Teslim Olayiwola

Baton Rouge LA 70803 tolayi1@lsu.edu

Education

Louisiana State University (LSU), Baton Rouge, LA

Dec 2026

Doctor of Philosophy in Chemical Engineering. GPA: 4.0+/4.0

African University of Science and Technology (AUST), Abuja

Dec 2017

Master of Science in Petroleum Engineering. GPA: 3.64/4.0

Ladoke Akintola University of Technology (LAUTECH), Ogbomosho

Dec 2015

Bachelor of Technology in Chemical Engineering. GPA: 4.62/5.0

Experience

Graduate Research Assistant

Jul 2022 – present

Baton Rouge, LA

• Simulation of molecules with LAMMPS simulation package.

Romagnoli's group at LSU Cain Department of Chemical Engineering

• Synergistic of study of molecular dynamics and machine learning in fuel cell design.

Graduate Research Assistant Ding's group at LSU Cain Department of Chemical Engineering

Jan 2021 – May 2022 Baton Rouge, LA

Description of the second seco

- Developed synthesis protocols to grow tiny (<10nm) noble metal nanocrystals
- Designed a method to accurately deposit ultra-small nanoparticles on catalyst support.
- Managed and operated reactor bed to test new catalysts for important reactions such as acetylene hydrogenation, propane dehydrogenation and water gas shift reaction, which are important feedstocks in petrochemical operations.
- Applied UV Ozone and plasma treatment in cleaning nanocrystal surfaces and analyzed varieties of supported catalyst and nanocrystals with XRD, XAS and DRIFTS.

Research Assistant Dhahran Techno Valley

Jan 2019 – Dec 2020 Dhahran, Saudi Arabia

- Designed and conducted quantitative research on the application of molecular dynamics study in polymer and surfactant studies.
- Secured a KAUST Shaheen II research grant (Project k1413) worth USD 26,000 in collaboration with my PI.
- Collaborated with peers and published thirteen (13) scientific writings on areas related to artificial intelligence in petroleum engineering and oil field chemistry
- Presented research results in the form of journal manuscripts, reports, posters, and presentations.
- Assisted professor in teaching reservoir engineering and enhanced oil recovery to junior and senior year petroleum engineering undergraduates.

Graduate Commercial analyst Intern Chevron

Aug 2018 – Dec 2018 Lekki, Lagos

- Assisted in drafting a detailed business processes and procedures for a gas sales agreement with Egbin Power PLC and Olorunsogo Power plant (now approved).
- Monitored gas operational activities to ensure contractual compliance, avoid liabilities and maximize value to the company.
- Calculated periodic gas prices and punctually ensured monthly pricing and volumetric information on invoices are correct.

- Prepared gas production and supply reports for management, regulatory authorities and customers.
- Supported gas value chain contracts negotiation, drafting and administration.

Undergraduate Process Engineering Intern Opex Oil and Gas (assignment at Oando Plc)

Nov 2014 – Feb 2015 Ikeja, Lagos

- Effectively manned and operated a 24/7 natural gas plant producing 250 bar high pressured compressed natural gas (CNG).
- Engineering and supervisory control of multi-million dollar compressors.
- Engaged in natural gas metering and validation.
- Responsible for loading, sales and tracking of CNG for onward delivery to the user.

Activities

National Organization for Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), American Institute of Chemical Engineers (AICHE), National Society of Black Engineers (NSBE), Society of Petroleum Engineers (SPE), African Graduate Student Association (AGSA)

Honors

2022 NOBCChE Travel award
Gamma Beta Phi Honor member
LSU George Daniel Fellowship
LSU Foundation Graduate Assistantship
2020 KFUPM Overseas Travel fellowship
2017 SPE Nigerian Regional Paper Contest Winner (BSc & MSc. category)
2017 SPE African Regional Paper Contest Winner (BSc & MSc. category)
2016/17 AUST Master of Science Scholarship Award
2015 Best Graduating Student in Chemical Engineering Student
MTN Foundation Science and Technology Scholarship Award

Volunteer

2021/2022 Membership Chairperson, LSU AGSA
20219/2020 Treasurer, SPE KFUPM Student Chapter
2016/2017 Symposium Co-organizer, SPE AUST Chapter
2014/2015 Academic Coordinator, LAUTECH Chemical Engineering Muslim Student Association
Peer reviewer for AlChE, Journal of Physical Chemistry, Journal of Taiwan Institute of Chemical Engineers

Skills

Python, Matlab, Microsoft Office packages (MS Word, Excel, PowerPoint), Scikit learn, Tensorflow, GROMACS, VASP

References

Available on request