

Jawad Ahmed Aleem

Abu Dhabi, UAE | 00971566147842 (m)

<https://www.linkedin.com/in/jawad-ahmed-aleem-48189b12> | aleem.jawad@gmail.com

Citizenship: Pakistan | Civil Status: Married with 3+ Children | DOB: 1965

Senior-Level Professional for Refinery, Fertilizer & Utility Plants

Plant Operations | Process Engineering | Project Management | Energy Management | Internal Audits

A Chemical Engineer and reputable management professional with over 28 years of experience in the Refining & Fertilizer Sector, acquired great deal of versatile experience, knowledge and skills, suitable to lead a large scale organization. Conducting feasibility studies and managing projects executions in Pakistan & the Middle East. Advising management in running and boosting energy efficiency of plants. Operate plants, ensuring safety of people and assets. Drive revenue and new business development by leading feasibility studies, analysing technical, financial and economic models and issuing management recommendations. Plan and execute projects, conduct techno-economic analysis, generate corporate reports, develop and implement strategies. Background in plant operations, process engineering, crude oil scheduling and refinery production planning, product yield analysis, defining refining process technologies and selecting licensors. Develop and implement energy management systems, measure performance, identify renewable energy possibilities, monitoring and delivering of KPIs and KMs. Manage technical audits from risk management and governance perspective, supporting achievements of corporate objectives. Regulate turnaround planning and execution, increase performance and mitigate and govern emergencies. Possess a broad range of competencies in the following business areas:

➤ Core competencies

- Plant Operations & Process Engineering
- Business Development
- Catalyst Management
- Solomon Associates Refinery Benchmark Studies
- Prod. Planning/LP modeling
- Energy Management
- Asset Integrity/ Maintenance management
- Refinery economics
- Project Management
- Feasibility studies
- Tender & Bid evaluation
- Scope, Schedule & Cost Control
- FEED, PMC & EPC agreements
- HSEIA studies(HaZop,SIL,Hazid)
- HSE/ Process Safety
- Handling renowned Engineering companies(FW,Technip,Samsung Engr, URS, UOP etc)
- Pipeline operations
- Budget preparation & control
- Corporate Business Planning
- Financial analysis
- Policies & Procedures
- Managing Full Audit Life Cycle
- ERM & Change Management
- Performance Management
- Vendors management
- Liaison with Govt, Regulatory & certification agencies

➤ Personal qualities

- Leadership skills
- Focused & Target oriented
- Team player
- Strategic thinking
- Effective communication & motivational skills
- Hard working & passionate
- Stakeholder Management
- Professional networking
- Problem solving/ Decision making
- Ethical compliance
- Multi-cultural orientation
- Business awareness

PROFESSIONAL EXPERIENCE

Abu Dhabi Oil Refining Company (ADNOC Refining), Abu Dhabi, UAE

May/2009 to Present

Manager-Process & Technical Audit Department

Internal Audit & Assurance Division- ADNOC Refining HQ

(Jan/2016 to Present)

Managing Process & Technical Audit Department of ADNOC Refining (World's fourth biggest refinery complex), delivering audit plan encompassing various risks to business. Regulating three major oil refining facilities processing +920k barrels per day (BPSD) of crude and condensate feeds, a utility plant with 650MW of power generation, 14M GPD desalination plant, and a purpose build state of the art waste treatment plant, with assets totalling c\$30B+. ADNOC Refinery has embarked on the route to build world's largest Refinery & Petrochemical complex at Ruwais by 2025 with an additional spending of c\$30B.

Structure audit activities and recommend risk management, control and governance process improvements to further enable company to achieve business objectives. Introduce a new and updated audit methodology based on end-to-end audit of various business processes. Ensure process safety and HSE management system policies and procedures are efficiently instituted across all operating refineries. Orchestrate proper installation of asset integrity & maintenance management systems in alignment with best practices. Review Research Centre's role in supporting refineries on catalyst performance and process modelling by assessing R&D activities. Lead refinery turnaround reviews, with a focus on planning and execution. Audit major projects for FEED & EPC phases for compliance with respective agreements.

- Improved project delivery by analysing and reporting on project management (PM) practices in terms of budget, schedule and resources and incorporating and recommending best practices.
- Examine plant operations including (Refining Processes & Utilities Plants), determining effectiveness of operational controls, HSEMS & Process Safety implementations, maintenance, plant availability, Economics, Planning & operational excellence.
- Audited various pipeline operations, focusing on efficient delivery of crude and refinery products, minimising losses and ensuring management of operational and strategic reserves for crude and refined products.
- Performed comprehensive audit of Gasoline & Aromatics Project, by visiting home office of FEED Engineer, M/s. Foster Wheeler in Reading, UK.
- Performed comprehensive audit of Gasoline & Aromatics Project, by visiting home office of EPC Engineer, M/s. Samsung Engineering in Seoul, South Korea.
- Audited Carbon Black and Delayed Coker, BeAAT Expansion Projects, documenting FEED and EPC activities and survey minor project activities, assuring compliance with agreements, HSE COP's/ MOC/DGS procedures.
- Participating in risk assessment activities to develop risk universe that covers all risks to the business in the area of technical, finance, Procurement, HR, IT etc. Got good understanding of various business processes like procurement, inventory management, recruitment, IT/OT operations, Business Continuity, Cyber Security etc.

Manager Energy Optimisation & Management Department

Corporate Support Division- ADNOC Refining HQ

(Sep/2012 to Dec/2015)

Expanded sustainability and future business growth by leading energy improvement studies and enhancing energy performance across three major refineries processing 920k BPSD at the time. Bolstered performance by project managing implementation of an Energy Management System as per ISO50001:2011 standards, as Management Representative (MR) reported directly to COO, whilst regulating the Energy Management Steering Committee's (EnMSC) activities as its Secretary. Exacted financial control of a studies budget valued at c\$2.5M (US), utilised during the performance of vital studies, including the energy efficiency improvement of major energy consuming equipment.

- Initiated and conducted a project for recovering waste heat (WHR) from exhaust gases of Gas Turbines (GT24- GT27 of M/s. Alstom) and studying upgrades to the steam system.
 - The \$450M project is in advanced EPC phase, will result in significant cost savings and additional revenue of \$120M annually with a promising IRR of +25%. The WHR project will result in generation of additional 230MWh of power and 60,000 M3 production of desalinated water without burning any additional fuel.
- Promoted use of renewable energy by leading the installation of two PV solar system pilot plants.
- Studied option for the installation of an LP flash drum in CDU feed heater for reducing energy consumption having saving potential of \$30M; and recovering H2 from reformer off gasses and LPG from amine treating sweet gasses.
- Prepared a scope of services (SOS) document for a feasibility study focused on the installation of a gas turbine inlet air cooling system, designed to improve power generation during summer conditions.
- Developed Energy Management Framework Document(EnMFD) meant for providing detailed guidelines for incorporating energy management practices during the various phases of project life cycle (Feasibility study, FEED & EPC) phases.

Head of Business Development-Strategic Studies & Business Development Department

Corporate Support Division, ADNOC Refining HQ

(May/2009 to Aug/2012)

Simulated future growth and business expansion by initiating and studying new business development opportunities, translating to major global projects valued at c\$5b (US). Projects included Inter Refinery Oil Pipeline for transferring finished and semi-finished products, NORM management, BeAAT waste treatment plant expansion, Catalyst regeneration facility and Carbon Black/Delayed Coker Unit Projects. Heightened plant capacities and product quality, resulting in increased revenue, whilst awarding contracts for feasibility studies. Actualised long-term business growth objectives via development and finalisation of business agreements, preparing strategic business plans, establishing the budget and executing a five year business plan. Originated key milestones (KMs) and key performance indicators (KPIs), formalised corporate level tasks and targets and responded to queries from external business stakeholders like ADNOC, Government agencies, Universities etc.

- Improved Project Management processes via development and implementation of strategic studies procedure, project charter and initial risk register documents designed to increase dividends; saved c\$100 k in consultancy costs.
- Executed operational excellence initiatives in Routine Maintenance Improvement (RMI) and Training Competency Development (TCD) areas, whilst leading employee awareness campaign, resulting in enactment of best practices.

- Developed excel based refinery model to compute various refined products at different operating capacities of refinery process units used for forecasting products availability and gross refinery margin for Five Year business planning.
- Interacted with concerned stakeholders like ADNOC, operating sites for discussion on new business development ideas.
- Follow up for execution of under development projects for meeting schedule, cost and quality targets.
- Development and finalization of business agreements like Joint Ventures (JV), Memorandum of Agreement (MOA) with potential business partners in consultation with company legal advisors, especially for Articles relating to technical & commercial aspects.
- Development of ADNOC Refinery Five Years Business Plan that envisages estimation of Production Data from available refining resources for wide variety of petroleum products, price forecast for Feed & Products, Manpower requirement, compilation of Operating & Capital expense etc. to calculate future refinery cash flows & margins. The Business Plan also covers corporate strategic objectives in light of Company's Mission & Vision. Accordingly, issuing the Corporate Five Year Business Plan for management's review and onwards submission for BOD approval.
- Coordinated with Pipeline & Storage Division for delivery of refined products as per market demand.
- Keeping in view KM's, formalized Corporate Level Tasks & Targets for key persons of the division, that served as a main basis for Balanced Score card preparation.
- Performed duties as Secretary for highest executive level committees for decision making, i.e Projects Steering Committee (PSC) & Operational Excellence Steering Committees of ADNOC Refining.
- Meetings and interaction with external stakeholders like Petroleum Institute, UAE University, Showa Shell etc. on R&D projects.

Chief Engineer-Technical Services Department

MID COUNTRY REFINERY -PAK-ARAB REFINING COMPANY (PARCO), Pakistan

(Oct/2000 to May/2009)

PARCO an integrated energy company, known as the most modern and state-of-the-art facility with a nameplate capacity of 100k BPSD, mainly processing imported crude oil from Saudi Arabia and the UAE in conjunction with the local condensate.

Formulated and executed detailed shutdown and turnaround plans for critical processes and utility units, whilst deploying CCR-Platforming catalysts loading/unloading and internal inspections and repairs of reactors. Enhanced performance of catalysts by effective monitoring and troubleshooting hydrocracker, CCR Platformer & hydrotreater catalyst performance and implementing chemical cleaning of M/s Packinox plate-type heat exchanger. Managed emergencies via process parameter analysis and troubleshooting, most notably a centre pipe support gasket failure on the platforming reactor. Performed benchmarking for the PARCO Mid-Country Refinery (MCR) via development of a system for data collection and KPI calculations as per M/s. Solomon Associates(SA) methodology. As main Focal Point, collected data on behalf of MCR and submitted for 2006 & 2008 Bench Marking Studies for fuel refineries conducted by SA. Regulated communications and represented company as lead focal point, fortifying business relationships with internal/external groups like UOP, JCCP, Packinox, Haverly, Cosmo engineering etc. Orchestrated an increase in profits by conducting techno-economic studies and stimulated an increase in productivity via performance evaluation of chemicals and catalyst.

- Performed successful commissioning of UOP Dieselmax unit, which is world's first mild hydrocracker unit in a single reactor. Effectively monitored and maintained its performance for eight years without any major incident, catalyst life was extended by more than twice of its design life.
- Mitigated production and revenue loss via troubleshooting and analysis of a dry gas seals leakage issue on the recycle gas compressor on the mild hydro cracking unit.
- Served as project leader, co-ordinating with M/s. Haverly USA amid implementation of Linear Programming LP software, providing full support, guidance and assistance to consultant during building of a refinery model, leading to successful project completion & implementation.
- Effectively utilized LP model for assessment of processing of various other crude oils and condensates to enhance refinery margin. LP modelling is a valuable tool used in the industry for refinery processes optimization and profit maximization.
- Developed a real-time Excel based model for monitoring and optimising steam consumption, generation, header pressure, extraction and steam let down status, saving quantifiable energy by avoiding steam let down through inter header pressure control values.
- Conducted performance evaluations of chemicals and catalyst and issued reports focussed on yields, stability, selectivity, deactivation rate and estimated remaining catalyst life. Utilized real time data import from Process Information (PI) system, to effectively monitor the catalyst performance for UOP catalyst for mild hydrocracker Dieselmax unit, NHT and CCR platforming units, resulting in higher performance than predicted design life.

- Evaluated processing of various crude oils by using LP model and prepared recommendation for management.
- Successfully Coordinated Performance Tests of Mild Hydrocracker (UOP Dieselmax technology) & CCR Platforming units during commissioning activities. Also planned & performed Capacity tests of Dieselmax, NHT & Platforming units at high loads to establish bottlenecks. Detailed technical reports for each activity were issued. Based on these studies, current capacity expansion project in MCR is in progress that will further enhance refinery profitability.
- Played instrumental role for finalizing UOP's Service Agreement with Parco Refinery including management of Parco's Platinum account. Maintained the service agreement on regular basis.
- Remained key contact person with UOP on technical matters on behalf of Parco Refinery.
- Performed performance evaluation of UOP Platforming Catalysts (R-134, R-234 & R-254) and convinced Parco Management to purchase latest improved version of catalyst.
- Effectively trouble shot emergency for the leakage of centre pipe support gasket of Platforming Reactor #2, that helped in avoiding major potential damage to the reactor.
- Coordinated and supervised activities relating to catalyst unloading, identification and separation of heal catalyst, estimation of available and shortfall catalyst, screening, reloading of the catalyst and unit startup in consultation with UOP expert.
- Successfully coordinated all activities for CCR-Platforming Reactors catalyst unloading/loading, internal inspection/repair of Platforming Reactors during two turnarounds.
- Supervised four skimming activities of Naphtha Hydrotreating catalyst to address high differential Pressure across catalyst bed.
- Prepared preliminary feasibility report for development of important future projects of the Refinery including:
 - Power Generation on IPP basis
 - Diesel Hydro desulphurization Unit (DHDS) for production of low sulphur diesel oil. Coordinated for detailed feasibility study and review of this project with M/S. Cosmo Engineering, Japan.
 - Naphtha & LPG Splitter.
- Developed Parco Refinery model on Excel Spreadsheet to calculate and compare Gross Refinery margins at different thruputs of important process units to help management in decision making.
- As head of Refinery Loss Control Committee issued detailed report identifying & quantifying sources of hydrocarbon losses and suggested necessary remedial actions. Got Management appreciation.
- Led a task force to review the entire SOP's of different departments before going for IMS (ISO 9001, ISO 14001 & ISO 18000)certification. Parco is now one of the few IMS certified company of Pakistan.
- Had closed interaction with refinery lab for routine & special analysis. Managed Lab activities for some time.
- Managed utilities plant operation for reliable generation of steam, cooling water, IA and other utilities for eight years.
- Managed ETP plant and concluded a study to recovery valuable oil from discharge effluents and ensuring compliance with environmental regulations. The recovered oil was effectively processed, resulted in savings.
- As head of Production Planning & Scheduling, managed effective functioning of cross country pipeline for simultaneously shifting of crude oil, HSD, Kerosene oil through a single pipeline from Karachi to MCR. The focus was effective utilization of pipeline, avoiding losses and properly processing interface material.
- Coordinated and provided support for commissioning of White Oil Pipeline project.
- Coordinated with Marketing & Commercial department on regular basis for managing rolling plans for delivery of refinery products as per market demand.
- By utilizing LP model, studied different scenarios for processing blends of various crude oils and establishing the best case for profit maximization. Regularly issued the GRM reports for management information.
- Handled project for successful elimination of TEL a hazardous material from Gasoline pool and introduced MTBE as an alternate additive.
- Met demand of PAF for production of JP-8 by adding speciality additives.

Senior Operations Engineer-Ammonia Urea Fertilizer Complex

FAUJI FERTILIZER COMPANY LIMITED, Machhi Goth, Pakistan

(Nov/1990 to Oct/2000)




The largest urea fertilizer manufacturing company in Pakistan with four ammonia-Urea complexes and a combined production capacity of 2.5m MT/annum (urea) and 0.7m MT/annum (DAP fertilizers).

Directed plant operations, most notably in catalytic process units, including Primary and Secondary reformers, shift converters and methanator/ammonia synthesis catalysts. Ensured operations ran on schedule by managing catalytic process operations and running major machines, including centrifugal & PD compressors and steam and gas turbines.

Originated and co-ordinated turnaround plans, plant handovers/takeovers and shutdowns for major equipment, machines and columns, prior to inspections and maintenance activities. Measured performance of ammonia/utility plants via analysis, whilst performing process parameter analysis and troubleshooting.

- Optimised plant and improved energy management by collecting, monitoring and analysing process parameters, identifying energy saving opportunities and implementing changes through MOC process.
- Managed a variety of ad hoc emergency situations and ensure plant ran under safe conditions.
- Trained, mentored and developed new chemical engineers and operators into valuable human assets for company via creation and execution of an on-the-job (OTJ) training programme.

SUMMARY OF PROFESSIONAL EXPERIENCE

Professional Role	Organization	Experience (No. of years)
Plant Operations – Ammonia Plants		7
Plant Operations – Utility Plants(WTS,CWS,IA, Power Generation)		3
Plant Operations – Dieselmax Hydrocracker Plant		0.5
Process Engineering – Dieselmax,NHT, CCR-Plat, Utilities		7
Production planning & scheduling– Parco Refinery		1
Business Development		3.5
Energy Management		3.2
Internal Audit- Process & Technical Audits		2.9+ ongoing

Note: Detailed resume can be provided if required.

EDUCATION, TRAINING & CERTIFICATIONS

BSc in Chemical Engineering, Punjab University, Lahore, Pakistan- 1989

EMBA, Lahore University of Management Science (LUMS), Pakistan- 2008

Certifications:

Certified Manager granted by Institute of Certified Professional Manager, USA

Certified Lead Auditor for ISO50001 Energy Management System by M/s. Bureau Veritas

Certified Lead Auditor for ISO 14001 Environment Management System by M/s. SGS

Certified Internal Auditor for ISO 22301:2012 for Business Continuity Management System M/s. EY

Professional Development Program:

Awarded Internal Audit Practitioner by IIA USA on successful completion of CIA (Certified Internal Auditors Part1 exam). Preparing for CFE (Certified Fraud Examiner) target 2Q 2019

Attended 5 days PMP (Project Management Professional) training conducted by M/s. Meirc, Dubai. Application for PMP exam has been approved by PMI, USA and planning to sit for exam by 1Q 2019.

Professional Trainings:

CCR-Platforming Standard Training Certification by M/s. UOP

Energy Efficiency in Refineries & Petrochemical Plants (2015)

Comprehensive Training Program for Certified Energy Managers (2013)

Great Leaders conducted by M/s. Franklin Covey USA.

Seven Habits for Highly Effective People conducted by M/s. Franklin Covey USA.

Working with Competencies; Certified Team Leader; Strategic Business Planning
Recent Improvements in Refining Technologies, World Refining Association
Business Process Analysis & Mapping,
Fuels Refinery Bench Marking Study Training, by Solomon Associate in Singapore 2006
Training Certificate in Fundamentals of Refining Economics,
Orientation of Refinery Operations & many other In-House Managerial Courses

Professional Affiliations:

Affiliate Member of Energy Institute, UK (ID#0064452),
Member of Project Management Institute, USA (ID#2142135),
Member of Pakistan Engineering Council (ID# CE2281),
Member of Institute of Internal Auditors (IIA), USA (ID#1925529)
Member of Institute of Internal Auditors (IIA), UAE chapter &
Member of Punjab University & LUMS Alumni Group

Synopsis Conferences, Seminars & Visits:

Attended meetings with Ministry of Energy (Japan) and with Japan Cooperation Centre, Petroleum (JCCP) in Tokyo (2015),
Visited two refineries in Japan; visited World largest CIS PV Solar modules manufacturing plant at Miyazaki (west of Japan)
and Visited "Mega solar PV system application site" in Kawasaki as a lead delegate of ADNOC Refining.

Presented paper on the "Options in energy conservation in oil refining industry" in a conference arranged by Organization
of Arab Petroleum Exporting Countries (OAPEC) in Bahrain (2015),

Attended as full time delegate the Abu Dhabi International Petroleum Exhibition & Conference (ADIPEC) (2014/2015)

Attended as full time delegate the Institute of Internal Auditors, IIA annual conference held in Dubai, 2018.

Technical Proficiencies:

SAP, Maximo, LIMS, PI & CMS Software, Process Simulation Programmes; PIMS LP Modelling & Design II & MS Office Suite.
Advance user of MS Excel

Languages: English, Urdu & Punjabi