Kehinde A. Adewale

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EDUCATION

Texas State University, Texas

- Ph.D. in Material Science Engineering and Commercialization, August 2025 – present

Texas State University, Texas

- Master of Science in Construction Management, August 2025

Obafemi Awolowo University, Nigeria

- Bachelor of Science in Civil Engineering, August, 2017

PROFESSIONAL EXPERIENCE

Texas State University, San Marcos, Texas September 2023 – Present
Graduate Research Assistant

- Doctoral research Assistant on **NSF/ERI funded project:** *Understanding How Nanoparticles Influence Carbon Storage in Cement Based Materials*. Leading the experimental investigation and executing core research activities.
- Conducting research on low-carbon and sustainable cementitious materials with emphasis on CO_2 curing, metakaolin and reclaimed fly ash.
- Drafting peer-reviewed journal manuscripts related to sustainable concrete materials and CO_2 sequestration technologies
- Supporting graduate research activities through experimental planning, data interpretation and documentation for ongoing research projects.

Nigerian National Petroleum Company (NNPC) Limited, Abuja, Nigeria. May 2021 – August 2023
Construction and Installation Engineer

NNPC Engineering and Technology Company (Subsidiary)

- Collaborated in the successful delivery of multiple Engineering Procurement and Construction projects, including national highway project valued at over $820M.
- Negotiated contracts, streamlined permitting processes, and minimized delays, achieving project milestones consistently within deadlines.
- Conducted comprehensive cost estimated for Engineering Procurement and Construction projects, enabling accurate tender submission by various sub-contractors.

NNPC Energy Services (Subsidiary)

- Served as project engineer in oil and gas seismic exploration activities leading to identification of oil and gas well in Nigeria Frontier basin.
- Ensured that access road and site routes remain passable and structurally stable throughout the exploration phase thereby reducing project timelines by 15%.
- Collaborated with others oil and gas professional to drill exploratory wells in a frontier basins thereby adding about 2 billion barrel of oil and gas reservoir.

Joola Ventures Limited, Lagos, Nigeria July 2019 – May 2023

Facilities Engineer

- Supervised regular maintenance of downstream company, Ardova Plc, 450 retail outlets (gas stations) in Nigeria.
- Developed bid documents for tendering purposes, enabling a 65% win rate on the submitted proposals
- Championed safety culture on site, reducing incident rates by 25% through consistent training and mentoring.

PEER REVIEWED PUBLICATIONS

1. **Adewale, K.** Francioso, V., & Moro, C. Investigating the Hydration Mechanism of CO_2-Cured Blended System Containing Metakaolin and Reclaimed Fly Ash (MK-RFA). SSRN, abstract 7576646.

2. Moro, C., Espinoza, W., Torres, A., Kambampati, S., & **Adewale, K.** (2026). Refinement of Reinforced Concrete Box Culvert Installation Guidelines (Report No. SD2023-07). South Dakota Department of Transportation.

3. **K. Adewale** and C. Moro, "Exploring CO2 mineralization for enhanced high-temperature exposure in cement-based materials containing slag cement and fly ash cenosphere," Construction and Building Materials, vol. 529, p. 146588, 2026/06/27/ 2026, https://doi.org/10.1016/j.conbuildmat.2026.146588

4. **K. Adewale** and C. Moro, "The Role of CO_2 Curing in Strengthening Carbonation Resistance o Cementitious Materials." – Under Review

5. Gholami Hossein Abadi, G., **Adewale, K.,** Salim, M. U., & Moro, C. (2026). Enhancing Concrete Strength Prediction from Non-Destructive Testing Under Variable Curing Temperatures Using Artificial Neural Networks. *Infrastructures*, *11*(2), 46. https://doi.org/10.3390/infrastructures11020046

6. **K. Adewale**, M. U. Salim, G. Gholami Hossein Abadi, and C. Moro, "Exploring enhanced high-temperature resistance: Analyzing the combined impact of fibers and nanoparticles in mortars," Construction Building Materials, vol. 435, p. 136886, 2024/07/12/ 2024

7. M. U. Salim, **K. Adewale,** G. Gholami Hossein Abadi, and C. Moro, "Long-term performance evaluation of slag-cenosphere geopolymer mortar," Construction and Building Materials, vol. 457, p. 139491, 2024/12/27/ 2024, https://doi.org/10.1016/j.conbuildmat.2024.139491
8. Arthur, C., Onuche, P. U. O., Yusuf, M., Animashaun, T., Boansi, S. O., **Adewale, K**., & Bart-Addison, C. E. (2025). Decarbonizing Concrete: Ultra-Low-Carbon Pathways and Policy Integration. Scientific Journal of Engineering, and Technology, 2(1), 134-142.

POSTER PRESENTATION

- **K. Adewale**, M. U. Salim, G. Gholami Hossein Abadi, and C. Moro, "Exploring enhanced high-temperature resistance: Analyzing the combined impact of fibers and nanoparticles in mortars," 16th Annual Graduate Student Research Conference (GSRC). Texas State University, San Marcos, TX. April, 2025.

- **K. Adewale**, C. Moro, "Exploring CO_2 Mineralization for Enhanced Fire Resistance in Cement-Based Materials Containing Slag Cement and Fly Ash Cenosphere, The ACI Concrete Convention – Rosemont/Chicago, IL, April, 2026.

- **K. Adewale**, C. Moro, "The Role of CO_2 Curing in Strengthening Carbonation Resistance of Cementiitous Materials, 2026 Concrete Conference, Cement Council of Texas – Austin, TX. May 13-14, 2026.

HONORS AND AWARDS

- **Travel Grants.** The travel grants covered my travel expenses to 1st Annual Texas Materials Consortium at Rice University, Houston, TX. 2026
- **Texas Public Education Grant (TPEG).** This scholarship covers part of my tuition during my Ph.D. program. Academic year: 2026
- **Travel Grants.** The travel grants covered my travel expenses to ACI Conference Spring, 2026, Rosemont/Chicago, IL
- **Awarded Doctoral Research Scholarship.** This scholarship cover part of my expenses for my doctoral program at Texas State University, where I will do research towards my PhD dissertation.
- **Texas Public Education Grant (TPEG).** This scholarship covers part of my tuition during my masters program. Academic year: 2023-2025
- **Finalist in Three Minutes Thesis (3MT) Competition** at College Level. Texas State University, San Marcos, TX. November 2024.

- **Awarded Graduate Research Scholarship.** This exclusive scholarship covered my tuition and monthly stipend during my master's program at Texas State University, where I did research towards my Master's thesis. Academic year: 2023-2025
- **Petroleum Trust Development Fund (PTDF) Overseas Scholarship.** This scholarship is funded by Federal government of Nigeria covers all expenses (flights, tuition, fees, meals and accommodation) during master's program. Academic year: 2022/2023
- **Best National Youth Service Corp (NYSC) Member.** Federal government college Nigeria

SOFTWARE SKILLS:

- **Statistical Data Analysis:** JMP, SPSS, Python, SQL
- **Structural Analysis/Design:** StaadPro, Orion, Civil 3D, Autocad
- **Project Management:** Bluebeam, Primevera, Procore
- **Others:** Microsoft Word, Excel, Project, Access

MATERIAL CHARACTERISATION METHODS

- **Thermogravimetric Analyzer (TGA):** Used this device to characterize the deterioration of cementitious material on exposure to high temperature.
- **Scanning Electron Microscope (SEM):** Used this device to image and analyze different phases of cementitious materials.
- **X-ray Diffractometer (XRD):** Used this device to probe crystalline structure of materials to determine phases.
- **Imagine Sputter Coater:** Use this device to coat the cementitious podwer with conductive materials such as gold(Au) prior to SEM analysis.

Certifications/Professional Exam/Courses

- **Professional Engineer (PE) license.** State of Colorado #PE.0069132
- **LEED Green Associate certification.** US. Green Building Council (USGBC). May 2025
- **OSHA 30-Hour Construction.** March. 2025 Card # 26-607637034
- **Engineer-in-Training (EIT) certification**. License # 82841 Texas Board of Professional Engineers and Land Surveyor. December, 2024.
- **Fundamental of Engineers (FE)**. National Council of Examiners for Engineering and Surveying (NCEES). August 21, 2024.

- **Project Management Professional (PMP)®**. PMP # 3449059 Project Management Institute (PMI). April 2023

PROFESSIONAL AND DEVELOPMENT ACTIVITIES

Professional organizations

- Construction Management Association of America
  - Member. February 2025 – Present
- American Society of Civil Engineers (ASCE)
  - Member. August 2023 – Present
- American Concrete Institute (ACI)
  - Member. August 2023 -present
  - Associate Member **ACI 123** (Research and Current Development) **Technical Committee**
- Project Management Institute (PMI)
  - Member. January 2023 to Present
- National Society of Black Engineers (NSBE)
  - Member. 2024 – Present
- Nigeria Society of Engineers (NSE)
  - Member. Jan. 2022 – Present

Professional meetings attended/Services

- 2026 Concrete Conference, Cement Council of Texas – Austin, TX. May 13-14, 2026.
- The ACI Concrete Convention – Rosemont/Chicago, IL, April, 2026.
- Austin ASCE Continuing Education Conference
- Member, ASCE Texas – Central Texas Flood Committee
- Austin ASCE General meeting. April 15, 2025. “Unconventional ATX: The Austin Convention Center - A Bold Vision for a Sustainable and Culturally Vibrant Downtown”
- Texas ASCE Webinar: 2025 Texas Infrastructure Report Card Overview. April 15, 2025.
- NSBE Annual conference. March 20 - 24, 2024. Atlanta, GA.