

Sara Makki

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EDUCATION

American University of Beirut	Beirut, Lebanon
Master of Engineering in Chemical Engineering <i>GPA 4/4</i>	Oct. 2022
<ul style="list-style-type: none">• <i>Graduate Fellowship and Assistantship Program</i>• Completed Thesis : “<i>Effect of fracture network complexity and evolution on fracturing fluid recovery and its implications on aquifers’ safety</i>”	
Beirut Arab University	Beirut, Lebanon
Bachelor of Engineering in Petroleum Engineering <i>GPA 3.6/4</i>	Mar. 2019
La Cité Culturelle	Beirut, Lebanon
Lebanese Baccalaureate in General Sciences High school diploma	Jul. 2014

WORK EXPERIENCE

American University of Beirut	Beirut, Lebanon
<i>Research Assistant</i>	Mar. 2023 – Jun. 2023
<ul style="list-style-type: none">• Working on academic articles and review papers, related to hydraulic fracturing fluid, to be submitted to scientific journals for publishing.• Benchmarking numerical models and validating results.	
American University of Beirut	Beirut, Lebanon
<i>Graduate Research Assistant</i>	Sep. 2020 – Sep. 2022
<p>Worked as a research assistant in my supervisor’s geomechanics research team, which involved building numerical models to study the effect of hydraulic fracturing on nearby faults and conducting experiments to study fluid flow in porous media. In this team I accomplished the following:</p> <ul style="list-style-type: none">• Conducted an extensive literature review to investigate the fate of hydraulic fracturing fluid and proposed correlations relating the flowback to formation and operational parameters.• Assessed the environmental impact of the fracturing fluid and possible groundwater contamination.• Built a numerical model, using COMSOL Multiphysics, to study the migration of fracturing fluid and track its distribution in fractured reservoirs.• Evaluated through a numerical parametric study the effect of several parameters, especially fracture network complexity and evolution, on the fluid recovery.	
Lebanese National Army Training	Beirut, Lebanon
<i>Laboratory Trainee</i>	Sep. 2017 – Oct. 2017
<ul style="list-style-type: none">• Conducted experiments in the chemical laboratories at the Technical Directorate in the Logistics Brigade.• Conducted laboratory tests on different types of oils, lubricants, and grease used for all sorts of transportation vehicles to provide maintenance to the Army units’ equipment.	

- Assessed the properties of petroleum products' samples received from companies and compared them to acceptable specifications to check their viability for usage by the Army.

CERTIFICATES

Certificate of Appreciation

Abu Dhabi, UAE

International Geomechanics Symposium

Nov. 2022

- Nominated by AUB thesis advisors to attend and selected by the International Geomechanics Symposium in Abu Dhabi to present the topic of my master's thesis.
- Certificate was given in recognition of participation and contribution as a presenter.

Certificate of Training

Beirut, Lebanon

American University of Beirut

Sep. 2019

- Laboratory Safety / Chemical Manipulation and Handling.

IC3 Digital Literacy Certification

Beirut, Lebanon

Beirut Arab University

Feb. 2019

- Received the certification through a course attended at Beirut Arab University.

SKILLS

Technical skills: Microsoft Office Suite, Petrel, Eclipse, COMSOL Multiphysics, HYSYS, AutoCAD.

Soft skills: Communication, Public Speaking, Teamwork, Critical Thinking, Problem Solving, Leadership, Time-management.

Languages Proficiency Level:

Arabic: Native

English: Fluent

REFERENCES

Available upon request