Dr. Abdunser Omar Susi

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Education:

Ph.D. Petroleum Engineering, Texas Tech University, Texas, USA.

May, 2019

- **Dissertation:** Quantitative 3D Analysis of Fracture Propagation Resulting from Composite Layering Effect in Unconventional Reservoirs.
- A Scientific Degree (lecturer) in Project Engineering management, Misurata University, Libya. Oct. 2010
- M.Sc. Petroleum Reservoir Engineering, Texas Tech University, Texas, USA.

Aug. 2015

- M.Sc. Geoscience and Petrophysics Engineering (Multidisciplinary studies), Texas Tech University, Texas, USA (Second Master).

Aug. 2018

- M.Sc. Petroleum Reservoir Simulation, Missouri University of Science and Technology, Rolla, Missouri, USA, (Third Master)

May 2014

- M.Sc. Project Engineering Management, Libyan Academy. Tripoli, Libya.
 Planning in Organizations and the role of Systems and Information Technology.
 (Fourth Master).
- B.Sc., Petroleum Engineering Bright Star University, Braga- Libya.

Project: A Practical Geophysics Study of Attahadi Field in Sirte Basin, Libya. July 1995

Work Experience:

- Years of experience in Petroleum Sector management in Libya Energy ministry and Libyan National Oil Corporation (NOC) at the main Headquarters of the Ministry and NOC. Jan 1998- Feb. 2006.
- Ministry of Libyan Industry and Minerals, at the Ministry Headquarters, Tripoli, 2006 2007.
- Former chairman of the Industrial Engineering and Manufacturing Department at Engineering College, Misurata University, city of Misurata – Libya in addition to my main job one of the faculty staff of the Petroleum Engineering Dept.
 Jul. 2007- Aug. 2010.
- Teaching assistant in reservoir engineering & fluid flow in porous media, and Researcher in EOR area, at Petroleum Engineering Dept., Texas Tech University,

June 2014-May 2019.

- Lecturer at National Libyan Institute of Management, Tripoli, Libyan program of training and preparation administrative Leaders in the field of methods and techniques of the local modern administration, 2010.
- Research assistant (RA) in EOR area, Petroleum Department, Missouri University of Science and Technology (MS&T), 2013.

Technical Committees:

- Evaluation Committee of Libyan Industrial Companies, Libyan Energy Ministry, 2006.
- Vice President of the Libyan Continuous Committee of the Mining and Minerals, Libyan Energy Ministry, 2002-2006.

Scientific and Professional Memberships:

- American Society of Petroleum Engineers /SPE.
- Society of Exploration Geophysicists /SEG
- Society of Economic Geologists /SEG.
- US Society of Petrophysicists and Well Log Analysts /SPWLA.
- American Association of Petroleum Geologists /AAPG.
- Guild of Libyans Engineers.
- Guild of Libyans Faculty staff.

Computer Skills:

The computer applications and software that are using in petroleum engineering, such as:

- FracPro Software.
- ImageJ Software.
- UTchem Software.
- TechLog Software.
- ANSYS Software.
- SOLID Software.
- LS-DYNA Software.
- CMG Software.
- Petral Software.
- Eclipse Software.
- Matlap Software.
- Applied Geomechanics Techniques.
- X-ray Computer Axial Tomography (CT-Scan/XCT/CAT).
- X-ray Powder Diffraction **XRD** instrumentation.
- X-ray Fluorescence **XRF** instrumentation.

List of Research Interest:

- Reservoir modeling, simulation, and stimulation.
- Geoscience /Petrophysics.
- Using Remote Sensing Techniques in Petroleum Exploration.
- Formation evaluation and field application design.

- Minimize and remove formation damage.
- Electric and Chemical EOR methods.
- Reservoir process monitoring.
- Multiphase flow in porous media.
- Hydraulic Fracturing Design.
- Horizontal and vertical wells drilling, completion and optimization.
- Calibration of effective reservoir properties using fine-scale heterogeneous models for conventional and unconventional reservoirs.

In Progress and Future Projects:

- Re-exploration of the petroleum in the Libyan northwestern offshore using Remote Sensing Techniques (Comparison studies).
- Microbial Enhanced Oil Recovery **MEOR** (a mathematical model of MEOR method).
- Electric EOR method (a numerical assessment).
- Hydraulic Fracture Geometry Modeling Techniques.

Publications:

- 1. "Darcy and Non-Darcy flow through a Packing Particles" THE INTERNATIONAL JOURNAL OF ENGINEERING AND INFORMATION TECHNOLOGY (IJEIT), VOL.7, NO.1,2020
- 2. "Optimization of Composite Layering Effect Based on Measured Formation Fracture Height to Length Ratios", Journal of Petroleum & Environmental Biotechnology 2018, D0I: 10.4172/2157-7463.1000376.
- 3. "Effect of Lithology Barriers and Composite Layering on Fracture Height in Unconventional Reservoirs" The International Journal of Engineering and Science (IJES), || Volume || 7 || Issue || 4 Ver. I || Pages || PP 08-19 || 2018 || ISSN (e): 2319 1813 ISSN (p): 23-19 1805.
- 4. "New Method to Estimate the Horizontal Well Landing Point to Optimize the Production" AAPG International Conference and Exhibition, London, UK, 2017.
- 5. Railways and its Role in Improving transportation and Development of the Service Sector In Libya. Railways Conference and Exhibition, Tripoli 2009.

Papers in Proceedings:

- Hydraulic Fracture Geometry Modeling Techniques (paper review).
- Reservoir Engineering Analysis of MEOR, Geo-Microbial Technologies **GMT**.
- The Execution Delay Of the Cities' Gas Nets and its Effect on the Environment and Libyan National Economy, Conference on the Role of Earth and Environmental Sciences in Developing Libyan Economy, Zawia University, Zawia Libya, 14 15 Oct. 2020.

Attended Conference, Exhibition, and Training Courses:

- Attend the **ATCE 2018, SPE** Annual Technical Conference and Exhibition holds in Dallas, Texas, USA on 24-26 September 2018.
- Annual Southwestern Petroleum Conference Course, Lubbock, Texas, USA. For six respectively years; 2014, 2015, 2016, 2017, 2018, and 2019.
- Mediterranean Oil Conference and Exhibition, Tripoli, Libya, 2006.

Organizations & Activities:

- Journal Reviewer for Intl. Journal of Petroleum & Environmental Biotechnology.
- Journal Reviewer for International Journal of Engineering and Science (IJES)
- Journal Reviewer for Intl. Journal of The International Journal of Engineering & Information Technology (IJEIT).