



Mohammed Adel Nassar

Process Simulation Consultant| Process Design| Business Development| New Energy
[CCUS] Project Lead

PERSONAL INFORMATION

- Date of birth: 17/09/1988
- Place of birth: Egypt
- Address (1): The Lofts east -Downtown -Dubai -UAE
- Address (2): District 1 area 3 new Cairo (fifth settlement)
- Phone (1): +971 50 727 0804
- Phone (2): +2012 27444672
- Gender: Male
- Military status: Exempted
- Marital status: Married
- Nationality: Egyptian

Career Summary: 11+ years of experience in process engineering activities (design, simulation, BOD, PFD, P&ID, C&E, ..etc) for different gas plant , refinery , H2 production and CCUS

Optimization and debottlenecking studies, Energy management, AI/ML modeling, digitalization and digital twin

Business Development activities and sales strategy implementation to meet targets and sales plan

Current job: Technical Sales Support Engineer -MENA at Schlumberger

Current education: Presidential Leadership Program (PLP) – Starting Nov. (2016).

- Strategic and political science.
- Leadership and administrative science (Marketing – Project Management- Change Management).
- Social science and humanities. (Human Resources – Communication Skills)

OBJECTIVE

Seeking to join your esteemed team aiming that my efforts be a value added to your successful business.

EDUCATION

(2006) graduated from secondary school (99.4%)

(2011) Bsc of chemical engineering from faculty of engineering Cairo University

Degree: V.Good (78.62%)

Graduation Project: Excellent

Rank: 16

WORK EXPERIENCE

April (2022) till Now Technical Sales Support Engineer- MENA at Schlumberger MENA basin -Dubai

- Support SLB Geo units in all technical activities for Symmetry Process simulation and Flaresim
- Build MENA process technical team and ensure service delivery.
- Achieve Process business KPI
- Present Symmetry features and capabilities for debottlenecking and optimizations studies.
- Deliver flaresim radiation and dispersion calculation studies.
- Support SLB Geo units to increase symmetry & Flaresim market share in MENA
- Cooperate with our clients to solve their process bottlenecks and challenges.
- Utilize our simulation capabilities for Co2 Capturing (CCUS), emissions monitoring, reduction and management to achieve net zero goals.
- AI/ML for process solution to create fast, accurate and predictive systems integrated with slb partners solution (dataiku, Geminus, ...etc)
- Online optimization and digital twin projects
- Present Cognite data fusion platform and its capabilities for digital solution (APM, Digital Twin, maintenance schedule, Digital operation, asset twin, ..etc)

Symmetry process simulation trainer:

Steady state -Dynamics-pipeline workspace-flare workspace-Flaresim

June (2019) till March (2022): Senior Process Engineer at Onspec Tawakol Engineering and Contracting (OTEC)

- Train, lead and support the modeling and simulation team to perform their activities.
- Project management
- Assure the project deliverables and time schedule compliance.
- Prepare technical and commercial proposals for different process studies.
- Technical discussion and project planning to solve the client challenges.

May (2013) till May (2019): Process Engineer at Onspec Tawakol Engineering and Contracting (OTEC)

Job Summary

- Steady State /Dynamic Modeling and simulation of oil and gas process.
- Developing dynamic simulation studies.
- Developing OTS system for different plants.
- Contribute to Basis for Design, Basis of Design, and Project Specifications/Philosophies.
- Carry out/review Process Simulations Models and Flare & Blowdown Simulations.
- Generate/review Heat & Material Balance (H&MB) Tables.
- Develop/review Process/Utility Flow Schemes and Control Narrative.
- Develop/review Process/Utility Engineering Flow Schemes and Process Safeguarding Flow Schemes.
- Review Sizing for Process Equipment and Relief Valves.

- Process control for oil and gas processing industries.
- Participate in the different design stages (conceptual design, feed and detailed design)
- Performs other related duties such as writing technical reports, carry out technical studies.
- Process engineering activities such as developing/Review:
 - Basis of Design (BOD)
 - Control Narrative
 - Optimization
 - Energy management
 - Conceptual selection and cost estimation
 - PFD
 - PSV &BDV design
 - P&ID
 - C&E matrix
 - Equipment Design

Main Simulation Projects

ADNOC INTEGRATED PROCESS ENGINEERING DIGITAL FRAMEWORK

Project Technical Manager support the simulation team, graphics team and developing team to perform the below system

A mega gas processing facilities located within Emirate of Abu Dhabi. The plant facilities are designed for treating gases to produce Sweet gas (fuel gas), NGL product (Natural Gas Liquids), condensates and Sulfur.

COMPANY Gas Processing currently focuses on digitalization initiatives, exploring the potential of integrating digital applications to drive performance and excellence. an integrated process Engineering Application / Digital framework was developed as part of digitalization with the following objectives:

- To build a custom application unifying the simulation models for all the processing facilities of COMPANY GAS PROCESSING, for quick and easy capacity assessment for a given feedstock profile.
- To highlight the maximum processing capacity of each train for the given feedstock composition.
- To identify the equipment level bottlenecks.

SONATRACH/IAP/HASSI MESSAOUD SCHOOL OTS system

Project Technical Manager

The project is to provide a Generic Gas-Oil Separation Plant (GOSP) OTS system for Hassi Messaoud School.

The OTS system provided consists of:

10 operator stations

instructor station (instructor and simulation station)

with two Emulated DCS Interfaces: one Honeywell and one Yokogawa.

Man-Turbo compressor studies

Deliver and develop many dynamic simulation projects to evaluate compressor performance , ASV size, pipeline and system behavior during startup, shutdown, power failure and different operating scenario

ERC steady state project

Develop a steady state simulation cases for (VDU, HCU, NRU, NHT.DHT and DCU) for ERC refinery at Mostorod to be used for optimization and troubleshooting.

Summed OTS project

Develop an OTS system for summed new LPG transportation facility and trained different teams to operate their plant, System implementation and train the team

UGDC Dynamic Simulation for NGL Plant

The project scope is to develop and supply dynamic models and perform the required set of scenarios to test the performance of the cold box against different shut down circumstances.

L.A. TURBINE for BADRA OIL FIELD

The project scope is to develop and supply dynamic models and perform the required set of scenarios for the Turbo Expander- re-compressor Package with associated IGV and anti-surge control loop to ensure good performance for the plant

ELMANSOORI for Miran water oil separation

The project scope is to develop a steady state simulation to generate a complete heat and material balance of the process and calculate the required duties for the different equipment such as pumps, heaters...etc.

WASTANI Open Drain Study

The project scope is to develop dynamic model to choose the optimum volume of the drain sump basin which be able to handle the firefighting water from the dike.

ELAMAL GOSP Facility

The project scope is to develop dynamic models and perform the required set of scenarios to ensure that the facility can handle the future production from the well.

Participate on the following Engineering projects:

- ***Eshpetco Tanks upgrade project***
- ***Wastani Engineering for HAZOP Study recommendation and re-engineering***
- ***Wastani-Plant Engineering of open drain system design***
- ***ADES - Basic and Detailed Engineering Services for Jack-Up Rig Production Facility***

Process Simulation Training Instructor:

Part of my job as application engineer was to provide process simulation and modeling training courses for the following software:

1. Aspen HYSYS steady state
2. Aspen HYSYS Advanced
3. Aspen HYSYS Dynamics
4. Aspen Heat Exchanger Design and Rating (Shell & Tube – Air cooler – Fired Heater – Plate Fin)
5. Aspen In Plant Cost Estimator
6. Aspen Flare system analyzer
7. Aspen PSV Sizing and Rating
8. Aspen Utility Planner
9. ASPEN Process Economic Analyzer

The following is a list of different companies where I had provided training:

1. Sonatrach (Algeria)
2. Oil and Gas Skills (OGS Egypt)
3. Universal Gas Derivatives (UGDC Egypt)
4. Militah oil (Libya)
5. Akakus company (Libya)
6. Belayim Petroleum Company (Petrobel Egypt)
7. JV In Salah Gas (Hassi Messaoud – Algeria)
8. EGAS (Egypt)
9. Egyptian Natural Gas Company (GASCO Egypt)
10. South oil company (SOC Iraq)

Business Development Engineer

Part of my job as business consultant is to provide the technical support to the sales team to show our software capabilities and how to use it to achieve customer satisfaction