FACULTY CURRICULUM VITAE

Name: Dr. Mohamed Abdulsalam Ali Omar
Rank: Assistant Professor – Petroleum Engineering

Personal Information

Nationality:	Libyan
AU Joining Date:	17 Aug 2014
E-Mail Address:	m.omar@au.edu.kw

Professional Information

Education:	- Qualification: Doctorate - Major: CFD Modeling and Simulation- Energy Conversion - College/University: University of Limerick, Ireland - Year: 2008 - Qualification: Masters - Major: Mechanical and Manufacturing Eng. - College/University: Dublin City University, Ireland - Year: 2000 - Qualification: Bachelor - Major: Petroleum Engineering - College/University: Bright Star University of Technology, Libya - Year: 1994
Specialization:	- CFD Modeling - Design and Optimization - Artificial Lift Techniques - Design and Optimization - Reservoir Simulation
Current Academic Position:	Assistant Professor
Current Professional Positions:	• Chairperson of PBL Committee • Member, Curriculum Committee

Previous Administrative Position Held:	- Head of Petroleum Department - Deputy Head of petroleum Engineering Department - Member of the Advisory Board Committee PAAET- PET
Previous Academic Positions Held:	- Assistant Professor Australian University AU - Lecturer University of Tripoli TU - Lecturer University of Sirte SU
Fellowships And Honors:	- Reviewer for Taylor & Francis Book Proposal (1 Books up to date, Membranes in Petroleum Industry) - Executive Committee member, 2018-2019 SPE Kuwait Oil & Gas Show - EU Scholarship for Ph.D. (2004-2008)
Teaching Experience:	- Faculty Member at AU, Petroleum Engineering Department - Assistant Professor (since 9/2014) - Faculty Member at University of Sirte, Petroleum Engineering Department Assistant Professor (2011-2014) - Faculty Member at Libyan academy for higher education (2009-2011) - Faculty Member at University of Tripoli, Petroleum Engineering Department Assistant Lecturer (2008-2011).
Industrial And Technical Experience:	- Worked with Alwaha oil company (Enhance d Oil Recovery joint project with University of Tripoli) – Libya - Member of industrial board committee – University of Tripoli/ Libyan oil companies
Research Interest:	- Produced Water Treatment - Fluid Flow in Porous Media - Enhanced Oil Recovery (Water Flooding) - Reservoir simulation - Production engineering - CFD Modeling and Simulation
Research Grants:	PI of a funded Research Project: - Oilfield Produced water Treatment using a Hybrid Photodegradation/ modified membranes System. AU Research Grant Co-PI of a Funded Research Project: - Treatment of Oilfield Wastewater using a Hybrid Photodegradation/Membrane System in collaboration with KFAS (Kuwait Foundation for the Advancement of Science). - Design and Assembly of an Automated Marsh Funnel for Rapid Measurement of Apparent Viscosity, Plastic Viscosity, and Yield Point of Fluids. AU Research Grant - Assessment of effects of solvents upon heavy oil recovery and upgrading in-situ". (Kuwait Institute for Scientific Research (KISR).
Research and Publications including Journal and Books:	- B Misbah, A Sedaghat, M Rashidi, M Sabati, K Vaidyan, N Ali, MAA Omar Friction reduction of Al2O3, SiO2, and TiO2 nanoparticles added to non-Newtonian water-based mud in a rotating medium, Journal of Petroleum Science and Engineering, July, 2022. https://doi.org/10.1016/j.petrol.2022.110927

- S Ghafoori, M Omar, N Koutahzadeh, S Zendehboudi, RN Malhas, New advancements, challenges, and future needs on treatment of oilfield produced water: A state-of-the-art review, Separation and Purification Technology, Ferburay,2022. https://doi.org/10.1016/j.seppur.2022.120652
- Ahmed, T., Bahzad, D., Almarshed, A., Omar, M. Evaluating the Characteristics of Crumb Rubber Modified Asphalt Binders Produced with Local Bitumen,9th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV9), Zürich, Switzerland,1-3 of July 2020.
- Marquez, S., Ghafoori, S., Omar M., AlMarshed, A. Delineation of most efficient recovery technique for typical heavy oil reservoir in the middle east region through compositional simulation of temperature-dependent relative permeabilities. Petroleum Science and Engineering. (accepted) (Q1-Scopus Impact Factor: 2.886), March 2020.
- Malhas, R.; Ghafoori, S.; Omar, M.; Nibi, M.; Al-Husainan; A., Al-Ibrahim,Y.; Al-Meraj, A.; and Alshatti . Proceedings of the 19th Kuwait Japan symposium- advanced petroleum refining industries. February 2020. Utilization of ultrafiltration membrane in treatment of KUBD wastewater in Kuwait.
- S.Balhasan ., Omar M., H, Alhamoudi., A, Alzaabi., ,Black Powder Removal From Oil Pipelines. (accepted) Kuwait Oil and Gas conference and Show, 13-16 October,2019.
- Sedaghat A., Khanafer, K., Rashidi, M., Ghafoori, S., Omar, M. A. O., AL Saba, M.T., Vaidyan, K. Development of a Taylor-Couette system for determining skin frictionreduction of turbulent nanofluid flows. 89th ISERD International Conference, Oxford, United Kingdom, 19th-20th October 2017.
- Saad Balhasan, American University of Ras Al Khaimah; Bader Al Kandari, Kuwait Institute for Scientific Research; Mohamed Omar, Jassim Al-Otaibi, Hamad Al-Shakhis, Ali Al Amer, Australian University Development of an Empirical Equation to Predict the Performance of CO2-WAG Flooding;,SPE, Kuwait, 15-18 October 2017
- Sedaghat, A., Omar, M.A.A., Damrah, S. and Gaith, M., 2016. Mathematical Modelling of the Flow Rate in a Marsh Funnel. J. Energ. Technol. Res., 1, 1; doi: 10.22496/jetr2016092281.
- Saad Belhasan, Mohamed Omar, Biltayib M.Biltayib Effects of Directional Permeability Anisotropy on Sweep Efficiency for Five-Spot and Nine-Spot Pattern Flood. Journal of petroleum and Environmental Biotechnology, 15, July, 2015.
- Biltayib. M. Biltayib, Saad A.Balhasan., M.Omar .,(Australian College of Kuwait (2015), Example of Improve drilling operational efficiency and reducing well costs in the Sirte basin Libya., IRACST – Engineering Science and Technology: An International Journal (ESTIJ), ISSN: 2250-3498.Vol.5, No.1, February 2015.
- Biltayib. M. Biltayib, Saad A.Balhasan., M.Omar ,(Australian College of Kuwait (2015)., Ultra mud system Optimizes Drilling Efficiency in Sirte basin. Asian Journal of Engineering and Technology. ISSN: 2321 - 2462
- Biltayib. Misbah, Australian College of Kuwait, Mohamed Omar Australian College of Kuwait AU , Saad A.Balhasan , Australian College of Kuwait (AU);Khulud.Rahuma, Al-Fateh University,(2015);Effect of Salinity on Polymers Performance :fifth environmental conference , Damiet university.

	- M. Omar, Ibrahim Musbah, Kulud.M.Rhumua, Rahil.O.Abdulhadi" Case Study of Full Field Simulation Faulted Anticline Reservoir" Engineering Science and Technology ESTIJ, Volume 3 Number 4 August 2013].
Paper Presentations at Professional Conferences:	NA
University Service including committee Membership:	- Curriculum committee - Research Committee - Validation and Moderation Committee
National Service:	NA
University Committees:	Teaching, Learning Validation & Moderation Committee Curriculum Committee Project Based Learning (PBL) Committee Students Appeals and Complaints Committee Research & Faculty Development Committee Accreditation Committee