# SHAKEEL ABDUL VAKKIL

## **PROCESS ENGINEER**

Process Engineering professional with experience in process design of Oil and Gas facilities. Hands on experience in FEED, Concept Study and EPC projects. Experience in design of Process equipment such as Pumps, Vessels, PSVs, and compressors. Hands on experience in depressurizations studies, blowdown/relief load calculation, Flare System modelling using Aspen FLARENET, steady state and transient/dynamic modelling, process simulation and optimization using ASPEN HYSYS, SPS, PIPESIM & OLGA. Hands on experience in Plant Commissioning & Start Up.

## **EDUCATIONAL QUALIFICATION**

MSc CHEMICAL ENGINEERING UNIVERSITY OF NOTTINGHAM – UK (Dec 2016)

**B. Tech** CHEMICAL ENGINEERING NIT WARANGAL – INDIA (Aug 2014)

#### PROFESSIONAL EXPERIENCE

NOV 2022 – PRESENT WOOD, DOHA, QATAR

**Position: - PROCESS ENGINEER** 

• Mayden Mazen and Bul Hanine Offshore Field Redevelopment (MMBH) — Qatar Energy, FEED, QATAR

Responsibility – Flare System Network design. Performed Blowdown Calculations and RO sizing using Blowdown Utility in ASPEN HYSYS. Developed the Flare network in ASPEN FLARENET. Developed P&IDs, PFDs of Well Head Jackets.

NOV 2021 – NOV 2022 WORLEY, ABU DHABI, UAE

**Position:** - PROCESS ENGINEER

MERAM (Maximizing Ethane Recovery and Monetization) – ADNOC Onshore, FEED,
 UAE

Scope of work – To Maximize Ethane Recovery from Residue Gas from various ADNOC Gas Processing Plants and transport ethane rich NGL to relevant processing facilities

Responsibility - Developed Process Engineering documents such as BFDs, PFDs, Philosophy Documents, Equipment List, Utility Summary. Performed Line sizing, PSV sizing, Pump Sizing, Knock Out Drum Sizing calculations. Responsible for Low Temperature/Acid Gas/Hydrocarbon Flare Header sizing using ASPEN FLARENET.

• LZ Early Production Scheme 2 - ADNOC Offshore-Study Project, UAE

Scope of work – Study design change of drilling wells from Central Island to New Well Head Towers.

Responsibility - Developed Process Engineering documents such as BFDs, PFDs, Philosophy Documents, Equipment List, Utility Summary. Simulation of New Export Gas Compressors and Gas Dehydration Unit. Performed Hydraulic Calculation, Well Fluid Characterization, Developed Heat & Material Balance for the Study.

## MAY 2019 – NOV 2021 CHINA PETROLEUM PIPELINE ENGINEERING, ABU DHABI, UAE

**Position: - PROCESS ENGINEER** 

Sales Gas Pipeline Network Enhancement Project- ADNOC – FEED Project, UAE

Scope of work – Design of New Compressor Station, Pipelines inside and Outside Abu Dhabi.

Responsibility - Developed Process Engineering documents such as BFDs, PFDs, P&IDs, Philosophy Documents, Datasheets, Line List, Equipment List, Cause & Effect Diagram for Pipelines and Compressor Station. Performed Hydraulic Calculations, PSV Sizing Calculations, Kock Out Drum Sizing Calculation, Control Valve Sizing Calculation.

#### **PERSONAL INFO**

## **Availability**

Notice Period: 1month



#### **Contact Number**



#### **Email ID**



#### **Date of Birth**

12th January 1993

#### LinkedIn

www.linkedin.com/in/shakeelabdulvakkil

## **SOFTWARE SKILLS**

- ASPEN HYSYS
- ASPEN PLUS
- PIPESIM
- SPS
- FLARENET
- OLGA 7
- MICROSOFT OFFICE

• Ras Markaz Crude Park Project- OTTCO - EPC Project for Crude Oil Tank farm, Slops/Oil recovery tanks, Utility system, Oman.

Scope of Work - The design & Installation of the offshore VLCC tanker unloading and Loading facility, SPM, PLEM, onshore pipeline, Crude booster pump facility, tanks for slops and recovered oil and utility system.

Responsibility - Developed PFDs, P&IDs, Design Basis, Cause and Effect Diagram, Philosophy Documents, Datasheets. Performed Line Sizing, Pump Hydraulic Calculations, PSV Sizing Calculation. Performed Steady State pump simulation using PIPESIM and Transient Simulation using OLGA. Attended review meetings and study meetings such as Design Review, HAZOP, HAZID

**SEP 2017- MAY 2019** 

IVP LIMITED, MAHARASHTRA, INDIA

**Position: - PROCESS & PRODUCTION ENGINEER** 

Installation, Start-up and Commissioning of Shell Resin and Polyester manufacturing plant

- Review P&IDs, Hydraulic Calculations, Equipment sizing, safety system calculations.
- Engaged in 24/7 technical and production support for Shell Resin, Polyurethane and Polyol batch polymerization processes.
- Familiarize engineering practices, calculation methods, international standards, codes,
  specifications, and procedures.
- Installed and commissioned Resin Production Plant and Polyester Polyol Production Plant.
- Conducted Process modifications to improve process operational efficiency and performance.
- Collaborated with cross-functional teams including R&D, Sales and Projects departments to optimize existing chemical processes and increase profits.

#### ACADEMIC PROJECT AND RESEARCH

#### **Carbon Capture and Storage (Master Thesis)**

Project team lead in the detailed design of a carbon capture and storage plant to remove CO2 from the flue gas of cement industry. Designed a circulating fluidized bed for continuous CO2 capture using solid adsorbent looping technology. Researched and developed high density ultra-microporous carbon material with high CO2 adsorption potential.

### **Production of Syngas From Natural Gas**

Techno-Economic analysis of Market Technologies like Steam Reforming, Partial Oxidation etc that are available for Syngas Production from Natural Gas. Concept Design and Study of the Partial Oxidation of Methane Technology.

## **REFERENCES**

Mr. Durai Muthukutty, KBR, Senior Process Engineer

Contact Number - +971557258979, Email Address: <a href="mailto:duraichem@gmail.com">duraichem@gmail.com</a>

#### **PROFESSIONAL SKILLS**

- Process Engineering
- Oil & Gas
- Plant commissioning
- Plant Start-Up
- Project Management
- Team Player
- Problem Solving
- Effective Communication
- Attention to Detail
- Research

#### **LANGUAGES**

- ENGLISH FLUENT
- HINDI FLUENT
- ARABIC INTERMEDIATE
- MALAYALAM FLUENT
- TAMIL FLUENT