

# Muhammad Furqan Khan *Chemical Engineer*

✉ furqanfayaz2000@gmail.com

☎ 03402844900

📍 House no: 18 Shah Rasool Colony, Clifton Karachi

📅 2001/01/09

🇵🇰 Pakistan

🏠 42301-9066394-7

👤 Single

♂ Male


## Profile

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To obtain a Trainee Engineer position in a dynamic and challenging environment where I can utilize my knowledge of Chemical Engineering and contribute to the company's success while gaining valuable experience and growth opportunities.

## Education

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2019/08 – 2023/05 Swabi, KPK, Pakistan	<b>BS Chemical Engineerin</b> <i>Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)</i>  Result: 3.3/4
2017 – 2019 Karachi, Pakistan	<b>F.S.C Pre-Engineering</b> <i>DJ Sindh Government College Karachi</i> Result: 921/1100
2015 – 2017 Karachi, Pakistan	<b>S.S.C Science Group</b> <i>Iqra Huffaz Boys Secondary School</i> Result: 776/900   Hifz-e-Quran: 98/100

## Professional Experience

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2022/07 – 2022/08 Karachi, Pakistan	<b>Oil and Gas Regulatory Authority (OGRA)</b> <i>Intern</i> During my internship at the Oil and Gas Regulatory Authority, I had the opportunity to work on both Consumer Complaints and Oil Enforcement divisions, obtaining important insight into the oil and gas industry's regulatory structure. I actively participated in the resolution of consumer complaints and disputes in the Consumer Complaints area. This entailed examining and investigating complaints thoroughly, conducting research, and talking with stakeholders to achieve prompt and satisfactory resolutions. I worked in the Oil Enforcement Division, where I monitored and enforced compliance. Inspections, data analysis, and collaboration with the enforcement team were all part of the job.
2021/08 – 2021/09 Rawalpindi, Pakistan	<b>Attock Refinery Limited (ARL)</b> <i>Intern</i> I got the opportunity to work in the Howe Baker and Isomerization units during my internship at Attoc Refinery Limited, obtaining significant hands-on knowledge in the oil refining process. I actively contributed to different parts of refinery operations and optimization while working directly with top engineers.

## Final Year Project Design

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### Adsorptive De-sulfurization of Crude Oil Using Modified Green Adsorbents

I actively participated in the research and development of an innovative solution for desulfurizing crude oil as part of my final-year project.

The study aimed to improve standard adsorbents such as activated carbon by adding additions such as TiO<sub>2</sub> nanoparticles. We attempted to achieve maximal sulfur compound removal efficiency while considering cost-effectiveness and operational feasibility by optimizing the adsorbent composition, researching kinetics, and finding the appropriate dosage. This project not only demonstrated my technical skills in experimental design and analysis but also demonstrated my commitment to ecologically friendly and sustainable solutions in the petroleum business. The results demonstrate the effectiveness of removing sulfur compounds from fuel oils has increased to 99.82%.

## Core Competencies

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- Occupational Health and Safety
- Fluid Mechanics
- Chemical Process Industries
- Chemical Engineering Thermodynamics
- Heat and Mass Transfer
- Separation Processes
- Reaction Kinetics and Reactor Designing
- Instrumentation and Process Control
- Transport Phenomena
- Petroleum Refining Engineering
- Process Modelling and Simulation
- Biochemical Engineering

## Academic Projects

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### Heat Exchanging Equipment Modelling

Sizing different kinds of heat exchangers with modeling.

### Fluid-Fluid Separation

Designing absorption and strippers with different techniques.

### Dynamic Pumps and Piping systems

Sizing pumps and studying the losses in piping and fittings.

### Reactor Designing

Designing a suitable reactor of such chemicals that are not produced by Pakistan and paying huge amounts to export.

### Transport Phenomena

Analyze and simulate different structures with respect to the transport of fluid, energy and mass using Ansys.

## Skills

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Aspen Hysys	● ● ● ● ●	Aspen Plus	● ● ● ● ●
Microsoft Office	● ● ● ● ●	Matlab	● ● ● ● ●
Ansys	● ● ● ● ●	Solid Works	● ● ● ● ●

## Awards

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Been on Dean's honor list

General Secretary and formal representative at GIKI of:

1. ASM International
2. AIST
3. ACerS
4. TMS

**Executive member (Director Support) of AIChE GIKI Chapter**

**Chief Minister Sindh scholarship rewarded**

### **Interests**

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- Novel reading
- Islamic studies
- Freelancing

### **Languages**

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- English
- Urdu
- Pashto

### **References**

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**Dr. Javaid Khan Rabbani**, *Head of the Department of Chemical Engineering*,  
Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)  
drjrabbani@giki.edu.pk, +92 321 4346933

**Dr. Hammad Amjad Khan**, *Associate Professor*,  
Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)  
hammad@giki.edu.pk, +92 333 6094881

**Dr. Sajjad**, *Associate Professor*, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)  
sajjad.hussain@giki.edu.pk

**Mr. Khalil Ahmed Sheikh**, *JED*, Oil and Gas Regulatory Authority (OGRA)  
ksheikh@ogra.org.pk, +92 300 3013228