

**101884-CME-4DGOS-E-1975**  
**Engineering Manager / Consultant Engineer**

Holds a B. Sc. in Chemical Engineering and has 45 years of successful Oil & Gas projects experience worldwide, including Chemical Process Engineering, Engineering Management, and Project Management, including PMC and PMT role, with international contractors and operating companies, in North America, Middle East, Europe and Korea.

## PERSONAL DATA

Nationality : Egyptian/Canadian  
Gender : Male

## EDUCATION

- : B. Sc. in Chemical Engineering, Cairo University, 1975
- : Postgraduate studies in Chemical Engineering, Cairo University

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

- : Windows, MS Office (Word, Excel, Access, Power Point), Internet
- : SIMSCI, PRO/II, HYSYS, AutoCAD 14, Visio, Pipe phase, Crane companion, Hazop Studies Software (PHA-4 &5)
- : Foxboro, Honeywell DCS applications, PLCs and SCADA systems
- : Refinery information systems
- : Bechtel, SNC Lavalin, Flour, GS, Worley Parsons, project management & Document control; database programs

## TRAINING COURSES AND CERTIFICATIONS

- : Professional Registered Consultant Engineer (registration No 190/5).
- : Attended several training courses and technical seminars in oil refining technology, Gas processing, Process engineering, simulation, safety, HAZOP, Project Management, and software applications, in USA, Canada, Kuwait, and UAE.

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : 2019  
Employer : Short assignment with Worley Parsons

**Project** : European Bank for Reconstruction and Development (EBRD)

**Job Description** : Participated in study for Evaluation of Alexandria refinery Alternative revamps configurations.

**Dates** : From 2017 till 2019

**Employer** : Worley Parsons PMC

**Project** : ASSIUT Refining Company (ASORC) Naphtha Complex - Egypt

**Job title** : Engineering Manager

**Job Description** :

- Headed Worley Parsons PMC Engineering team for Assiut Naphtha complex EPC contract project, with Axens as Licensor and Enppi & Amec Foster Wheeler, as EPC contractor.
- Engineering team was working from WP-Abu Dhabi, India, and Qatar. Contractor home office in Cairo. Scope of work included FEED and Detailed engineering, in addition to procurement, construction, Training and startup services.

**Dates** : 2016

**Job title** : Freelancer

**Job Description** : Developed conceptual design, reviewed specifications, PFDs, P&IDs, simulation, develop Value engineering, Data sheets, participated in preparing tender documents, and tender's evaluation; provided HAZOP chairman.

**Dates** : 2015

**Employer** : Mozhel Offshore Company - Egypt

**Job title** : Consultant Process Engineer

**Job Description** : Mozhel offshore project, including engineering for building oil production platform, pipeline, Mopu & FSO. Developed conceptual design, and detailed engineering, reviewed specifications, PFDs, P&IDs, Data sheets, coordinated engineering deliverables with Worley Parson as engineering contractor.

**Dates** : 2014

**Project** : Kurdistan Refinery Expansion Project – Dubai / Kurdistan

**Job title** : Senior Project Engineer - Process Engineering Manager

**Job Description** : Worked as Senior Project Engineer / Process Engineering Manager, part of PMT team for Refinery expansion project (adding new Crude unit 50,000BPD, Hydrocracker, Hydrotraeter, Isomerization, Merox, LPG, Sulfur, Hydrogen, utilities and Tank farm with Truck loading facilities). Performed FEED review (by Technip), EPC contractors offers evaluation phase. Project stopped because of finance problems & ware.

**Dates** : 2014

**Job title** : Freelancer Consultant – Cairo

**Job Description** : Provided process conceptual and detailed engineering and HAZOP consultancy to Oil & Gas companies in Egypt & Middle East. Provided Project Manager Role for Shell-Egypt FEED study for tank farm expansion, utilities project.

**Dates** : 2013  
**Employer** : Worley Parsons – Cairo Office / Bahrain  
**Job title** : Engineering Manager  
**Job Description** :
 

- Performed Worley Parsons Cairo office Engineering Manager role, and Engineering Manager for Sudan LPG grass root project FEED, Pipelines, Desalters, Oil treating & truck loading projects and variety of other revamps in upstream facilities, and developed proposals.
- Sudan LPG project included development of Basic Engineering Package FEED, (PFD, P&IDs, and Simulation, Philosophies Plot plan, ITB and Cost estimation). The cost estimation we developed was as accurate as 5% of actual signed EPC contract value.
- Developed and reviewed:
  - Project schedule and execution plan.
  - Manpower histogram and recruitment of additional engineers.
  - Project Cost Estimation and Budget review.
  - Project Team Alignment & Team Building (Owners / Contractor).
  - Develop Value engineering.
  - Reviewed engineering documents, drawings, specifications, etc. (including simulation, PFD, P&D, Specifications, Data Sheets, ...etc.).
  - Process simulation, BFD, PFD, Pressure and temperature profiles.
  - Conducted Engineering review meetings and HAZOP.
  - Insured safety and reliability of the plant by conducting black start up, and re-start up & Shutdown scenarios. Developed proper procedures.
  - Negotiations with Client.
  - Developed data for cost estimation.
  - Several other documents.

**Dates** : 2013  
**Employer** : PMC - Worley Parsons  
**Project** : ERC Refinery Project - Cairo  
**Job title** : PMC Interface Manager / Process Engineering Manager  
**Job Description** :
 

- Manage new refinery project interface issues with EPC contractor (GS-Korea as EPC contractor), government, utility providers and existing CORC refinery and PPC for ERC complex Hydro cracking / Coker refinery in - Cairo, Capital 3.7 Billion US\$. This includes pipelines to tank farm Tie-ins, Desalters upgrade, WWT upgrade, Natural Gas supply agreement, and electric high voltage cables routing, permits, contracts negotiations, ...etc.
- Review GS process engineering deliverables for Crude vacuum unit, NHT, Reformer, DHT, Hydrocracker, Coker, LPG Amine Theater, SRU, Hydrogen unites, Utilities, flare, firefighting...etc.
- Conducted field surveys and test runs for existing CORC refinery, which will feed the project with Atmospheric Bottom.
- Conducted rout selection for product pipelines feeding existing EGPC /Storage tanks company & existing LPG storage facility.
- Coordinated gas, water and electric feed routes outside the refinery.

**Dates** : From 2010 till 2012

**Job Description** :

- Engineering Manager, for all the project (8 Packages) (7 Billion \$) Sour Gas Project JV ADNOC/Occidental Oil – Al Hosn Gas – Shah Development Project (UAE / Spain / Italy / Korea):
  - Representing Company/owner, to supervise 8 EPC and 3 PMC contractor's teams for World Largest Sour Gas project (1,000MMSCFD - 23% H2S) Shah Gas Development Project), Al Hosn Gas Company. This includes Technicas Reunidas, Spain as EPC Company and, Snamprogetti Italy, for main plant, Samsung Korea for utilities. Flour and VECO- Canada as PMC.
  - Appointed as Corporate Engineering Services Manager (Senior Project Manager level), in charge of manpower recruitment, coordination of external interface, utilities supply projects, provided technical back up for interface management, Technical Authority for change management for all packages, maintain consistency between packages, insure high quality engineering work by EPC contractors, including PMT & PMC teams. Provide technical advice to company top management / ADNOC for technical proposals. Reviewed and approved change orders, scope and schedule changes. Participated in HAZOP, plot plan, safety, and 3D model review meetings.
  - Managed Interfaced with project teams (e.g. EPC contractors, Inspection teams, PMC, HSE, drilling. Government agencies and utilities providers, ...). Provided good interface with Operations and other stake holders.
  - Managed interfaces with Government and utility provider, including early estimations of utilities requirements.
  - Performed staff interviews, selection, appraisals, for engineering department posts, also provided monitoring of PMC performance.
  - Ensure Rigorous "Management of Change process" is followed, and insured cascading information from one package to another after each change. Negotiated and stopped few million \$ worth of change orders, against PMC recommendations.
- Senior Project Manager Gas Gathering System, 1,000 MMSCF/D sour gas -Spain - Tecnicas Reunidas:
  - Represented Company as Sr. Project Manager with Tecnicas Reunidas - Spain.
  - Starting from KO Meeting, established Company office in Madrid, developed technical review cycles, with PMC, selected PMC team, reported potential risks to management, negotiated reimbursable items with Contractor, and conducted internal engineering review meetings (Process, HAZOP, Etc.), attended 3D model reviews and HAZOP ...etc.

**Dates** : 2009

**Employer** : PMC - Worley Parsons – for IGD DAS ISLAND – ADGAS - UAE / Korea

**Job title** : Engineering Manager

**Job Description** :

- Leading multi-disciplinary multicultural teams' group of 11 engineers to perform PMC services for 1 Billion \$, ADGAS - IGD project, Gas plant in DAS Island - EPC phase with Hyundai – Korea, as EPC contractor, Korea-Ulsan, Offshore Division.

- The project includes Pipeline, Gas treating (Amine & glycol), Compression station, Utilities, Flare, Tie-ins, DCS, and soil reclamation. I was also in charge of process engineering with 2 fresh graduates. ADGAS issued appreciation letters for my excellent performance.

**Dates** : 2009

**Employer** : Worley Parsons – Egypt

**Job title** : Process Engineering Department Manager

**Job Description** :

- Provided Process engineering management services for 15 process engineers, to develop Front end, feasibility studies, and detailed engineering for several projects, including GOSP, LPG recovery project, Tank Farm, Power recovery project, flare study for LNG plant, BP North Shedwan development project FEED. Performed project management for Suez oil refinery upgrade study jointly with Worley Parsons USA, Petzed-Mozhel offshore platform, pipelines and onshore treating facilities projects, and supervised preparing several proposals, studies. This include supervising engineers in Preparation of Project Execution Plan including Manpower plan, schedule and develop and review Simulation using PRO/II or HYSYS.
- Developed / reviewed: Basis of Design, Process Flow Diagram and Material & Heat Balance, Process Description, Utility Balance Diagram/Calculations, P&ID, Equipment Data Sheet, equipment and instrument lists, line list, Catalyst and Chemical summary, Cause and Effect Diagram, provide data for Material Selection Diagram, Hydraulics Calculation and Preparation of Hydraulics Calculation Report, Instrument Process Data, of Safety Process Data, Start-up and Operation strategy/ Instruction, Emergency Shutdown Philosophy, streams Analytical instruction, Participate in HAZOP, and HAZID. Review plot plans, isometrics, detailed engineering for all other HSE & Engineering disciplines, and preparing progress reports and management reports. Developed technical papers and position papers to present alternative design solutions.

**Dates** : From 2007 till 2009

**Employer** : PMC - Worley Parsons

**Project** : ERC Refinery Project

**Job title** : Process Engineering Manager Egypt / Korea

**Job Description** :

- As part of PMC team to supervise Contractor preparing FEED, including finalizing process scheme, selecting licensors & contractors, contract development with FEED & EPC Contractor, and reviewed FEED, including, reviewed Heat & material balance, PFD, P&ID, specifications and data sheets, Plot Plan, Cause and effect diagram, control philosophy, flare system, for 3.2 \$Billion, Cairo refinery expansion project – ERC - Mostorod 95,000BPD.
- Provided interface management for ERC refinery project, including dealing with Cairo refinery, local government issues, Banks technical and environmental consultants, conducted surveys with contractor, conducted test runs, data collection, in CORC refinery, provided early identifications of project risks (which later on caused project to freeze). Compiled/ Developed refinery upgrading package.

**Dates** : From 2005 till 2007  
**Employer** : GASCO, Abu Dhabi - UAE  
**Job title** : Sr. Process Engineer  
**Job Description** :

- Provided process & Project engineering services for revamp & upgrade projects including gas plants, pipelines, Sulphur plants, ...etc., including PFD and P&ID review meetings, review calculations, simulations, Hazop studies (OAG project, Ruwais 3rd train utilities, etc.).
- Transfer to Process team in PMC team.

**Dates** : 2005  
**Employer** : SSJ Consortium - Saudi Arabia Consortium of Saudi consult - SNC LAVALINUK (UK) & Jacobs Middle East – Saudi Aramco - KSA (EPC Contractor)  
**Project** : Armco De-Ethanizer FEED Project  
**Job title** : Project Manager  
**Job Description** : Provided project management for FEED package developed for Saudi Aramco - KSA Yanbu gas plant 3rd De-Ethanizer train, in Al- Khobar Saudi Arabia office, and utility station. Developed organization chart, schedule, budgets, progress report, subcontracts, and conducted negotiations with customer, vendors and subcontractors. Implemented lessons learned, value engineering, team building, recruited and developed local staff. Initiated alternative plot plan with net \$1.5 Million saving. Received Armco appreciation letter for the quality and progress of the project. Also, for value Engineering ideas presented.

**Dates** : From 2004 till 2005  
**Employer** : SNC LAVALIN - UK – Kuwait (EPC Contractor)  
**Project** : KOC GC-27 Expansion  
**Job title** : Project Manager  
**Job Description** :

- Managed \$ 88 Million gathering station expansion EPC project.
- Provide project management as EPC contractor for KOC, GC-27 gathering station expansion project. Provided supervision for developing detailed engineering, planning, procurement, and construction. Ensured implementation of the overall project strategies and objectives (namely budgets, schedule, quality, HSE and maintained relation with customer). Co-ordinate the preparation of the sub-contracts scope of work, and responsibility matrix. Prepared monthly Progress Report. Conducted negotiations with client, vendors and subcontractors.

**Dates** : 2004  
**Employer** : GASCO, Abu Dhabi – UAE  
**Job title** : Senior Process Engineer  
**Job Description** : Prepared FEED for Habshan new flare system and New Flare tips modifications for 3 GASCO sites flare stacks. Participated in process team for EPC contractor's bid evaluation for OGD-III (1,306 MMSCFD gas treatment and NGL project), with FW as PMC and Bechtel as FEED engineer. Participated as Sr. Process engineer in OGD-II Step 2 modification Project (capacity increase to 130%), with Technip as EPC Contractor.

**Dates** : 2003  
**Job title** : PROCESS & HAZOP CONSULTANT - Toronto, Canada  
**Job Description** : Conducted HAZOP, PHA and process calculations, including Hydraulic studies, developed.

**Dates** : 2002  
**Employer** : Colt Engineering (Worley Parsons) - Toronto, Canada  
**Job title** : Senior Process Technologist  
**Job Description** : Conducted process calculations, Hydraulic studies, developed HYSYS simulation, PFD & P&IDs, for Petro Canada gasoline pool, facilitated HAZOP study for wastewater treatment project in Petro Canada – Toronto. Facilitated HAZOP study for Dunvegan Canada BP gas plant in Alberta. Performed assessment for Sunoco wastewater treatment plant in Sarnia, and participated in proposal for the refinery expansion. Participated in preparation of technical proposals, developed basic process engineering guidelines & Calculations methods, and trained new engineer.

**Dates** : From 1999 till 2002  
**Project** : Midor Refinery, Alexandria  
**Job title** : Owner Representative (acting Project Manager - Engineering Manager)  
**Job Description** : Headed the owner and PMC team to develop a grassroots 5 Million Barrels/Year complex refinery with Technip as EPC and Foster Wheeler s PMC. Work including development of contract with EPC contractor and Oil suppliers, utility providers, interface with Government agencies, EGPC, building PMT Team, review of all PMC and vendors deliverables. Training, attending Hazop, 3D review and safety review meetings, pre-commissioning and commissioning, and start-up of the refinery. I was reporting directly to Minister of oil.

**Dates** : From 1997 till 1999  
**Job title** : PROCESS & HAZOP CONSULTANT - Toronto, Canada  
**Job Description** : Conducted HAZOP, PHA and process calculations, including Hydraulic studies, developed.

**Dates** : From 1992 till 1997  
**Employer** : Kuwait National Petroleum Co. (KNPC) – Kuwait  
**Job title** : Lead Process Engineer - Shuaiba Refinery Projects Department  
**Job Description** :

- Provided technical support and process engineering for the refinery units, utilities, off-sites, Tank farm, oil pier and lube oil blending plant restoration program.
- Participated in Early start up team for Shuaiba refinery (developed Several temporary solutions, with minima resources), debottlenecking, test runs, DCS revamp project (Analog to Digital). Performed process calculations, contracts & proposals review, training of graduates, conducted test runs, etc.

**Dates** : From 1991 till 1992  
**Employer** : Kinematics Technology Inc. (KTI) – USA

**Job title** : Senior Process Engineer - Design Group  
**Job Description** :

- Worked on the following projects: hydrogen plants, hydrogen recovery packages and lube oils reprocessing plants.
- Prepared technical proposals and project budgets.
- Provided support for business development department and project management. Developed PFD (heat and material balances), process simulations and control philosophy.
- Developed P&IDs for process and utilities units including hydraulics, line sizing, equipment sizing, equipment / instrument lists and their data sheets. Reviewed cause and effect diagrams.

**Dates** : From 1980 till Aug. 1990  
**Employer** : Kuwait National Petroleum Co. (KNPC) – Kuwait  
**Job title** : Lead Process Engineer - Shuaiba Refinery Technical Services Department  
**Job Description** :

- Provided technical support and process engineering/trouble shooting, catalyst regeneration/Loading, for the refinery units (including H-Oil, Hydrocrackers, Hydrogen unites, Unifiners, Merox, Sulfur, CCR ...etc.), utilities, off-sites, Tank farm, oil pier and lube oil blending plant.
- Performed test runs, data collection, trouble shooting, catalyst loading / unloading, regeneration, energy conservation programs auditing, insuring implementation of safety and environmental requirements.
- Participated in revamps and modifications, by developing PFD, P&ID, data sheets, and specifications, review of vendors and contractors' submittals.

**Dates** : From 1977 till 1980  
**Employer** : C.F. Braun – Enppi – Egypt  
**Job title** : Process Engineer  
**Job Description** :

- Participated in the design of the projects: gas gathering stations, pipelines, booster stations, LPG Recovery Plant (80 MMSCFD), refinery utilities station up grading, off-shore gas platform design.
- Developed, PFD (heat and material balance), P&IDs, Instrument and equipment calculations, conducted hydraulic studies, prepared line lists, equipment and instrument lists, data sheets and technical specifications.
- Developed operating manuals for refinery units.

**Further experiences** : Short Period Consultancy Services:  
Oriental Petrochemical:

- Subcontractor to ABB in charge of developing Engineering for utilities material balance, size packages, write technical specifications, and develop detailed engineering including P&ID for grassroots Propylene onshore and Marine Unloading Facilities, Pipe Line and main plant utilities Stations – Egypt.
- Shell Lube oil plant Tank & Utilities revamp project (Cairo).

**Field of experience** :

- International experience in project Management; as EPC Contractor and as Owner Representative.
- Practiced process engineering in front-end (FEED) and detailed design of Oil & Gas projects (pipelines, Gas treating/processing, refinery design



and operations support, for Complex Refinery Process units, utilities, offsite, storage tanks, shipping terminals, utilities, oil piers...etc.), in Green & Brown field projects. Also have operational experience in Hydro treating/H-Oil complex refineries, and training of junior engineers.

- Work independently and provide the technical leadership within the department/project team, and take responsibility of team building. I also take responsibility for the efficient, proper and timely completion of the assigned engineering packages for the project as per the agreed scope of work in accordance with the project schedule. Also responsible for selection of methods and procedures and optimization of the design and materials within the scope of the project specifications.
- Prepared / Developed and Reviewed: Basis of Design, Process Flow Diagrams, Heat and Material Balance, Simulation using HYSYS and PRO\_II, value engineering, basic control scheme and philosophy, Utility Balance, Plot plans, Equipment List, Equipment Sizing and Calculations, Equipment/Instrument Datasheets, Basis of design, P&ID - Piping and Instrumentation Diagrams-, FEED design, Cause & Effect Diagram, Alarm and Trip Settings, Cause & effect, as built P&IDs, start-up procedures, HAZOP/HAZID participation and follow up, Line List, Relief and Blow down Study, Conducted TBE, Vendor Data Review, Coordination and input to other disciplines, process studies and reports, prepared Reviewed and commented on Hydraulics study, PSV sizing & flare design, Summaries, Utility/effluent/flare/line), Positively participated in Plot plan/HAZID /Risk assessment, Schedule, HAZOP reviews, and 3-D model reviews. Headed teams for development of Operation manual, identified root cause problems, operation root cause problems and troubleshooting, conducted and analyzed Test runes.
- Coordinated Technical Verification and Clarification with contractors, venders other engineering Disciplines and government agencies.
- Experience in review FEED packages & detailed Engineering prepared by Bechtel, Technip, Worley Parsons, Jacobs, Técnicas Reunidas, Fluor, Foster Wheeler, SNC Lavalin, Enppi, GS, LG, and Samsung.
- Some of my accomplishments are:
  - Provided team leadership, project management and project engineering for mega projects. Also, as Process Engineering Department Manager in world class EPC contractor & owner companies.
  - Developed front-end process engineering, FEED, including Design basis, simulations, calculations using HYSYS and PRO-II, Material and Heat balances, process selection, developed process flow diagrams (PFD), optimization, isolation philosophy, drainage philosophy, flare and blow down philosophy, cause and effect diagrams, line sizing, equipment sizing, packages specifications, and sized utilities networks (steam boilers, water, nitrogen... etc.). Prepared and Reviewed feasibility studies, and Cost Estimations.
  - Developed detailed engineering for systems, equipment, instruments and P&IDs. Basic control criteria, Data sheets, Cause and effect, line list. Instrument list, TBE, MRQ and MRP.
  - Performed project engineering, and performed Engineering Manager for PMC teams, provided team leadership to negotiate contracts, with licensors, vendors, and contractors (as owner reprehensive). Reviewed project progress, schedule, budget,

technical documents, and performed project quality control, managed change orders. Conducted negotiations with vendors and contractors.

- Prepared tender documents, proposals, budgets, contracts, and evaluated technical bids.
- Provided technical services support for refinery operations, including utility station, Lube oil blending plant, offsite facilities, Oil pier, Oil Movement, Tank Farms, Truck loading stations, terminals, Process units, daily production follow-up troubleshooting, test-runs, data collection, catalyst evaluation, energy auditing, refinery unit's/systems revamp and evaluation of technical tenders, and attended safety studies (Risk, Hazop, Hazed, SIL).
- Headed teams to prepare mechanical completion punch list, As Built P&IDs, hand over test runs. Enforced safety and environmental regulations. Trained junior engineers & Operators, coordinated relevant issues with Government.
- Provided PMC and PMT Engineering Manager Roles, reviewing engineering design deliverables by Contractor and guiding Owner on technical issues. Including Specifications, Design basis, philosophies, MRQ, TBE, MRP, and letters of Award.
- Participated in Facilities start up planning and commissioning.
- Identify and quantify external /risks, affecting the project implementation, and safe operations.
- Set the overall project strategy to deliver the goals of the client.
- Familiar with complex Oil Refinery units, and Operations.
- Conducted design review meetings (Process, P&IDs), Safety, 3D models, ...).
- Conducted several HAZOP, as chairman.
- Attended HAZID sessions, Risk assessment, 3-D model reviews, Plot Plan reviews, P&ID reviews.
- Delivered professional training, prepared development programs, for process engineers and operators.
- Interviewed, recruited, evaluated performance, for managers, engineers and operators' staff.
- Worked in the Capacity of Project Manager, Interface Manager, owner representative, Engineering manager, Process manager, for variety of international EPC contractors, in upstream, downstream Oil, Gas and Hydro cracking refinery projects.
- Provide timely support to operation in identifying root cause, operation-related problems and developed Process analysis, troubleshooting & plant/equipment optimization for operating facilities.
- Identify operating philosophies/technology opportunities, and provided Value engineering.
- Developed process design including plant models (Process simulation using HYSYS), developed conceptual designs, process flow diagrams and heat/material balance, equipment sizing, rating and line sizing hydraulics.
- Performed technical audit, and headed accidents investigation teams.
- Active participant in Review meetings, including Process review meetings, P&ID review meetings, Plot plan review meetings, 3D (30%, 60% and 90%), Hazop, HAZID, risk assessment, Hazed,

- monthly progress meetings.
- Assigned as “Technical Authority” for Al Hosn Gas, Sour Gas project.
- Worked in Brownfield project & Green field projects.
- Familiar with KNPC, KOC, GASCO, ADNOC, EGPC, Shell, SNC Lavalin (UK) and Worley Parsons and Armco standards.
- Worked in Egypt, Kuwait, Saudi Arabia, Bahrain, UAE, Korea, Spain, Italy, USA and Canada.
- Excellent communication skills and ability to work with operations, projects, third parties & governmental regulatory agencies.
- Self-motivation – high leadership, proactive & team building skills, ability to work with different nationalities, different skills and all levels of engineers and supporting teams organized completing tasks without direction, and within schedule and budgets.
- Experience in upstream Gas & Oil projects/Engineering/Operations, for gathering stations, marine platforms, Oil piers, underwater pipelines, gas processing, utilities, including sour gas systems, oil terminals, refinery process units including Hydrotraeter and Hydrocrackers, H-oil, Sulfur units, etc., and off sites, for grassroots and revamp projects, with excellent records of safety and meeting Budget and Schedule, with full customer satisfaction (Several customer recommendation letters available).
- Have significant input in ITB, tenders, contracts, and scope of work definition.
- Additional Technical Activities:
  - Published several technical papers in KNPC magazine.
  - Lectured twice in Kuwait University, on computer applications for HC projects management & HAZOP studies, and Water treatment.
  - Lectured several times in Cairo University on Hazop studies. Lectured post graduate students for Gas Diploma, on project management - Cairo, University.
- Worked for each of the following employers, two or three times (KNPC - 2 times, ADNOC 3 times and Worley Parsons 7 times):
  - Petro-zenima - Offshore platform – Egypt.
  - Abu Dhabi Gas Development - Al Hosn - Shah Company, Abu Dhabi - UAE / Spain.
  - Worley Parsons - Egypt, Canada, UAE, Korea, Bahrain (7 times).
  - Colt Engineering – Canada.
  - SNC Lavalin-UK - SNC Lavalin -UK - Kuwait / SNC Lavalin - Saudi Aramco - KSA (2 times).
  - Buna Engineering – Canada.
  - SNC LAVALIN (UK) - Jacobs Engineering Consortium – KSA.
  - KTI – USA.
  - Kuwait National Petroleum Company (KNPC), Kuwait (2 times).
  - GASCO - Abu Dhabi, UAE (2 times).
  - Worley Parsons, Enppi / C.F. Braun, Egypt (3 times).
  - Worley Parsons – Korea.
  - EGPC – Egypt (2 times).
- Worked in the capacity of Owner Representative, EPC contractor PM, PMC member, Hazop chairman, as summarized hereinafter:
  - Project Manager - owner representative (PMT).
  - Project Manager - owner representative (PMC).

- Project Manager - FEED & EPC contractor.
- Engineering Manager – (PMC).
- Technical Services Manager - owner (PMT) corporate office.
- Technical Authority (PMT).
- Process Manager - PMC, PMT, EPC Contractor.
- Interface Manager – PMC and PMT.
- Engineering Manager – PMC, EPC Contractor.
- Owner representative (Project Manager), Technical services manager & project coordinator – Grassroots & revamp project.
- Project Engineer / Process Engineer – FEED, EPC Grassroots & revamp projects for Gas plants and pipelines projects.
- Senior / Lead Process Engineer – refinery, gas, pipeline, utilities, waste water treatment, EPC contractor and owner representative.
- Refinery Process Engineer - utilities, WWT, lube oil blending plant, oil pier, truck loading stations, tank farm.
- HAZOP facilitator - several projects, in Canada, UAE, Egypt.
- Refinery Manager - Short time assignment.
- Process Engineering Consultant (upstream, Refinery and gas projects).
- Training Coordinator.
- Worked in the following projects & revamps:
  - Assiut Naphtha Complex – Axens License – Grassroots.
  - LPG – Grassroots.
  - Cairo refinery expansion – ERC.
  - North Iraq Refinery expansion.
  - KNPC refinery restoration project.
  - KNPC oil pier revamp & Capacity increase.
  - KNPC Tank farm re-arrangement.
  - KNPC Hydrocracker Reactor replacement.
  - KNPC Crude Unit Pre-flash tower feed line re-arrangement.
  - 382 gas field, 1<sup>st</sup> LPG plant in Egypt – Grassroots.
  - PMT- Shah 1000 MMSCFZD World Largest Sour Gas Gathering & Processing Project - Grassroots.
  - PMC - Gas treating and compression station – EPC.
  - Offshore platform – Grassroots.
  - Offshore oil Platform, MOPU & Gas platform – Grassroots.
  - Grass roots Refinery, Hydro treating/Hydro cracking / cooker 100,000 BPD refinery, utilities, offsite, tank farm, pipelines, and marine facilities (Oil pier).
  - PMC - Grassroots, gas compression, treatment, utilities, and pipelines -ADGS AGE.
  - Grassroots Acid gas removal plant.
  - Dubai Chemical Tank farm - Grassroots.
  - LPG feasibility study (WP).
  - Shell tank farm & utilities revamp.
  - Alex refinery to COOP Pipelines – 2018.
- Worked in the following projects:
  - Sudan LPG grass root plant – FEED.
  - Cairo oil refinery revamp - Desalters, floating roof tanks.
  - Suez oil refinery revamps study.
  - Shuaiba refinery oil pier.
  - Shuaiba refinery tank farm.

- Sulfur plant – TGT.
- Demineralizer & water treatment unit.
- Lube oil blending plant.
- Local market trucks loading facilities.
- API separator - IAF unit, Floating mops.
- De-bottle nicking of crude unit Pre-flash tower, heaters and Desalters.
- Simulation for KNPC Refinery units.
- Revamp of control room to DCS.
- Crude unit Pre-flash tower feed line.
- Hydrocracker Reactor replacement.
- Amoniacal water pumps modifications/Heat exchanger.
- Refinery sewer system.
- Demineralizer upgrade.
- Tank farm re-arrangement.
- Gathering and treatment station (Oil and gas).
- Design of Re-Lube Grass roots plant (KTI - USA).
- Design of Grassroots Hydrogen units (KTI - USA).
- Design of Grass roots utility stations/packages.
- Flare gas minimization & gas recovery project.
- Bid evaluation for Habana gas complex expansion-OGD-III.
- Bid evaluation for OAG gas project.
- Bid Evaluation North Iraq refinery project EPC.
- GASCO OAG projects detailed engineering.
- GASCO Ruwais third train utilities projects.
- FEED development for several projects.
- New DCS for Shuaiba refinery.
- Revamp of Shuaiba oil pier & Loading system.
- Khalda ground flares upgrade.
- Akik-Khalda west desert - LPG plant.
- Dana Gas - Gas gathering and booster station - front end engineering.
- Waste water truck loading station.
- Utilities (refrigeration, Instrument air, Nitrogen, cooling / potable / fire water, heating oil, WWT, ...etc.
- Marine platform process packages.
- Responsible for Engineers and Operators recruiting and training of:
  - KNPC - Shuaiba refinery fresh graduates training program.
  - HAZOP lecturing for Kuwait University Cairo University.
  - Upgrade and train fresh graduates (Colt, Shuaiba refinery).
  - Worley Parsons Cairo office.
  - ERC.
  - Midor.
  - Colt Engineering - Toronto.
- Conduct HAZOP as chairman and Process member for:
  - LPG plant FEED.
  - Several Process, utilities and off-sites units in Shuaiba refinery.
  - Midom pipelines and oil pier.
  - Dunvegan, Alberta Gas plant – Alberta.
  - Ontario - Mississauga refinery - WWT unit revamp.
  - Sarnia Refinery WW Treatment.
  - Power recovery unit – Alexandria.

- New gathering station and underwater pipeline – Mozhel.
- New gathering station and underwater pipeline – GABCO.
- Sour Gas gathering stations – Shah project.
- Oil production Platform (oil, gas, revamps, grassroots).
- Attended several 3D Model reviews, Plot plan reviews, HSE reviews, with excellent positive contribution (saved over 3 Million \$ in proposal to rearrange Armco project plot plan), also significant improvement in cost for plot plan modification in Shuaiba refinery tank farm re-arrangement.
- WORKED IN THE FOLLOWING GAS PLANTS & ASSOCIATED UTILITIES & PIPELINES:
  - Sudan LPG – Cairo / Sudan / Bahrain.
  - Dunvegan, Alberta Gas plant – Canada.
  - Das island expansion – UAE.
  - Al Hosn Gas – Sour gas 1000 MMSCFD.
  - GASCO - UAE.
  - AKik - eastern desert Gas plant revamp.
  - 382 Gas project – GAPCO - LPG, 1<sup>st</sup> LPG plant in Egypt.
- WORKED IN THE FOLLOWING REFINERIES / PROJECTS & ASSOCIATED UTILITIES AND PIPELINES:
  - ASSIUT Refining Company (ASORC) expansion – Egypt.
  - KNPC Shuaiba Refinery + Oil pier and lube oil Plant, DCS, Pre-flash tower – Kuwait.
  - ERC - Expansion of CORC Refinery – Egypt.
  - North Iraq Refinery expansion – Iraq.
  - Toronto refinery – Canada.
  - Sarnia Refinery – Canada.
  - Midor Alexandria refinery – Egypt.
  - Al Max refinery Heater Modifications – Egypt.
  - Alexandria refinery CDU & VRU project.
- WORKED IN THE FOLLOWING Oil & Gas Units, Design & Start-up and Operations: Pipelines, Storage tank farm & oil movement, Oil piers, Crude & Vacuum Distillation, Naphtha CCR, Hydrotraeter, Naphtha Splitter, Catalytic Reforming, Isomerization, Kerosene (Merox), Distillate Hydrotraeter, Hydrocracker, Hydrogen Plant, Delayed Coker, Light Ends & LPG Recovery, Sulphur Plant & Tail Gas Treatment, H-Oil, Unifiners, LPG plants, Amine treating, Dew pointing, Natural Gas / sour gas treating plants, LNG, pipelines, Flare & Blow down systems, flare gas recovery, sulfur storage and flaking and handling systems, Steam Systems and steam boilers, Nitrogen unites, Demineralizer, fire water systems, potable water, Cooling water systems, fuel Gas, drainage systems, API separator, DAF, sludge handling, Oil Piers, truck loading stations, Airport Jet fuel tanks.....etc.
- LECTURED ON:
  - Post graduate Gas Diploma - Cairo University 2013.
  - HAZOP Studies - Cairo University.
  - Project cycle & WWT - Kuwait University - several times.
  - Fresh Graduates Joining Oil & Gas - ADNOC – UAE.
  - Midor New employee's orientation program.
  - Have several technical publications in KNPC magazine, few articles published in Kuwait newspapers.