
| 12. Registration With Research Gates: | Yes |
| 13. If Yes, Provide the link: | https://www.researchgate.net/profile/mutiu_kareem |
| 14. If No, Why? | Nil |
| 15. Registration With Google Scholar: | Yes |
| 16. If Yes, Provide the link: | https://scholar.google.com/citations?user=2lsv5bc-AAAAj&hl=en |
| 17. If No, Why? | Nil |
| 18. Cell Phone Number: | +234(0)8038588086 |
| 19. College/Faculty/Unit: | Science, Engineering and Technology, Faculty of Engineering |
| 20. Department: | Civil Engineering |
| 21. Position on First Appointment: | Lecturer II |
| 22. Present Position and Salary: | Senior Lecturer, CONUASS 05/02 |
| 23. Date of Present Position: | 01 October, 2025 |
| 24. Is your Appointment Confirmed: | Yes |
| 25. If No, Why Not? | Nil |
| 26. Date of Confirmation of Appointment: | 19 March, 2024 |

B. EDUCATIONAL BACKGROUND

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|---|--------------|
| 1. Educational Institutions Attended with Dates: | |
| (i) Ladoke Akintola University of Technology, Ogbomoso, Nigeria | (2017- 2022) |
| (ii) Ladoke Akintola University of Technology, Ogbomoso, Nigeria | (2012-2015) |
| (iii) Ladoke Akintola University of Technology, Ogbomoso, Nigeria | (2002-2007) |

(iv) Ogbomosho Grammar School, Ogbomosho, Oyo State (1995-2001)

2. Academic Qualification with Dates

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|---|------|
| (i) Ph.D Civil Engineering | 2022 |
| (ii) Master of Technology (Civil Engineering) | 2015 |
| (iii) Bachelor of Technology (<i>Hons</i>), 2 nd Class Upper Div. (Civil Eng.) | 2007 |
| (iv) Senior School Certificate Examination | 2001 |

3. Professional Qualifications and Certificates with Dates

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| (i) Registered Engineer (R. 39,111)
[Council for the Regulation of Engineering in Nigeria, COREN] | 2017 |
| (ii) Proficiency Certificate in Management | 2009 |

4. Honours, Awards and Distinction and Award:

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| (i) Tertiary Education Trust Fund, Institutional Based Research Grant Award | 2025 |
| (ii) Award of Honour, Nigerian University Engineering Student's Association | 2025 |
| (iii) Distinguished Personality Award, Department of Civil Engineering by Association of Civil Engineering Students, Osun State University, Osogbo | 2004 |
| (iv) Sponsorship award for Ph.D programme by Osun State University, Osogbo, (<i>Under the NEEDS Assessment Intervention Fund for Staff Training and Development</i>) | 2019 |
| (v) Best student in English Language, Ogbomosho Grammar School, Ogbomosho, Oyo State. | 2001 |

5. Research Fellowship with Dates Nil

C. WORK EXPERIENCE OUTSIDE THE UNIVERSITY SYSTEM

- (i) **Site Engineer:** Sukazeem Enterprises (Nig.) Ltd. No. 45 Salvation Army, Road, Ibadan, Oyo State.
- (ii) **Teacher (Corps Member):** National Youth Service Corps (NYSC), Government Secondary School (Fantai) Hadejia, Jigawa State.
- (iii) **Trainee:** Yolas Consultant (Civil Engineering Firm), Ilorin, Kwara State. Student Industrial Work Experience Scheme (SIWES).

D. WORK EXPERIENCE IN OTHER UNIVERSITY:

Date: 10th February, 2014 –19th May, 2015
 Company Name: **Ladoke Akintola University of Technology Ogbomosho, Nigeria**
 Position: **Teaching Assistant**
 Schedule of Duty: Assisted the academic staff to teach courses, supervise Tests, and Studio works.

Some of the courses taught are listed below:

S/N	Course code	Course title	Unit
i.	CVE 504	Unit Process in Water and Waste Water Engineering	3
ii.	CVE 552	Element of Civil Engineering Practice	2
iii.	CVE 513	Construction Technology I	2
iv.	CVE 504	Research Methodology in Planning	2
v.	CVE 401	Project Methodology	1
vi.	CVE 403	Quantity Surveying and Estimating	2
vii.	CVE 308	Soil Mechanics	3
viii.	CVE 301	Engineering Geology	3

E. WORK EXPERIENCE IN OSUN STATE UNIVERSITY:

1. Lecturer I in the Department of Civil Engineering - Oct. 2022 – till date

(a) Teaching and Research

Teaching and handling the following undergraduate and Postgraduate courses:

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|--------|---------|--|
| i. | CVE 206 | Strength of Materials |
| ii. | CVE 304 | Structural Mechanics |
| iii. | CVE 401 | Technical Report Writing |
| iv. | CVE 409 | Design of Structures II |
| v. | CVE 411 | Structural Analysis I |
| vi. | CVE 501 | Assigned Project I |
| vii. | CVE 502 | Assigned Project II |
| viii. | CVE 505 | Design of Structures III |
| ix. | CVE 603 | Numerical Methods in Engineering Computation |
| x. | CVE 606 | Structural Analysis II |
| xi. | CVE 622 | Design of Structures in Steel and Timbers |
| xii. | CVE 631 | Technical Report Writing |
| xiii. | CVE 633 | Project I |
| xiv. | CVE 634 | Project II |
| xv. | CVE 709 | Advanced Structural Analysis |
| xvi. | CVE 710 | Advanced Steel Metals Structures |
| xvii. | CVE 712 | Timber Structures |
| xviii. | CVE 801 | Computational Mechanics |

(b) Administrative Works

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|------|---|---------------------------|
| i. | Cordinator, Department of Civil Engineering | (August 2024 – till date) |
| ii. | Cordinator, Department of Civil Engineering | (August 2022 – July 2024) |
| iii. | Level Adviser | (2019 – 2024) |
| iv. | Member, Departmental Consultancy Committee | (2019 – till date) |

2. Lecturer II in the Department of Civil Engineering - Jan. 2019 – Oct. 2022

(a) Teaching and Research

Teaching and handling the following undergraduate and Postgraduate courses:

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|--------|---------|--|
| i. | CVE 206 | Strength of Materials |
| ii. | CVE 304 | Structural Mechanics |
| iii. | CVE 401 | Technical Report Writing |
| iv. | CVE 409 | Design of Structures II |
| v. | CVE 411 | Structural Analysis I |
| vi. | CVE 501 | Assigned Project I |
| vii. | CVE 502 | Assigned Project II |
| viii. | CVE 505 | Design of Structures III |
| ix. | CVE 603 | Numerical Methods in Engineering Computation |
| x. | CVE 606 | Structural Analysis II |
| xi. | CVE 622 | Design of Structures in Steel and Timbers |
| xii. | CVE 631 | Technical Report Writing |
| xiii. | CVE 633 | Project I |
| xiv. | CVE 634 | Project II |
| xv. | CVE 709 | Advanced Structural Analysis |
| xvi. | CVE 710 | Advanced Steel Metals Structures |
| xvii. | CVE 712 | Timber Structures |
| xviii. | CVE 801 | Computational Mechanics |

(b) Administrative Works

- i. Member, Publication Committee, UNIOSUN Journal of Engineering and Environmental Sciences, Osun State University (2022-till date)
- ii. 300 Level Students' Advisor, Civil Engr'g Dept., Osun State University (2019-2020)
- iii. 400 Level Students' Advisor, Electrical/ Electronics Dept., Osun State University Osogbo (2020 to 2021)
- iv. Civil Engineering Students' Association Staff Adviser, 2009-2012
- v. Member, Curriculum drafting committee, Civil Engineering Department, Osun State University, Osogbo.
- vi. Member, Local Organizing Committee, 1st International Conference on Engineering and Environmental Sciences on Advancing Technology Burdens (Challenges and Sustainable Solutions), held between March 5 – 7, 2019 at Olagunsoye Oyinlola Auditorium, Osun State University, Osogbo, Osun State Nigeria.
- vii. Postgraduate Coordinator, Department of Civil Engineering, Osun State University (August, 2021- July, 2024).

F. CO-CURRICULAR PROFESSIONAL EXPERIENCE:

- i. Geotechnical investigative studies of the proposed Sport Complex at the Osogbo Campus,

- Osun State, Osun State University.
- ii. Structural Design of the proposed ASUU Building at the Osogbo Campus, Osun State, Osun State University.
- iii. Structural Design of a proposed Supermarket Store for Mrs. Akande Tinuade Omolade.
- iv. Supervision of the construction of 5 Hostel Blocks at Toyosi Hostel Under G Area, Ogbomoso, Oyo State.
- v. Supervision of the Construction of Library for Junior Secondary School Project at Federal Government College, Ogbomoso, Oyo State.
- vi. Supervision of the Construction of UNIOSUN, Campus Library.
- vii. Supervision of the Construction of Labour and Delivery Block at LAUTECH Teaching Hospital, Ogbomoso, Oyo State.

G. MEMBERSHIP OF PROFESSIONAL BODIES:

- i. Corporate member, Nigeria Society of Engineers (MNSE-Num. 40378)
- ii. Graduate member, Nigeria Society of Engineers (GNSE-Num. G9234)
- iii. Graduate member, Nigeria Institute of Management (GNIM-Num. 122570)

H. SERVICE:

(i) University

(a) Departmental Level:

- | | |
|--|------------------|
| 1. Coordinator, Department of Civil Engineering | 2024 – till date |
| 2. Chairman of Departmental Academic Board | 2024 – till date |
| 3. Postgraduate Coordinator, Department of Civil Engineering | 2020 – 2024 |
| 4. Member, Departmental Examination Board | 2019 – 2024 |
| 5. Member, Departmental Consultancy Service. | 2019 – 2024 |
| 6. Student Staff Adviser | 2019 – 2024 |

(b) Faculty/ College Level:

- | | |
|---|---------------------|
| 1. Member, College of Science, Engineering and Technology Management Board. | 2024 – till date |
| 2. Member, College of Science, Engineering and Technology Review Panel. | 2024 – till date |
| 3. Member, Postgraduate College Board | 2024 – till date |
| 4. Member, 1 st , 2 nd and 3 rd Faculty of Engineering, and Environmental Sciences Conference Committee. | 2019, 2021 and 2025 |
| 5. Member, adhoc committee on Faculty of Engineering Building Inspection. | 2022 – till date |
| 6. Member, Faculty of Engineering Building Examination Board | 2019 – till date |

(c) University Level:

- | | |
|---------------------|------------------|
| 1. Member of Senate | 2024 – till date |
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2. Member, UNIOSUN ASUU Building Committee. 2023 – till date

(ii) Community:

1. Member, White Mosque, Al-Madinah College, Iludun Area, 2020 – till date Osogbo, Osun State.
2. Member, Transformer Procurement Committee, Layout Landlord Association, Aadin Community, Oluwusi, Ogbomoso, Oyo State. 2019-2020
3. Member, Electoral Community, The Nigeria Society of Engineers 2018 Ogbomoso Branch, Ogbomoso, Oyo State.

(iii) National

National Youth Service Corps (NYSC) at Government Secondary School (Fantai). Hadejia, Jigawa State (March, 2008 – February, 2009).

(iv) International:

1. Reviewer, Silicon Journal, Springer Nature, London, United Kingdom.
2. Reviewer, Journal of Building Engineering, Elsevier B.V., New York City, United States of America.
3. Reviewer, Discover Civil Engineering Springer, New York City, United States of America.
4. Reviewer, Uniosun Journal of Engineering and Environmental Sciences (UJEES), Faculty of Engineering Osun State University, Osun State, Nigeria.
5. Reviewer, Nigerian Journal of Technological Development, Faculty of Engineering, University of Ilorin, Kwara State, Nigeria.

I. COURSES TAUGHT DURING THE CURRENT ACADEMIC SESSION:

Harmattan, 2024/2025 Academic Session

Code	Title	Unit
CVE 401	Technical Report Writing	2
CVE 409	Design of Structures II	3
CVE 505	Design of Structures III	2
CVE 501	Assigned Project I	3
CVE 603	Numerical Methods in Engineering Computation	3
CVE 631	Technical Report Writing	3
CVE 633	Project I	3
CVE 709	Advanced Structural Analysis	3
CVE 801	Computational Mechanics	3

Rain, 2024/2025 Academic Session

CVE 304	Structural Mechanics	3
CVE 206	Strength of Materials	3
CVE 502	Assigned Project II	3
CVE 606	Structural Analysis II	3
CVE 622	Design of Structures in Steel and Timbers	3
CVE 634	Project II	3
CVE 709	Advanced Structural Analysis	3
CVE 710	Advanced Steel Metal Structures	3
CVE 712	Timber Structures	3

J. GRADUATE STUDIES SUPERVISION:

1. Akinlolu, Akinola Seth (M.Eng.) - concluded
Topic : Prediction of Mechanical Properties of NBRRI Pozzolanic Concrete by Fuzzy Logic Based Model.
2. Ajadi, Emmanuel Oluwafemi (M.Eng.) - concluded
Topic : Experimental Optimization of Waste Steel and Tyre Rubber Fibres-Reinforced Concrete Characteristics Using Response Surface Methodolgy.
3. Memudu, Habeeb Olalekan (M.Eng) - concluded
Topic : The Influence of Granite Gradation on the Strength Characteristics of NBRRI Pozzolanic Concrete
4. Sulaimon, Hameed Babatunde (M.Eng) - concluded
Topic : Process Parameters Optimization of Eco-Friendly High-Strength Waste Tire Steel Fiber-Reinforced Concrete using Taguchi Method.
5. Ajiferuke, Ayotunde Taiwo (M.Eng) – on-going
Topic : Prediction of The Mechanical Properties Of Concrete Containing Cow Horn Ash As Partial Replacement for Cement By Artificial Neural Network.
6. Olasunkanmi, Basiru Aremu (M.Eng) – on-going
Topic: Optimising Eco-Frieadly Sandcrete Block Properties Through Synergetic Integration of Coconut Shell and Groundnut Shell.

K. PUBLICATIONS

I. Thesis/Dissertation

1. **Kareem, M.A. (2007).** Groundwater Contamination by a Solid Waste Dump in Odo-Oba Village, South Western Nigeria. Unpublished B.Tech. Final Year Project, Ladoke Akintola University of Technology, Ogbomosho, Nigeria.

2. **Kareem, M.A. (2015).** Optimal Raw Material Mix for the Production of Rice Husk Ash Blended Cement. Unpublished M.Tech. Dissertation, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.
3. **Kareem, M.A. (2022).** A Study of the Durability and Thermal Properties of Rice Husk Ash-Blended Palm Kernel Shell Concrete. Unpublished Ph.D Thesis, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

II **Books (Authored/Co-Authored)** Nil

III **Books (Edited/Co-Edited)** Nil

IV **Monographs:** Nil

V **Chapter in Books**

1. Bamigboye, G.O., Ademola, D. O., **Kareem, M.A.**, Orogade, B. O., Odetoyan, A.O., Adeniyi, A. (2022). Durability of recycled Aggregate in Concrete Production. In Awoyera, P.O., Thomas, C., Kirgiz, M.S. (Eds) The Structural Integrity of Recycled Aggregate Concrete Produced with Fillers and Pozzolans. Woodhead, United Kingdom. <https://doi.org/10.1016/B978-0-12-824105-9.00010-X>. [Publisher: Elsevier B.V.].

VI **Articles in learned journals:**

2. **Kareem, M.A.**, Ajadi, E.O., Fadipe, O.O., Ishola, K., Olawuyi, O.A., Ayanlere, S.A., Olatoyan, O.J., Adeosun, J.O., Adefajo, A.A., Oyewo, A.T., Olawale, S.O.A., Lamidi, W.A. (2025). Sustainability-driven application of waste steel and tyre rubber fibres as reinforcement in concrete: An optimization study using response surface methodology. *Next Materials*, 7 (2025) 100345. <https://doi.org/10.1016/j.nxmate.2024.100345>. [Publisher: Elsevier B.V., Amsterdam, Netherlands].
3. Salami, L. O., Ameen I. O., Tijani M. A., **Kareem M. A.**, Bello, A. A. (2025). A Study of Performance Characteristics of Combined Waste Polymer Enhanced Bitumen on Hot and Warm Mix Asphaltic Concrete. *Discover Civil Engineering*, 1:132, 1 – 17. <https://doi.org/10.1007/s44290-024-00139-y>. [Publisher: Springer Nature].
4. Ameen I. O., **Kareem M. A.**, Ishola, K., Olawuyi, O.A., Adeyemo. K.A., Bello, A. A. (2024). An Appraisal of Lateritic Soil Modified with Lime and Bamboo Leaf Ash as Hydraulic Barrier. *Discover Civil Engineering*, 2:40, 1 – 26. <https://doi.org/10.1007/s44290-024-00177-y>. [Publisher: Springer Nature].
5. Fadipe O.O., **Kareem, M.A.**, Ishola, K. (2024). Influence of Climate Change on Groundwater Resources in Osogbo, Osun State Nigeria. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*. <https://doi.org/10.1007/s40996-024-01389-7>. [Publisher: Springer Nature].
6. Olatoyan, O.J., Okeyinka, O.M., Bello, O., Oyewo, S.T., Olayanju, O.K., **Kareem, M.A.**, Adebajo, A.U., Salami, M.O. (2024). Investigation of Tensile Strength Performance of Green Concrete Incorporating Steel Slag. *Hybrid Advances*, 6,

100186. <https://doi.org/10.1016/j.hybadv.2024.100186>. [Publisher: Elsevier B.V., Amsterdam, Netherlands].
7. Adebajo, A.U., **Kareem, M.A.**, Olatoyan, O.J., Tijani M. A., Adeoye, A.B., Adebajo, I.C., Ogundele, P.O., Adesina, Q.O. (2024). Assessing the durability of Sandcrete Blocks Incorporating Iron Filings as Fine Aggregates. *Hybrid Advances*, 6, 100228. <https://doi.org/10.1016/j.hybadv.2024.100228>. [Publisher: Elsevier B.V., Amsterdam, Netherlands].
 8. Adeosun, J.O., **Kareem, M.A.** and Ekekezie, C.U. (2024). Evaluation of End Users' Participation in the Design and Delivery of Public Building Projects in Ekiti State, Nigeria. *LAUTECH Journal of Civil and Environmental Studies*. 12(1): 65 - 72. <https://doi.org/10.36108/laujoces/4202.21.0170>. [Publisher: Department of Civil Engineering, Ladoke Akintola University of Technology, Ogbomosho].
 9. **Kareem, M.A.**, Akintonde, B.B, Adesoye, J.S., Ishola, K., Tijani, I.A., Adebajo, A.U., Thanni, M.O., Oduoye, W.O., Adeyanju, D.O. and Bello, A.A. (2023): Influence of cashew leaf ash as partial replacement for cement on the properties of fresh and hardened concrete. *Cleaner Waste Systems*, 4: 100063. <https://doi.org/10.1016/j.clwas.2022.100063>. [Publisher: Elsevier B.V.].
 10. **Kareem, M.A.**, Adebayo, A.O., Adeosun, J. O., Akinwusi, A.I., Orogade, B.O., Ayanlere, A.S., Adebawo, A.A., Obadare, G.O., Ishola, K. and Bello, A.A. (2023). Characteristics of interlocking paving blocks made with cashew leaf ash as partial replacement for cement, *Materials Today: Proceedings*, 86: 121-127. <https://doi.org/10.1016/j.matpr.2023.04.294>. [Publisher: Elsevier B.V.].
 11. Salami, L. O., **Kareem M. A.**, Tijani M. A., Ameen I. O. and Bello, A. A. (2023). Performance Investigation of Combined Waste Polymer Modified Hot Bitumen Mix. *Adeleke University Journal of Engineering and Technology [AUJET]*. 6(1): 151-159. <https://www.aujet.adelekeuniversity.edu.ng/index.php/aujet/article/view/296>. [Publisher: Faculty of Engineering, Adeleke University, Osun State, Nigeria].
 12. Ameen, I.O., **Kareem, M.A.**, Tijani, M.A., Salami, L.O. and Bello, A. A. (2023). Effect of West African Standard Compactive Energy on Stone Dust Stabilized Lateritic Soil, *Adeleke University Journal of Engineering and Technology*, 6:1: 215-221. [AUJET]. <http://aujet.adelekeuniversity.edu.ng/index.php/aujet/article/view/304>. [Publisher: Faculty of Engineering, Adeleke University, Osun State, Nigeria].
 13. **Kareem, M.A.**, Orogade, B.O., Ibiwoye, E.O. and Nafisat, O.O. (2022). The use of palm oil mill effluent as mixing and curing water in cement-based composite. *Silicon* 14, 1285–1296. doi: 10.1007/s12633-020-00864-w. [Publisher: Springer Nature].
 14. Raheem, A.A., Oriola, K.O., **Kareem, M.A.** and Abdulwahab, R. (2021). Investigation on thermal properties of rice husk ash-blended palm kernel shell concrete. *Environmental Challenges*, 5, 100284: 1–16. <https://doi.org/10.1016/j.envc.2021.100284> [Publisher: Elsevier B.V.].
 15. Olawale, S.A.O., **Kareem, M.A.**, Muritala, H.T., Adebajo, A.U., Alabi, O.O., Olawuyi, O.A. and Fadipe, O.O. (2021). Utilization of Iron Filings as Partial

- Replacements for Sand in Self-Compacting Concrete, **Tanzania Journal of Science**, 47(3): 906-916. <https://dx.doi.org/10.4314/tjs.v47i3.3>. [Publisher: College of Natural and Applied Sciences, University of Dar es Salaam, Tanzania].
16. Olawale, S. O. A., **Kareem, M.A.**, Ojo, O. Y., Adebajo, A. U. and Thanni, M. O. (2021). Strength Characteristics of M40 Grade Concrete using Waste PET as Replacement for Sand. *Nigerian Journal of Technological Development*, 18, 3: 209-218. doi: <http://dx.doi.org/10.4314/njtd.v18i3.5>. [Publisher: The Faculty of Engineering, University of Ilorin, Kwara State, Nigeria].
 17. Oriola, K.O., Raheem, A.A., **Kareem, M.A.** and Abdulwahab, R. (2021). Assessment of Workability and Compressive Strength of Rice Husk Ash-Blended Palm Kernel Shell Concrete, *LAUTECH Journal of Civil and Environmental Studies*, 7(1): 100-115. DOI: 10.36108/laujoces/1202.70.0101. [Publisher: Civil Engineering Dept., LAUTECH, Ogbomoso, Nigeria].
 18. Adeyanju D.O., **Kareem M.A.**, Awogboro O.S., Adebajo A.U. and Oduoye, W.O. (2021). Compressive Strength and Water Absorption of Concrete with Palm Kernel Shell Ash as Partial Replacement for Cement. *UI Journal of Civil Engineering and Technology*, 3(1): 7-15. [https://www.uijcet.com/journal.php?id=4&c=Vol-3-No-1-\(June-2021\)](https://www.uijcet.com/journal.php?id=4&c=Vol-3-No-1-(June-2021)). [Publisher: Civil Engineering Dept., University of Ibadan, Nigeria].
 19. **Kareem, M.A.**, Bamigboye, G.O., Olawale, S.O.A, Tijani, M.A., Ishola, K. and Olawuyi, O.A. (2019). Response Surface Approach for Determining Optimal Mix Parameters For Normal Strength Concrete. **Uniosun Journal of Engineering and Environmental Sciences**. 1(1): 19-26. DOI: 10.36108/ujees/9102.10.0130. [Publisher: Faculty of Engineering, Osun State University, Osun State, Nigeria].
 20. Raheem, A.A. and **Kareem, M.A.** (2017). Optimal Raw Material Mix for the Production of Rice Husk Ash Blended Cement, *International Journal of Sustainable Construction Engineering and Technology*, 7, 2: 77-93. <https://publisher.uthm.edu.my/ojs/index.php/IJSCET/article/view/1188>. [Publisher: Universiti Tun Hussein Onn Malaysia (UTHM) and Concrete Society of Malaysia (CSM)].

VII Review Articles:

21. Olatoyan, O.J., **Kareem, M.A.**, Adebajo, A.U. and Olawale, S.O.A. (2023). Potential use of biomass ash as a sustainable alternative for fly ash in concrete production: A review. *Hybrid Advances* 4:100076. <https://doi.org/10.1016/j.hybadv.2023.100076>. [Publisher: Elsevier B.V.].

22. **Kareem, M.A.**, Raheem, A.A., Oriola, K.O. and Abdulwahab, R. (2022). A review on application of oil palm shell as aggregate in concrete-Towards realizing a pollution-free environment and sustainable concrete' **Environmental Challenges**, 8, 100531: 1-25. <https://doi.org/10.1016/j.envc.2022.100531>. [Publisher: Elsevier B.V.].
23. Gideon, B , Enabulele, D., Odetoyan, A.O., **Kareem, M.A.**, Nworgu, A. and Bassey, D | (2021) Mechanical and durability assessment of concrete containing seashells: A review, *Cogent Engineering*, 8:1, 1883830, <https://doi.org/10.1080/23311916.2021.1883830>. [Publisher: Taylor and Francis].

VIII **Refereed Conference Proceedings:**

24. **Kareem, M.A.**, Wahab, K.O. (2024). Compressive Strength of Concrete Incorporating NBRRI Pozzolana as Cement Replacement Material, Proceedings, 3rd International Conference on Engineering and Environmental Sciences on Advancing Technology Burdens (Challenges and Sustainable Solutions), held between March 25 – 28, 2024 at Osun State University, Osogbo, Osun State Nigeria, p 240 – 245.
25. **Kareem, M.A.**, Raheem, A.A., Ayanlere, S.A., Ige, A.I, Orogade, B.O., Ibiwoye, E. O., Fatubarin, T., Yunus, S. and Ojo, O.Y. (2021). Compressive Strength of Concrete made with Palm Kernel Shell as Partial Replacement for Sand Incorporating Superplasticizer, Proceedings, 2st International Conference on Engineering and Environmental Sciences on Re-thinking Engineering and Technology for Environmental Sustainability in the face of Global Pandemic held between November 23 – 25, 2021 at Osun State University, Osogbo, Osun State Nigeria, p 304-313.
26. **Kareem, M.A.**, Adesiyan, T.O. and Oduoye, W.O. (2019). Comparative Assessment of Properties of Local and Imported Steel Reinforcing Bars In Selected Areas In Osun State, Proceedings, 1st International Conference on Engineering and Environmental Sciences on Advancing Technology Burdens (Challenges and Sustainable Solutions), held between March 5 – 7, 2019 at Osun State University, Osogbo, Osun State Nigeria, p 1210 – 1221.

IX **Manuscripts Submitted for Publication:**

1. Jimoh, K.O., **Kareem, M.A.**, Elijah-Adegoke, A., Ariyo, D.T., Ariyo, D.T., Adekunle, T.A., and Jimoh-Ademola, M.O. (2025). Concrete Water Cement Ratio Prediction System using Random Forest Regression submitted to Discover Concrete and Cement Journal.

X **Un-refereed conference proceedings:**

Nil

XI	Book reviews:	Nil
XII	Technical Reports:	Nil
	1. Kareem, M. A. (2016). Postgraduate Professional Experience in Civil Engineering. A Report submitted to ‘The Nigerian Society Engineers (NSE), Ogbomoso Branch, Ogbomoso, Oyo State, Nigeria.	
	2. Kareem, M. A. (2017). Postgraduate Professional Experience in Civil Engineering. A Report submitted to ‘The Council for the Regulation of Engineering in Nigeria (COREN), Abuja, Nigeria.	
XIII	Patents and inventions:	Nil
XIV	Creative/ Design work:	Nil

L. CURRENT RESEARCH ACTIVITIES:

- (I) Funded Research:** Nil
- (II) Non-Funded/ Self Sponsored Research:**
1. Durability properties of rice husk ash-blended palm kernel shell concrete.
 2. Simulation and modeling the service life of rice husk ash-blended palm kernel shell concrete exposed to magnesium sulphate.
 3. The Potentials of cashew leaf ash as cement replacement material for application in cement mortar.
 4. Enhancing the mechanical properties of cashew leaf ash concrete using lime as additive.
 5. Strength and durability characteristics of sandcrete blocks made with cashew leaf ash as partial replacement for cement.
 6. Study on the behaviour of Ayunre (*Albizia Zygia*) and Bush Mango (*Irvingia Garbonensis*) Timbers as reinforcement in concrete.
 7. Experimental Study on the properties of blocks made with Laterite stabilized With cement, cashew leaf ash and rice husk ash.
- (III) Papers and Works in Preparation**
1. Cashew leaf ash as partial replacement for cement in interlocking paving stones.
 2. Evaluation of the qualities of sandcrete blocks produced by selected block industries within Osogbo.
 3. Experimental study on the properties of pervious concrete made with cassava peel ash as partial replacement for cement.
 4. The impact of palm kernel shell as partial replacement for fine aggregate on the properties of self-compacting concrete.
 5. Performance evaluation on health and safety on building construction project in Osogbo, Osun State, Southwestern Nigeria.

M. CONFERENCES ATTENDED:

- (i) 3rd International Conference on Advances in Cement and Concrete Research with the Theme, Applications of Cement and Concrete Materials for Smart, Resilient and Sustainable Infrastructures held between November 5 – 8, 2024 at The Hall, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
- (ii) 3rd International Conference on Engineering and Environmental Sciences on Innovative Technology for Resource Utilization and Environmental Sustainability, held between November 25 – 28, 2024 at Olagunsoye Oyinlola Auditorium, Osun State University, Osogbo, Osun State Nigeria.
- (iii) 2nd International Conference on Advances in Cement and Concrete Research with the Theme, Innovations in Cement and Concrete Production for Sustainable Development held between November 7 – 10, 2023 at The Great Hall, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
- (iv) 1st International Conference on Advances in Cement and Concrete Research with the Theme, Cement and Concrete Innovative Materials for Sustainable Development held between November 15 – 18, 2022 at The Great Hall, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
- (v) 2st International Conference on Engineering and Environmental Sciences on Re-thinking Engineering and Technology for Environmental Sustainability in the face of Global Pandemic held between November 23 – 25, 2021 at Olagunsoye Oyinlola Auditorium, Osun State University, Osogbo, Osun State Nigeria.
- (vi) 1st International Conference on Engineering and Environmental Sciences on Advancing Technology Burdens (Challenges and Sustainable Solutions), held between March 5 – 7, 2019 at Olagunsoye Oyinlola Auditorium, Osun State University, Osogbo, Osun State Nigeria.
- (vii) A Day Training Workshop on “Mechanical Research Needs for Early Career Academics in the University”: Organized by ACU.UK in collaboration with Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria held on Tuesday, 29 August 2017 at Anti-Maggis Hotel and Suite, Yoaco Area, Ogbomoso.
- (viii) 2-Day Mandatory Continuing Professional Education Course for Prospective Corporate Members of the Nigerian Society of Engineers, held between April 4-5 2016 at CAD Centre, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
- (ix) 3-Day Mandatory Continuing Professional Education Course for Prospective Corporate Members of the Nigerian Society of Engineers, held between March 31-April 1, 2016 at NSE Secretariat, Kolapo Ishola Estate, Ibadan, Oyo State, Nigeria.
- (x) Humboldt-Kolleg International Conference on Harvesting Research Outcomes: a Practical Plan to Confirm Achievement of the Millennium Development Goals, held between January 13 – 16, 2015 at Senate Chamber, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
- (xi) 3rd International Conference on Engineering and Technology Research with the Theme, Advancing Research and Innovation in Engineering for Sustainable Industrialization held between July 29 – 31, 2014 at FET CAD Centre/FET High

Rise Building, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.

- (xii) 2nd International Conference on Engineering and Technology Research on Revamping the Industrialization of the Nigeria Economy: The role of Science, Engineering and Technology, held between March 26 – 28, 2013 at Senate Chamber, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.

N. EXTRA-CURRICULAR ACTIVITIES:

Traveling, Playing table tennis, listening to Radio, Meeting people.

O. ANY OTHER RELEVANT INFORMATION:

Reviewer for:

- i. UNOSUN Journal of Engineering and Environmental Sciences (UJEES), Faculty of Engineering Osun State University, Osun State, Nigeria; 2019 till date.
- ii. Nigerian Journal of Technological Development, Faculty of Engineering, University of Ilorin, Kwara State, Nigeria, 2021 till date.
- iii. Silicon Journal, Springer Nature, London, United Kingdom, 2021 till date.
- iv. Journal of Building Engineering, Elsevier B.V., New York City, United States of America.
- v. Discover Civil Engineering, Springer Nature, London, United Kingdom, 2024 till date.
- vi. LAUTECH Journal of Engineering, Faculty of Engineering, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria, 2022 till date.

P. SUMMARY OF CONTRIBUTION TO KNOWLEDGE

Mr. Kareem does research in structural and civil engineering materials. His area of research interest and activities are the uses of agriculture residues as supplementary materials for cement or aggregates in cement, concrete and asphaltic concrete production as well as soil stabilization. The research interest is also extended to the evaluation of water from different sources for used in mixing or curing mortar and concrete and quality assessment of local and imported steel reinforcing bars used in construction industries across Osun State.

Some of my area of my research are the application agricultural and industrial by-products such as palm kernel shell, waste plastic, iron filling and burnt bricks as alternative aggregate (fine or coarse aggregate) in concrete production. Other materials such as rice husk ash, palm kernel shell ash were employed as partial replacement for cement in concrete. The areas covered in the studies involving agricultural and industrial by-products include the availability of the parent materials in Nigeria, the reactivity and potentials of these materials as replacement for cement in mortar and concrete. The optimum level of incorporation of these materials in mortar and concrete for the sustainability of concrete production were established.

The types, quality, contents cement or aggregate, mix proportion and curing age are the factors generally believed to have influence on the properties of mortar and concrete but much attentions have not been given to the influence of the quality of water used for concrete mixing or the environment which the concrete is subjected to during its service life. Although, some previous studies have shown that water from questionable sources such as sea water could be considered for mixing concrete without adversely affecting the concrete quality. However, it was established in my study that water containing palm oil mill effluent is unsuitable for mixing cement mortar.

The vulnerability of buildings to premature failure is majorly ascribed to the use of substandard materials, thus this validates the importance of assessing the properties of steel rebar and their bond strength performance in concrete surrounding. This research shows that all the local and imported steel test specimens met the BS minimum strength specifications. However, the Imported steel rebar are relatively brittle than their local counterparts. Also, with the exception of 12 mm local bar, other imported test diameter bars outscored the local counterparts in terms of bond strength performance in the cylindrical concrete specimens.

Dr. Mutiu Abiodun Kareem



Signature

18-05-2026

Date