



OLARINRE
SALAKO
SCIENCE • SYSTEMS • SOCIETY

Olarinre Salako PhD

Scientist | Engineer | Technology Leader | Inventor | Author

EXECUTIVE PROFILE

Olarinre Salako, Ph.D., is a multidisciplinary scientist, engineer, researcher, educator, technology leader, consultant, inventor, author and public-policy commentator. Over more than two decades, he has worked across the oil and gas, carbon management, renewables, electricity and energy systems, and automotive sectors, as well as government-sponsored research and executive consulting.

His work spans geoscience, reservoir engineering, CCUS, hydrogen and low-carbon energy, vehicle safety, electrification and vehicle - grid integration, energy optimization, gas pipeline construction, data science, machine learning and artificial intelligence. His research in transportation electrification has included vehicle-to-grid (V2G), grid-to-vehicle (G2V) and smart charging systems.

He has led multidisciplinary scientific and engineering teams, served as Co-Principal Investigator on U.S. Department of Energy-sponsored research, developed enterprise-scale data and AI solutions, contributed to a portfolio of 10 inventions, 8 patents and authored and co-authored more than 20 scientific publications, technical papers and reports.

Beyond science and technology, Salako applies systems thinking to governance, institutions, public policy and national development. He writes the weekly Systems & Society column for the Nigerian Tribune and is the author of The Unfinished Nigerian Project. Across these fields, his work is connected by a central intellectual approach: understanding complex problems through the interaction of science, systems and society.

AREAS OF EXPERTISE & INTEREST

Geoscience & Subsurface Engineering

Applied geophysics; petroleum geoscience; reservoir characterization; numerical reservoir simulation; 4D seismic monitoring and inversion; electromagnetic modeling; integrated multiphysics analysis; subsurface monitoring and decision support.

Carbon Management, CCUS & Low-Carbon Energy

Carbon capture, utilization and storage (CCUS); geological CO₂ storage; monitoring, verification and storage assurance; CO₂-enhanced oil recovery; carbon management; hydrogen; emissions reduction; energy transition and decarbonization technologies.

Energy & Electricity Systems

Energy systems; electricity infrastructure; renewable-energy integration; distributed energy systems; energy storage; battery systems; smart charging; vehicle-to-grid (V2G), grid-to-vehicle (G2V) and grid-interactive technologies; sustainable energy infrastructure.

Automotive Electrification & Mobility

Battery-electric, plug-in hybrid, hybrid and fuel-cell vehicle systems; battery degradation and lifecycle analytics; charging behavior and infrastructure; vehicle energy optimization; carbon-footprint analytics; connected mobility and transportation safety.

Data Science, Artificial Intelligence & Digital Technologies

Machine learning; predictive analytics; generative AI; large language models; retrieval-augmented generation; physics-informed AI; explainable AI; numerical and scenario modeling; decision-support systems; cloud analytics and enterprise data platforms.

Technology Strategy, Innovation & Commercialization

Technology evaluation and roadmapping; innovation portfolio development; intellectual property; technology commercialization; business-case development; emerging-technology assessment; digital transformation; research-to-deployment strategy.

Climate, Energy Policy & Sustainability

Climate and energy policy; energy-transition strategy; sustainability; carbon accounting; regulatory analysis; strategic energy planning; public-private collaboration; institutional capacity and sustainable infrastructure.

Leadership, Research & Strategic Advisory

Multidisciplinary team leadership; scientific research leadership; U.S. government-sponsored research; proposal development; executive advisory; strategic partnerships; stakeholder engagement; industry-academic-government collaboration; technical and scientific communication.

Systems Thinking, Public Policy & Institutional Analysis

Systems analysis; governance and institutional reform; public-policy analysis; energy governance; infrastructure policy; national development; evidence-based public communication and interdisciplinary problem-solving.

EDUCATION & EXECUTIVE EDUCATION

Heriot-Watt University, School of Energy, Geoscience, Infrastructure and Society, UK

Doctor of Philosophy (Ph.D.), Energy (Petroleum) Engineering

MSc., Geoscience for Subsurface Exploration

Federal University of Technology, Akure, Nigeria

Bachelor of Technology (Hons) in Applied Geophysics

Columbia Executive Engineering / EMERITUS Institute

Postgraduate Diploma in Applied Data Science & Machine Learning

University of North Dakota

Graduate Coursework, Master of Business Administration (MBA) Program Operations • Accounting • Finance • Supply Chain Management • Leadership

University of Cambridge Institute for Sustainability Leadership

Certificate: Business and Climate Change - Towards Net Zero Emissions

Cornell University

Certificate: Blockchain & Smart Contract Essentials

PROFESSIONAL EXPERIENCE

Emakemtos Inc., 02/2019 - 07/2021, 10/2024 - Present

- Managing Partner/ Principal Advisor - Energy, AI & Sustainability Strategy

- **Executive Leadership & Strategic Advisory:** Founded and lead a multidisciplinary consulting practice, directing a 13-member team of engineers, scientists and consultants providing advisory and technical services across the oil and gas, automotive, renewable energy, sustainability and technology sectors.
- **Energy Transition & Sustainability:** Advise organizations on carbon management, carbon capture, utilization and storage (CCUS), hydrogen, electrification, renewable energy and emerging low-carbon technologies, supporting technology evaluation, decarbonization planning and investment decisions.
- **Decision Analytics & Value Optimization:** Demonstrated that an approximately \$3 million seismic reprocessing program represented the highest-value investment, protecting approximately \$36 million in drilling capital by reducing subsurface uncertainty and improving redevelopment decisions.
- **Artificial Intelligence & Digital Transformation:** Lead the development and application of AI-enabled analytics and decision-support solutions integrating engineering, geoscience, energy systems and advanced data analytics to address complex technical, operational and strategic problems.
- **Technology Strategy & Commercialization:** Support organizations in evaluating emerging technologies, developing innovation strategies and business cases, and translating scientific and technological developments into commercially and operationally relevant solutions.
- **Climate Policy & International Collaboration:** Lead consulting initiatives involving climate policy, energy systems and institutional development, including collaboration with a Nigerian consortium on a proposal under the UK PACT Climate Policy and Governance Programme to strengthen institutional capacity and support low-carbon development.
- **Executive & Stakeholder Engagement:** Work with corporate executives, government agencies, research institutions, investors and industry partners to develop strategic partnerships connecting scientific and technical capabilities with business, investment and public-policy objectives.

Toyota, Plano TX, USA 07/2021 - 10/2024

Senior Technical Lead - Electrification & Energy Systems, Data & AI Innovation

- **Technical Leadership, Vehicle Data & AI Innovation:** Led a cross-functional team of 10 scientists and engineers working across vehicle electrification, energy systems, sustainability, data science and artificial intelligence, providing technical direction, mentoring and scientific leadership for enterprise research initiatives, collaborating with Toyota organizations across North America, Europe and Asia.
- **Proof of Concept, Production AI & Intellectual Property Leadership:** Led development of five production AI solutions and more than 20 proof-of-concepts, contributing to an innovation portfolio of 10 inventions and 8 patents spanning vehicle energy management, carbon-footprint reduction, driving behavior, electrification and connected mobility.
- **Vehicle Electrification & Battery Analytics:** Developed predictive models for battery degradation, lifecycle and warranty analytics across battery-electric (BEV), plug-in hybrid (PHEV), hybrid (HEV) and fuel-cell electric vehicle (FCEV) platforms, supporting battery-performance assessment, customer value, energy optimization and long-term electrification strategy.
- **Vehicle - Grid Integration & Charging Systems:** Collaborated with electric utilities, grid-service providers and technology partners on research and evaluation of grid-to-vehicle (G2V), vehicle-to-grid (V2G), smart charging, charging protocols and vehicle - grid integration, examining interactions among electrified vehicles, charging infrastructure and electricity systems to support charging optimization, grid services and energy management.
- **PHEV, Charging & Energy-Transition Research:** Developed research and analytical frameworks examining PHEV utilization, charging behavior, EV range, regenerative braking and real-world tailpipe emissions. Proposed data-driven approaches using connected-vehicle and charging data to evaluate emissions reduction, including the Percentage Reduction in Tailpipe CO2 Emission (PRTCE) concept, within the broader transportation energy trilemma of decarbonization, energy availability and affordability.
- **Vehicle Energy, Carbon Analytics & Sustainable Mobility:** Developed the EV-Fit Recommendation Engine, integrating driving behavior, charging accessibility and infrastructure availability to assess electrified-vehicle suitability. Developed analytics for vehicle energy consumption, fuel savings, charging behavior and CO2 reduction, and created the Carbon Footprint Gauge, integrating vehicle physics, fuel chemistry and driver behavior to measure emissions and identify carbon-reduction opportunities.

- **Eco-Mode Efficiency & Emissions Research:** Designed analytics to quantify the energy and emissions benefits of vehicle Eco-Mode functionality, using large-scale connected-vehicle data. The work was showcased during Toyota Earth Day 2023 and supported technical analyses and discussions with the U.S. Environmental Protection Agency (EPA) concerning off-cycle carbon credits.
- **Transportation Safety, AI & Connected Mobility:** Collaborated with Toyota's Collaborative Safety Research Center (CSRC) on senior-driver safety, AI-enabled driver monitoring and predictive safety analytics, applying machine learning, computer vision, sensor fusion and driver-behavior modeling to safer and more intelligent mobility.
- **Enterprise Technology & Strategic Collaboration:** Architected scalable AWS-based analytics platforms integrating connected-vehicle data for enterprise analytics, advanced decision support and global R&D. Collaborated across Toyota business units, battery and powertrain organizations, engineering and research teams, utilities, grid-service providers and external technology partners to evaluate emerging technologies, develop technical and business cases and support enterprise decision-making.

Energy & Environmental Research Center (University of North Dakota) 08/2015 - 01/2019

Research Scientist/Co-Principal Investigator - CCUS, Hydrogen & Energy Systems

- **Research Leadership & DOE Programs:** Led and supported multidisciplinary, multi-million dollars research and proposal development for U.S. Department of Energy-sponsored programs, including the Plains CO2 Reduction (PCOR) Partnership, CarbonSAFE, BEST and Aquistore, spanning carbon capture, utilization and storage (CCUS), reservoir engineering, carbon management, hydrogen, pipeline integrity and low-carbon energy technologies. Served as Co-Principal Investigator on multiple research initiatives.
- **Research Program & Portfolio Management:** Directed research planning and execution across multidisciplinary technical teams, including proposal development, project scoping, budgeting, resource coordination, sponsor and client engagement, technical reporting and delivery of research outcomes.
- **CCUS, CO2-EOR & Geological Storage:** Developed integrated approaches for monitoring and managing injected CO2 in geological formations and CO2-enhanced oil recovery operations, supporting reservoir surveillance, monitoring and verification, storage assurance, risk assessment and field-development decisions.
- **Linear Programming Research for Power Plant Operators:** Collaborated on linear optimization solutions for power-plant operations, improving energy efficiency and resource scheduling.
- **Multiphysics Modeling & Scientific Computing:** Developed computational workflows integrating reservoir simulation, 4D seismic inversion, electromagnetic modeling, pulsed-neutron and other well-log data, dynamic well-tie techniques and reservoir surveillance data to improve characterization of subsurface fluid and pressure changes, history matching and CO2-storage monitoring.
- **AI, Data Analytics & Intelligent Monitoring:** Applied machine learning, numerical simulation, geospatial analytics and multi-sensor data integration to reservoir characterization, anomaly detection, monitoring and decision-support problems involving complex subsurface and energy systems.
- **Hydrogen & Energy-Transition Research:** Led and supported research involving blue hydrogen integrated with carbon capture and storage, green-hydrogen techno-economic optimization, power-generation optimization, emissions management, pipeline integrity and leakage detection, and other emerging low-carbon energy technologies.
- **Government, Industry & Research Collaboration:** Worked with the U.S. Department of Energy, universities, research institutions, industry consortia, Denbury Resources, Schlumberger and multidisciplinary technical teams to advance research, demonstration, technology transfer and deployment of carbon-management and energy technologies.
- **Scientific Publications & Knowledge Transfer:** Authored and co-authored peer-reviewed publications, U.S. DOE technical reports, conference papers and presentations on CCUS, CO2-EOR, reservoir monitoring, geophysics and related energy technologies, and communicated research findings to government sponsors, industry partners and international scientific audiences.

Edinburgh Time Lapse Project (A Heriot Watt University Research Consortium) 11/2010 - 06/2015

Research Engineer - Reservoir Fluid Flow Simulation, 4D Seismic & Electromagnetics Modelling

- **Numerical Reservoir Simulation & Fluid-Flow Modelling:** Conducted research in numerical reservoir simulation and fluid-flow prediction under varying production and injection scenarios, supporting reservoir characterization, production forecasting and improved understanding of dynamic subsurface behaviour.
- **4D Seismic Modelling & Inversion:** Developed and applied time-lapse seismic forward-modelling and inversion workflows to characterize reservoir changes and distinguish fluid-saturation effects from pressure-induced responses, improving dynamic reservoir monitoring and interpretation.
- **Time-Lapse Electromagnetic Modelling:** Modelled electromagnetic responses to changes in rock and fluid resistivity, temperature and salinity during water and gas injection, investigating the complementary value of electromagnetic methods for dynamic reservoir characterization and monitoring.
- **Integrated Multiphysics Reservoir Modelling:** Designed automated workflows integrating reservoir simulation, 4D seismic and electromagnetic modelling to evaluate reservoir responses under multiple production and injection scenarios and investigate the combined value of seismic and electromagnetic measurements for reservoir surveillance.
- **Industry Research & Collaboration:** Conducted research, technical studies and consultancy through the ETLP industry consortium, supporting BP, Shell, TotalEnergies and ExxonMobil and contributing scientific insights to industry problems in reservoir characterization, monitoring and management.
- **Scientific Publications & Knowledge Dissemination:** Authored and co-authored peer-reviewed journal papers, conference papers and technical presentations arising from research in time-lapse seismic, electromagnetic monitoring and integrated reservoir characterization.
- Osun State University, Osogbo, Nigeria 2009 - 2010; Study Leave 2010 - 2015
- Lecturer, Department of Geological Sciences
- **Geophysics Teaching:** Taught undergraduate courses in geophysics, providing instruction in the theoretical and applied principles of geophysical methods and their applications to subsurface investigation.
- **Academic Instruction & Student Development:** Developed and delivered lectures, supported student learning and assessment, and contributed to undergraduate education in geology and geophysics.
- **Postgraduate Study Leave:** Proceeded on approved study leave at Heriot-Watt University, United Kingdom, remaining on study leave until resignation in 2015.
- Kokun Integrated Nigeria Limited, Ota/Agbara, Nigeria 2005 - 2008
- Supervisor, Gas Pipeline Construction
- **Gas Pipeline Construction, Engineering, Welding & Quality Control:** Supervised day-to-day pipeline construction, including cost management, right-of-way preparation, trenching, stringing, welding, coating, lowering-in, backfilling and tie-ins, ensuring compliance with approved drawings, specifications, NDT requirements and engineering codes.
- **Health, Safety & Environmental Compliance:** Enforced HSE procedures, permit-to-work requirements, toolbox talks and safe working practices for excavation, lifting, welding, pressure testing and construction around existing pipelines and utilities.
- **Contractor & Construction Coordination:** Coordinated contractors, subcontractors, foremen and field crews, monitored manpower, equipment and materials, and resolved field construction issues in collaboration with engineering, procurement and project-management teams.
- **Pipeline Testing, Integrity & Commissioning:** Supervised pipeline cleaning, gauging, hydrostatic testing, dewatering, leak testing and pre-commissioning activities, while ensuring protection of pipeline integrity throughout construction.

- **Progress Monitoring, Documentation & Handover:** Monitored construction schedules, productivity and milestones; prepared progress and inspection records; supported as-built documentation, punch-list closeout, mechanical completion and final handover to operations.
- Aatan Comprehensive High School, Oyo, Nigeria 2003 - 2005
- Mathematics & Physics Teacher, Coordinator, After-School Lessons
- **Mathematics & Physics Teaching:** Taught secondary-school Mathematics and Physics, delivering instruction in core concepts, quantitative problem-solving and practical applications.
- **Lesson Planning, Assessment & Student Development:** Prepared and delivered structured lessons, assessed student performance, provided academic support and prepared students for internal and external examinations.
- **After-School Programme Coordination:** Coordinated after-school lessons, organized teaching schedules and provided additional instruction to strengthen student understanding and academic performance.
- Pipeline & Products Marketing Company (PPMC) & Warri Refinery 2001 - 2002
- National Youth Service Corps (NYSC)
- **Initial Posting - Warri Refinery:** Commenced national service at Warri Refinery, gaining initial exposure to refinery operations, industrial processes and petroleum-product infrastructure.
- **Health, Safety & Environment - PPMC:** Subsequently transferred to PPMC's Health, Safety & Environment Department, supporting HSE activities associated with petroleum-product pipeline and facility operations
- **Pipeline Inspection, Spill Remediation & Community Engagement:** Participated in pipeline inspections, petroleum-spill response and remediation activities, field safety assessments and engagement with affected host communities on pipeline, environmental and safety-related matters

RESEARCH & SCIENTIFIC EXPERIENCE

Exploration Geoscience, Reservoir Characterization & Field Development

Applied seismic acquisition, processing and interpretation, quantitative reservoir characterization and integrated field-development analysis to prospect evaluation, seismic-survey design, drilling decisions, mature-field rejuvenation and production optimization.

Reservoir Simulation, 4D Seismic & Multiphysics Monitoring

Developed reservoir-simulation, 4D seismic and time-lapse electromagnetic (CSEM) methods, integrating petro-elastic and petro-electric rock physics to characterize dynamic fluid and pressure changes and improve reservoir surveillance and management.

CCUS, CO2-EOR & Geological Carbon Storage

Conducted U.S. Department of Energy-sponsored research in CCUS, CO2-enhanced oil recovery and geological CO2 storage, integrating reservoir simulation, 4D seismic, geological models, well logs, production data and machine learning for monitoring, verification, storage assurance and risk-informed reservoir management.

Hydrogen, Power Systems & Low-Carbon Energy

Contributed to research and technical evaluation in blue hydrogen with CCUS, green-hydrogen optimization, power-generation optimization, pipeline integrity, emissions management and low-carbon energy systems, applying engineering and analytics to energy-transition and decarbonization challenges.

Vehicle Electrification, Battery Systems & Sustainable Mobility

Led applied research across BEV, PHEV, HEV and FCEV platforms, spanning battery degradation and lifecycle forecasting, charging behavior, vehicle-energy consumption, electrification suitability and sustainable mobility.

Conducted research on vehicle - grid and vehicle - home integration, including vehicle-to-grid (V2G), grid-to-vehicle (G2V), vehicle-to-home (V2H), smart charging and charging protocols, examining interactions among electrified vehicles, charging infrastructure, electricity grids and household energy systems.

Developed data-driven approaches integrating vehicle physics, fuel chemistry, connected-vehicle data and driver behavior for energy optimization and carbon-emissions analysis, including Toyota's large-scale Eco-Mode research.

Artificial Intelligence, Physics-Informed Analytics & Decision Systems

Applied machine learning, physics-informed analytics, predictive modeling, optimization and computer vision across geoscience, CCUS, energy systems and automotive applications, including subsurface monitoring, battery-health prediction, vehicle-energy analytics, transportation safety and enterprise decision support.

PATENTS & INVENTIONS

- **Innovation Portfolio:** 10 inventions, including 6 granted U.S. patents, 2 published U.S. patent applications, and 2 additional proprietary innovations.
- **Granted U.S. Patents**
- US 12,561,696 - Modeling Driver Style to Lower a Carbon Footprint (Feb. 24, 2026).
- US 12,534,096 - Methods and Systems and Non-Transitory Computers for Monitoring Driving Behavior of a Vehicle (Jan. 27, 2026).
- US 12,530,929 - Driving Modification to Decrease Carbon (Jan. 20, 2026).
- US 12,460,937 - Ranking Carbon Footprints of Vehicles to Determine Driving Behavior Modifications (Nov. 4, 2025).
- US 12,351,176 - Vehicular Enclosed Area Determination (July 8, 2025).
- US 12,000,706 - Vehicle Carbon Footprint Management (June 4, 2024).
- **Published U.S. Patent Applications**
- US 2024/0273557 - NFT-ECO Generated Based on Carbon Footprint Reduction from Selection of New Vehicle (Aug. 15, 2024).
- US 2024/0037628 - Methods and Systems for Providing Vehicle Information Based on a Vehicle Powertrain Type (Feb. 1, 2024).

SELECTED SCIENTIFIC PUBLICATIONS & TECHNICAL CONTRIBUTIONS

Peer-Reviewed Journal & Proceedings Articles

Salako, O., Jin, L., Barajas-Olalde, C., Hamling, J.A., & Gorecki, C.D. (2018). Implementing adaptive scaling and dynamic well-tie for quantitative 4-D seismic evaluation of a reservoir subjected to CO₂ enhanced oil recovery and associated storage. *International Journal of Greenhouse Gas Control*, 78, 306 - 326.

Jin, L., Pekot, L.J., Hawthorne, S.B., Salako, O., Peterson, K.J., Bosshart, N.W., Jiang, T., Hamling, J.A., & Gorecki, C.D. (2018). Evaluation of recycle gas injection on CO₂ enhanced oil recovery and associated storage performance. *International Journal of Greenhouse Gas Control*, 75, 151 - 161.

Jin, L., Pekot, L.J., Smith, S.A., Salako, O., Peterson, K.J., Bosshart, N.W., Hamling, J.A., Mibeck, B.A.F., Hurley, J.P., Beddo, C.J., & Gorecki, C.D. (2018). Effect of gas relative permeability hysteresis and solubility on associated CO₂ storage performance. *International Journal of Greenhouse Gas Control*, 75, 140 - 150.

Burnison, S.A., Bosshart, N.W., Salako, O., Hamling, J.A., Reed, S., & Gorecki, C.D. (2017). 4-D seismic monitoring of injected CO₂ enhances geological interpretation, reservoir simulation, and production operations. *Energy Procedia*, 114, 2748 - 2759. DOI: 10.1016/j.egypro.2017.03.1539.

Burnison, S.A., Livers, A.J., Hamling, J.A., Salako, O., & Gorecki, C.D. (2017). Design and implementation of a scalable, automated, semi-permanent seismic array for detecting CO₂ extent during geologic CO₂ injection. *Energy Procedia*, 114, 3879 - 3888. DOI: 10.1016/j.egypro.2017.03.1520.

Salako, O., MacBeth, C., & MacGregor, L. (2015). Potential applications of time-lapse marine CSEM to reservoir monitoring. *First Break*, 33(4), 35 - 46. DOI: 10.3997/1365-2397.2014025.

Published Conference Papers & Extended Abstracts

Olajide, O.I., Adedeji, E., Chukwu, E., & Salako, O. (2025). Integrating Carbon Capture Utilization and Storage (CCUS) concept into the petroleum industry operations in Nigeria, benefits and challenges. SPE Nigeria Annual International Conference and Exhibition, Lagos, Nigeria, August 2025. SPE-228784-MS. DOI: 10.2118/228784-MS.

Dalkhaa, C., Pekot, L.J., Oster, B., Bosshart, N.W., Jiang, T., Salako, O., Sorensen, J., Wildgust, N., Nickel, E., & Gorecki, C.D. (2018). An improved numerical modeling and simulation study of the Aquistore CO₂ storage project. 14th International Conference on Greenhouse Gas Control Technologies (GHGT-14), Melbourne, Australia, 21 - 26 October 2018. DOI: 10.2139/ssrn.3365731.

Jin, L., Pekot, L.J., Salako, O., Ge, J., Burnison, S.A., Bosshart, N.W., Jiang, T., Hamling, J.A., Wildgust, N., & Gorecki, C.D. (2018). Predicting the potential for CO₂ migration associated with enhanced oil recovery after injection is completed. 14th International Conference on Greenhouse Gas Control Technologies (GHGT-14), Melbourne, Australia, 21 - 26 October 2018.

Livers-Douglas, A., Salako, O., Burnison, S.A., Barajas-Olalde, C., Torres Rivero, J., Pekot, L.J., & Gorecki, C.D. (2018). Application of seismic trace-based analysis to detect the extent of injected CO₂ using modeled seismic data from Aquistore. 14th International Conference on Greenhouse Gas Control Technologies (GHGT-14), Melbourne, Australia, October 2018.

Salako, O., Jin, L., Burnison, S.A., Hamling, J.A., & Gorecki, C.D. (2017). The value of 4-D seismic monitoring at Bell Creek - A mature oil field undergoing CO₂ enhanced oil recovery. Extended abstract presented at the 79th EAGE Conference & Exhibition, Paris, France, 12 - 15 June 2017.

Salako, O., MacBeth, C. (2015). Effective imaging of reservoir fluid changes. 77th EAGE Conference & Exhibition incorporating SPE EUROPEC - Workshops Programme, Madrid, Spain, 1 - 4 June 2015, WS02. Published in EarthDoc. DOI: 10.3997/2214-4609.201413459.

Salako, O., MacBeth, C., MacGregor, L., & Mackay, E. (2013). Potential applications of time-lapse marine CSEM to reservoir monitoring. 75th EAGE Conference & Exhibition incorporating SPE EUROPEC, London, UK, 10 - 13 June 2013. DOI: 10.3997/2214-4609.20130968.

Salako, O., MacBeth, C., & MacGregor, L. (2012). Towards joint interpretation of CSEM surveys with 4D seismic for reservoir monitoring. 74th EAGE Conference & Exhibition incorporating SPE EUROPEC, Copenhagen, Denmark, 4 - 7 June 2012. DOI: 10.3997/2214-4609.20148431.

U.S. Department of Energy / NETL Technical Reports & Research Deliverables

Salako, O., Livers, A.J., Burnison, S.A., Hamling, J.A., Wildgust, N., Gorecki, C.D., Glazewski, K.A., & Heebink, L.V. (2017). Analysis of Expanded Seismic Campaign. Plains CO₂ Reduction (PCOR) Partnership Phase III, Task 9 - Deliverable D104. Energy & Environmental Research Center, University of North Dakota. Prepared for the National Energy Technology Laboratory, U.S. Department of Energy. Cooperative Agreement No. DE-FC26-05NT42592, June 2017.

Burnison, S.A., Salako, O., Livers, A.J., Wildgust, N., Gorecki, C.D., Hamling, J.A., & Glazewski, K.A. (2017). Initial Analysis of Expanded Seismic Campaign Data Completed. Plains CO₂ Reduction (PCOR) Partnership Phase III, Task 9 - Milestone M64. Energy & Environmental Research Center, University of North Dakota. Prepared for the National Energy Technology Laboratory, U.S. Department of Energy. Cooperative Agreement No. DE-FC26-05NT42592. Report No. 2017-EERC-06-13, June 2017.

Glazewski, K.A., Aulich, T.R., Wildgust, N., Nakles, D.V., Hamling, J.A., Burnison, S.A., Livers, A.J., Salako, O., Sorensen, J.A., Ayash, S.C., Pekot, L.J., Bosshart, N.W., Gorz, A.J., Peck, W.D., & Gorecki, C.D. (2017). Best Practices Manual (BPM) for Site Characterization. Plains CO₂ Reduction (PCOR) Partnership Phase III, Task 4 - Deliverable D35. Energy & Environmental Research Center, University of North Dakota. Prepared for the National Energy Technology Laboratory, U.S. Department of Energy. Cooperative Agreement No. DE-FC26-05NT42592. Report No. 2017-EERC-06-08, March 2017.

PROFESSIONAL MEMBERSHIPS

- Society of Petroleum Engineers (SPE)
 - Society of Exploration Geophysicists (SEG)
 - European Association of Geoscientists and Engineers (EAGE)
 - Nigerian Mining and Geosciences Society (NMGS)
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PROFESSIONAL REGISTRATION & CERTIFICATIONS

- Professional Registration
 - Council of Nigerian Mining Engineers and Geoscientists (COMEG) - Registered Geoscientist
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AWARDS & RECOGNITION

- Ian Jack/BP Amoco/SEG Scholarship - Society of Exploration Geophysicists (SEG) 2012 & 2013 Recipient of the scholarship in two consecutive years in support of graduate studies and research in reservoir geophysics at Heriot-Watt University.
 - PTDF Overseas Scholarships - Petroleum Technology Development Fund, Nigeria 2008 & 2010 Recipient of two PTDF Overseas Scholarships: 2008 for MSc studies in Geoscience and 2010 for PhD studies in Engineering, both at Heriot-Watt University.
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LEADERSHIP & VOLUNTARY SERVICE

- Patron, Reviewer, Assessor & Mentor - i-Scholar Initiative (ISI) May 2019 - Present
- Supports scholarship, educational advancement and mentoring initiatives for younger generations, including scholarship assessment, candidate review and mentorship of emerging scholars.

Volunteer - Journey Together Immigration Oct. 2024 - Present

- Supports initiatives providing pro bono or low-cost immigration assistance to victims of violence and low-income individuals, including compassionate guidance, access to resources and community support for vulnerable immigrants.

Conference Co-Chair, Applied Data Analytics Upstream - Hanson Wade, Aug. 2020

- Co-chaired a technical conference focused on data analytics and machine-learning applications in the energy industry, particularly upstream oil and gas.

Technical Program Monitor - Society of Exploration Geophysicists (SEG) Sept. 2019

- Provided volunteer technical-program support during the 2019 SEG Convention in San Antonio, Texas, supporting delivery of the scientific and technical program.

Approved Volunteer Driver - Northlands Rescue Mission, Jan. 2017 - Jan. 2019

- Supported community-relief activities through the transportation and distribution of food and essential supplies to temporary and vulnerable populations served by the mission in Grand Forks, ND, USA.

Secretary - Harmony Outreach, Edinburgh, United Kingdom Nov. 2010 - Dec. 2013

- Served as Secretary and volunteer for a community outreach initiative providing clothing and household materials to less-privileged members of the Edinburgh community.

BOOK

- **The Unfinished Nigerian Project:** Essays on State Capacity, Institutional Design, and Nigeria's Search for Nationhood (2020 - 2025) First published 2026 | ISBN 979-8-90600-873-2
 - Author of The Unfinished Nigerian Project, a collection of essays examining Nigeria's development challenges through constitutionalism, institutional design, state capacity and systems thinking. The book connects questions of federalism, democratic governance, security, taxation, infrastructure, healthcare, education and human capital to the institutional structures that shape national outcomes. Its two epilogues apply this systems perspective to electricity, proposing three interconnected Integrated Power Systems for Nigeria and cooperative rural electrification for underserved communities.
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PUBLIC POLICY, WRITING & JOURNALISM

- Systems & Society Column - Nigerian Tribune
 - Columnist with the Nigerian Tribune, writing the Monday back-page Systems & Society column on governance, public institutions, energy, infrastructure, economic development, democracy, security and other questions affecting Nigerian society. The column applies a multidisciplinary and systems-oriented perspective to public policy, connecting institutional design, technical evidence and societal outcomes.
 - Editorial Contributions - Nigerian Tribune
 - Contributes to editorial discussions and institutional commentary as a member of the Nigerian Tribune Editorial Board.
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MEDIA ENGAGEMENTS

- **Toyota - Driving Decarbonization in America:** Partners in Progress
- Featured in Toyota's Driving Decarbonization in America documentary series, aired on MotorTrend TV, Discovery GO and Discovery+, discussing technology and data-driven approaches supporting transportation decarbonization and sustainable mobility. Also featured by Toyota USA Newsroom on research using connected-vehicle data to evaluate the carbon-reduction benefits of Eco Mode. "Partners in Progress" on Discovery GO , Toyota USA Newsroom - Eco-Mode Research
- 90MinutesAfrica - Public Policy, Energy & Economic Affairs
- Featured guest on 90MinutesAfrica, discussing Nigeria's economic reforms, energy policy, petrol-subsidy removal, exchange-rate policy, governance and the socioeconomic consequences of public-policy decisions. The interview subsequently received national media coverage, including reports by TheCable and Sahara Reporters. TheCable - Interview Coverage | Sahara Reporters - Interview Coverage.