

Shaine Mohammadali Lalji

Address: C-67 Inaara Garden Scheme 33 Gulzar-e-Hijri, Karachi

Contact: +923333264109 | **Email:** shaine@neduet.edu.pk; shaine@cloud.neduet.edu.pk

Google Scholar <https://scholar.google.co.uk/citations?user=fbYV-Z0AAAJ&hl=en&oi=ao> (Citations: 757)

PROFESSIONAL SUMMARY

I am a Petroleum Engineering graduate with specialization in Drilling Engineering from Norwegian University of Science & Technology, Trondheim. I am proficient in developing new lessons and activities to expand learning opportunities.

EXPERIENCE

Oct 2025 onwards	N.E.D. University of Engineering and Technology Associate Professor • Research activities • Delivering lectures • Administration related activities
Mar 2018–Oct 2025 Karachi, Pakistan	N.E.D. University of Engineering and Technology Assistant Professor • Research activities • Delivering lectures • Administration related activities
Jan 2014– 2018 Karachi, Pakistan	N.E.D. University of Engineering and Technology Lecturer • Prepared and delivered lectures • Supervised and evaluate examinations • Rendered Class Advisory role in for students • Held position as an Internal Supervisor and Coordinator of Final-Year design project • Involved in course team activities and curriculum development for students

EDUCATION

2021 – 2024	N.E.D. University of Engineering and Technology Ph.D. (Chemical and Process Engineering) 3.96 CGPA
2015 – 2017	Norwegian University of Science and Technology MS (Petroleum/Drilling Engineering) with and overall B Grade (85%)
2009 – 2012	N.E.D. University of Engineering and Technology BE (Petroleum Engineering) 89.61% 4.0 GPA
2007 – 2008	COMMCEs College Intermediate Engineering with 84.3% and ranked 2nd in the section

RESEARCH RELATED ACTIVITIES

1. 76 International Journal Published Articles
2. 10 articles under consideration in different journals
3. 08 International Conference Published Articles
4. Serving as reviewer in Petroleum Science and Technology, Geo-fluids, Asia-Pacific Journal of Chemical Engineering, Scientific Reports, Journal of Engineering and Applied Science, Journal of Petroleum Exploration and Production Technology, Environmental Earth Sciences
5. 01 Poster in ACS Meeting

SELECTED PUBLICATIONS (published a total of 76 journal papers)

1. **Lalji, S.M.**, Khan, M.A., Haneef, J. et al. Nano particles adapted drilling fluids for the swelling inhibition for the Northern region clay formation of Pakistan. *Applied Nanoscience*, 13, 503–517 (2023).
2. **Lalji, S.M.**, Ali, S.I., Ahmed, R. et al. Comparative performance analysis of different swelling kinetic models for the evaluation of shale swelling. *Journal of Petroleum Exploration and Production Technology*, 12, 1237–1249 (2022).
3. **Lalji, S.M.**, Ali, S.I., Awan, Z.U.H. et al. A novel technique for the modeling of shale swelling behavior in water-based drilling fluids. *Journal of Petroleum Exploration and Production Technology*, 11, 3421–3435 (2021).
4. **Lalji, S.M.**, Haneef, J. & Hashmi, S. Mitigating Paleocene age Ranikot shale formation swelling characteristics using carbon supported anatase-titanium dioxide (MWCNT/TiO₂, GO/TiO₂ and AC/TiO₂) nanomaterial water-based mud—chemical and rock interaction study. *Chemical Papers*, 78, 4361–4381 (2024).
5. Khan, M. A., **S. M. Lalji**, S. I. Ali, M.-C. Li and M. Burney (2024). Application of Hydrothermal Synthesized Titanium Dioxide – Doped Multi walled Carbon Nanotubes on Filtration Properties Response Surface Methodology Study. *ACS Omega*, 9 (32): 34765-34776 (2024).
6. **Lalji, S.M.**, Ali, S.I., Ayubi, M. et al. Introducing a novel nano-based drilling fluid: synergic use of murree shale, titanium dioxide, and graphene oxide nanoparticles. *Multiscale and Multidiscip. Multiscale and Multidisciplinary Modeling, Experiments and Design*, 8, 6 (2025).
7. **Lalji, S.M.**, Ali, S.I., Lashari, Z.A. et al. Performance evaluation of Si/Fe₃O₄ nanoparticles in water-based mud in presence of different Mg²⁺, K⁺, Na⁺ salts: experimental and stability visualization study. *Chemical Papers*, 78, 8379–8396 (2024).
8. **Lalji, S.M.**, Ali, S. I. & Asad, M. Experimental Effect of Biopolymers, Synthetic and Modified Polymers on Western Pakistan Shale (GHAZIJ) Stability. *Arabian Journal of Science and Engineering*, 48, 16639–16653 (2023).
9. **Lalji, S.M.**, Ali, S.I. & Khan, M.A. Study of Rheological Characteristics of a Water-Based Drilling Fluid in Presence of Biopolymers, Synthetic Polymer, and Modified Natural Polymer. *Petroleum Chemistry*, 63, 906–916 (2023).
10. **Lalji, S.M.**, Ali, S.I., Yousufi, M.M. et al. Factorial analysis for the impact on filtration properties of water-based drilling fluid after the addition of graphene oxide, pure-bore, and sodium alginate. *Arabian Journal of Geosciences*, 16, 132 (2023).
11. **Lalji, S.M.**, Ali, S.I., Asad, M. et al. Earth's Magnetic Declination Error Influence on Wellbore Positioning in Pakistan Region and Norwegian Sea. Case Study. *Geomagnetism and Aeronomy*, 63 (Suppl 1), S59–S70 (2023).

RESEARCH AWARD

1. Awarded with the Best Researcher Award from NED University of Engineering and Technology in 2021
2. Awarded with the Best Researcher Award from NED University of Engineering and Technology in 2022
3. Awarded with the Best Researcher Award from NED University of Engineering and Technology in 2023
4. Awarded with the NEDAASC 2022 Best Published Research Award (BPRA) from NED Alumnus USA

SKILLS

1. Landmark suit of software (Well plan, Well-cat, Stress check, Compass etc.), MATLAB, Microsoft Office.
2. Strong Communication & Interpersonal skills.
3. Data Analysis, Problem Solving, Petroleum Engineering, Drilling Engineering.
4. Cooperative, Initiator, Team Player, Patient and Ethical.

5. Hands on experience on statistical software MINITAB

ACHIEVEMENTS

1. 1st Position (Poster Presentation) at PhD seminar organized by Department of Geo-science & Petroleum, NTNU.
2. Member NTNU Petro-bowl team; Finished in world stop 8 elite teams at the final Petro-bowl Championship held at SPE Annual Technical Conference & Exhibition, Dubai, 2016.