

Lecturer  
Department of Petroleum and Natural Gas Engineering  
University of Energy and Natural Resources  
Sunyani, Ghana  
shaibu.mohammed@uenr.edu.gh

**Education**

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**2020–Present PhD (Ongoing)**

University of Port Harcourt, Nigeria  
*Thesis: Local materials-based microemulsion for enhanced oil recovery for a high salinity, high-temperature reservoir*

**2010–2011 MSc Petroleum Engineering**

African University of Science and Technology, Nigeria  
*Thesis: Pressure transient analysis of hydraulically fractured wells in multi-layered reservoirs*

**2003–2007 BSc (First class) Mineral Engineering**

University of Mines and Technology, Ghana

**Research Interests**

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- Pressure/rate transient analysis
- Unconventional reservoir modeling
- Enhanced oil recovery
- Reservoir engineering

**Experience**

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**2021–Present Lecturer**

Department of Petroleum and Natural Gas Engineering  
University of Energy and Natural Resources, Ghana

**Courses I teach include:**

- Well test analysis
- Reservoir engineering
- Engineering physics
- Engineering chemistry and materials
- Offshore technology
- Environmental management in the petroleum industry

**2018–2021 Assistant Lecturer**

Department Petroleum and Natural Gas Engineering  
University of Energy and Natural Resources, Ghana

**2012–2014 Assistant Lecturer**

Department of Petroleum Engineering,  
University of Mines and Technology, Ghana

**Courses I taught include:**

- Reservoir Engineering

- Drilling fluids
- Fundamentals of Natural Gas Engineering

#### 2012–2022 **Other responsibilities:**

- Postgraduate Co-ordinator, Energy and Petroleum Engineering Department
- Member of the committee that revised the Petroleum Engineering Department syllabus of University of Mines and Technology, Ghana
- Have supervised more than 20 undergraduate project works all in Petroleum Engineering

#### Reviewer

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- Journal of Petroleum Science and Engineering, Elsevier

#### Publications

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- **S. Mohammed**, Y. A. Boakye-Ansah, E. Gyamfi-Yeboah, K. O. Duartey, W. I. Nyamekye. (2022). A multi-fractured well performance model for unconventional reservoirs. *Heliyon*, Elsevier. <https://doi.org/10.1016/j.heliyon.2022.e10827>.
- **Mohammed, S.** Anumah, P., Sarkodie, J. K. and Emmanuel, A. (2021). A Production-Based Model for a Fractured-Well in Unconventional Reservoirs. *Journal of Petroleum Science and Engineering*, Elsevier. <https://doi.org/10.1016/J.petrol.2021.109036>.
- **Mohammed, S.**, Emmanuel, K. N., Anthony, M., Anumah, P., Sarkodie, J. K. (2021). Use of Relative Extra Citation Counts and Uncited Publications to Enhance the Discriminatory Power of the h-index. *Scientometrics*, Springer. 122:181–199. <https://doi.org/10.1007/s11192-020-03777-y>.
- **Mohammed, S.** Anthony, M. and Emmanuel, K. N. (2020). On the Influence of Uncited Publications on Researcher's h-index. *Scientometrics*, Springer. 122:1791–1799 <https://doi.org/10.1007/s11192-020-03356-1>.
- Anthony, M., Lateef, A., Tinuola, U., **Mohammed, S.**, Anumah, P. and Sarkodie, J. K. (2020). Fractional Flow Behaviour and Transport Mechanisms During Low salinity and Protein Enzyme Bio-surfactant EOR Flooding. *Nigeria Annual International Conference and Exhibition*. SPE 203600-MS. <http://dx.doi.org/10.2118/203600-MS>.
- Anthony M, Lateef A, Tinuola U, **Mohammed, S.**, Wilberforce A. and Sarkodie, J. K. (2020). Experimental Determination of Protein Enzyme Bio-Surfactant Properties for Enhanced Oil Recovery. *Nigeria Annual International Conference and Exhibition*. SPE 203599-MS. <http://dx.doi.org/10.2118/203599-MS>.
- **Mohammed, S.** Anumah, P., Justice, S. K. and Anthony, M. (2019). Analysis of Boundary-Dominated Gas Well Production Data. *Nigeria Annual International Conference and Exhibition*. SPE 198732-MS. <http://dx.doi.org/10.2118/198732-MS>.
- Anumah, P., **Mohammed, S.** and Justice, S. K. (2019). Petrophysical Evaluation of the Reservoir in the South Tano Field – Offshore Ghana. *Nigeria Annual International Conference and Exhibition*. SPE 198796-MS. <http://dx.doi.org/10.2118/198796-MS>.
- **Mohammed, S.** (2017). A General Approach to Production Forecasting of Long-Term Reservoir Performance. *Nigeria Annual International Conference and Exhibition*. SPE 189166-MS. <http://dx.doi.org/10.2118/189166-MS>.
- Damoah, L. O., **Mohammed, S.** and Enty, G. S. (2015). Utilizing Early Time Boundary-Dominated Flow Regime to Make an Initial Estimate of Gas-in-Place: An Aid to

Computing Material Balance Pseudotime. *Nigeria Annual International Conference and Exhibition*. SPE 178376-MS. <http://dx.doi.org/10.2118/178376-MS>.

- **Mohammed, S.** (2014). A Simple Approach to Determining Original Gas-in-Place Using Production Data. *Nigeria Annual International Conference and Exhibition*. SPE 172423-MS. <http://dx.doi.org/10.2118/172423-MS>.
- **Mohammed, S.** Amarfio, E. M. and Enty, G. S. (2014). Determination of Average Reservoir Pressure from Constant-Rate Drawdown Tests. *Nigeria Annual International Conference and Exhibition*. SPE 172424-MS. <http://dx.doi.org/10.2118/172424-MS>.
- **Mohammed, S.** Amarfio, E. M. and Dankwa, O. K. (2014). Production Analysis for Solution Gas-Drive Reservoirs: General Variable Pressure/Variable Rate Case –Theory. *Nigeria Annual International Conference and Exhibition*. SPE 172426-MS. <http://dx.doi.org/10.2118/172426-MS>.
- Amarfio, E. M., and **Mohammed, S.** (2014). Environmental and Health Impacts of Nanoparticles Application in Our Oil Industry. SPE 172427, *Nigeria Annual International Conference and Exhibition*. 5 – 7 August. SPE 172427-MS. <http://dx.doi.org/10.2118/172427-MS>.
- **Mohammed, S.** and Enty, G. S. (2013). Analysis of Gas Production Data Using Flowing Material Balance Method. SPE 167504, *Nigeria Annual International Conference and Exhibition*. SPE 167504-MS. <http://dx.doi.org/10.2118/167504-MS>.
- Amarfio, E. M., Aborisade O. and **Mohammed, S.** (2013). Effects of Nano Particles (Al, Al<sub>2</sub>O<sub>3</sub>, C<sub>u</sub> and C<sub>u</sub>O) on Emulsion Treatment and Separation. *Nigeria Annual International Conference and Exhibition*. SPE 167508-MS. <http://dx.doi.org/10.2118/167508-MS>.

#### Award(s)

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- World Bank MSc scholarship
- PhD Regional Scholarship and Innovation Fund

#### Membership

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2010–present Society of Petroleum Engineers  
2019-present Ghana Institution of Engineering

#### Skills

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##### **Information Technology**

- Microsoft Office (Word, Excel, PowerPoint, Outlook)
- LaTeX
- MATLAB

##### **Language**

- English
  - Twi
  - Hausa
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## References

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Senior lecturer

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