



# Mahmoud Khaled Mostafa Abbas Mohamed

## Petroleum Engineer

Cairo, Egypt

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Mahmoud Khaled | LinkedIn | Mahmoud Khaled | Research Gate

1 Year

Work Experience

3

Research Papers

100%

Client Satisfaction

### BRIEF SUMMARY

Languages: English(C1) | Arabic(Native) | French(B2)

Recent Petroleum Engineering graduate, recognized for academic excellence and practical internships. Proficient in the latest engineering software and well-versed in optimizing production methods in compliance with environmental regulations. Demonstrated ability to use data interpretation software for reservoir modeling. Known for technical proficiency, teamwork skills, and an innovative mindset. Eager to launch a career in the energy industry and contribute to the design and execution of efficient petroleum extraction systems.

### EDUCATION

Perak, Malaysia

Universiti Teknologi PETRONAS (UTP)
01/2020–12/2023
Bachelor of Petroleum Engineering with Honours
CGPA: 3.50/4.00



Universiti Teknologi PETRONAS (UTP)
01/2019–12/2019
Foundation in Engineering and Sciences
CGPA: 3.70/4.00

### INTERPERSONAL SKILLS

- Ability to work under pressure
Creative
Communication Skills
Good Team Player
Multitasking
Time Management
Presentation Skills
Attention to detail

### WORKING EXPERIENCE

#### Petroleum and Production Engineering - Intern

05/2022–01/2023



Czech University of Life Sciences, Prague, Czech Republic

- International Fuel Pricing Analysis: Uncovering Factors that Drive Price Fluctuations Amidst the Russian-Ukrainian War and Southeast Asian Markets
Analyzed fuel price fluctuations in Southeast Asia and Europe during geopolitical upheavals.
Assessed impacts of the Russian-Ukrainian conflict on fuel markets, pinpointing key price influencers.
Provided recommendations for enhancing market efficiency and policy in Southeast Asia.
Lessons Learned:
Developed a refined insight into the interplay between global fuel markets and regional policies.
Acquired skills in data synthesis and economic analysis under crisis conditions.
Learned the importance of adaptability and foresight in energy market analysis.

#### Petroleum Engineering – Intern

10/2021–12/2021



Khalda Petroleum Company, Egypt

- Acquired practical oil and gas sector exposure through field visits and diverse operational processes.
Benefited from expert mentorship and industry-specific software training.
Contributed to live projects across drilling, production, reservoir, and geological functions.
Lessons Learned:
Developed a versatile skill set adaptable to multiple facets of the energy industry.
Enhanced problem-solving abilities in high-pressure environments.
Recognized the importance of cross-disciplinary collaboration for operational efficiency.

#### Energy Sector Consultant

07/2023–Present



Mahmoud Energy Hub, Online Platform, (My website)

- Provided drilling, reservoir, and production optimization consultations; assessed project economics and risks.
Hosted technical software training; directed sustainable energy and recovery improvement research.

# RESEARCH PROJECTS

## Field Development Project (Leader)

📅 04/2023 – Present

- Evaluated field geology, reservoir characteristics, risks, and exploration opportunities.
- Conducted petrophysical evaluation, estimated volumetrics, and provided reservoir optimization recommendations.
- Analyzed reservoir data, performed reserves estimation, and evaluated enhanced oil recovery strategies.
- Designed production technology, optimized production, managed drilling plans, and implemented safety measures.

## Investigation of Wettability Alteration by Clay Stabilizer – Reservoir Engineering

📅 01/2023 – Present

- Conducting ongoing research in the lab investigating wettability alteration by clay stabilizer.
- Focusing on understanding the mechanism of clay inhibition through wettability alteration using various clay stabilizers (PolyDADMAC, CTAB, KCl).
- Investigating the effect of low salinity or high pH fluids on clay swelling and fine migration, and the use of clay stabilizers to prevent these effects.
- Studying the impact of clay stabilizers on clay active surfaces.
- Continuously analyzing and documenting research data to draw conclusions and make recommendations.

## Utilizing Wasted Gas for Cryptocurrency Mining: A Sustainable Solution

📅 10/2022 – Present

- Researched using wasted gas from oil and gas operations for cryptocurrency mining instead of flaring.
- Assessed the technical and economic feasibility and environmental benefits of gas-powered cryptocurrency mining.
- Explored existing technologies and software tools for gas-powered mining and evaluated financial viability.
- Developed a report with recommendations for implementing this sustainable solution and generating revenue.

## Engineering Team Project

📅 08/2021 – 09/2021

- Developed a Small Scale Food Waste system to reduce waste and provide biogas in rural agricultural areas.
- Aligned the project with Sustainable Development Goal 7 - Affordable and Clean Energy.
- Researched biogas production, food waste management, and implemented a prototype for optimization.
- Collaborated with stakeholders to ensure the project met the needs of farmers, communities, and government agencies.

## LEADERSHIP EXPERIENCE

- |  |                   |
|--|-------------------|
| • Field Development Project (Leader)                         | 04/2023 – Present |
| • Committee member, Society of Petroleum Engineers (SPE) UTP | 11/2020 – 09/2023 |
| • Committee member, Exchange Student Support Center (ESSC)   | 02/2020 – 04/2023 |
| • Project Leader, “Down to Earth”                            | 07/2021 – 09/2021 |
| • Director, Energy Institute (EI) UTP                        | 01/2020 – 11/2020 |

## TRAINING & CERTIFICATIONS

- |   |         |
|---|---------|
| • Well Stimulation Techniques (well productivity and recovery rates)        | 09/2023 |
| • Haliburton Landmark Compass Training                                      | 06/2023 |
| • Production System Optimization (Artificial Lift) Oil and Gas Professional | 05/2023 |
| • Flow Assurance (Optimizing Fluid Flow Dynamics)                           | 01/2023 |
| • Advanced Reservoir Simulation using Eclipse                               | 01/2022 |
| • Safety and Environmental Management in the Oil and Gas Industry           | 09/2021 |

## AWARDS & ACHIEVEMENTS

- |  |         |
|--|---------|
| • PetroSolve T-Navigator Reservoir Simulation Competition 2023, Finalist | 09/2023 |
| • 48th Science & Engineering Design Exhibition (SEDEX48), Bronze Award   | 08/2022 |
| • Engineering Renewable Project Showcase, Best Technical Design          | 07/2022 |
| • Dean’s list award recipient 3 semesters highest 3.87 GPA               | 01/2022 |
| • Renewable Energy Hackathon, 2 <sup>nd</sup> Prize Winner               | 10/2021 |
| • PetroBowl Asia Pacific Regional Qualifier, Participant                 | 07/2021 |
| • Energy Efficiency Program Developer 3 <sup>rd</sup> Runner up          | 06/2021 |

## SKILLS

**Software:** Eclipse, Petrel, T-Navigator, Compass, Landmark, GAP, Prosper, MBAL, Avocet, MS Office, MS Excel, MS Access, Power BI, Tableau

**Programming Language:** Python, SQL, R, MATLAB

**Others:** Machine Learning, Data Science, Data Analytics

**\*References are available upon request**