Contact

+447799849210 (Mobile)
Maziar.Bahiraee@Outlook.com

www.linkedin.com/in/mahizadyar (LinkedIn)

Top Skills

Time Management
Problem Solving
Cross-Functional Team Building

Languages

English (Professional Working)
French (Elementary)

Honors-Awards

Top Inventor in The University
Best Researcher Student in the University
Member of Bonyad Meli Nokhbegan

Maziar Bahiraee

Commissioning & Start-Up Manager at Kangan Petro Refining Co. (KPRC)
Istanbul, Türkiye

Summary

Seasoned chemical process engineer with over 13 years of expertise in the petrochemical industry, specializing in ABS (Acrylonitrile Butadiene Styrene) and rubber production plants and projects. Renowned for leading innovative process engineering initiatives, optimizing polymer production systems, and driving operational excellence. Proficient in managing licensors and negotiating licensing agreements for Process Design Packages (PDPs), ensuring alignment with organizational and industry standards. Experienced in developing advanced process control frameworks, troubleshooting complex systems, and delivering high-quality solutions that improve plant efficiency and product quality.Extensive experience as a commissioning and start-up engineer, utilizing the OPERCOM methodology to oversee critical project phases from pre-commissioning to start-up. Skilled in implementing system and subsystem readiness reviews, executing conformity checks, and ensuring plant operability through comprehensive Pre-Startup Safety Reviews (PSSR). Managed functional and operational testing across multiple projects, guaranteeing compliance with safety, quality, and environmental standards while adhering to project milestones and budgets. Successfully developed and supervised commissioning task registers, ensuring seamless transitions from construction to operation.Adept at applying PMP principles to streamline project planning and execution, with a strong focus on risk management, cost control, and schedule adherence. Demonstrated ability to manage multi-disciplinary teams and collaborate with stakeholders, fostering a culture of innovation and accountability. Expert in resolving EPCC contractor claims, safeguarding project timelines, and optimizing resource allocation.In leadership roles, provided strategic oversight and technical guidance to major petrochemical companies, including Padjam Polymer Development Co., Sadaf Petrochemical Company, and Fanavaran Petrochemical Co. Successfully managed high-value projects, implementing continuous improvement strategies

and achieving measurable gains in productivity and efficiency.Fluent in English and basic in French, enabling effective collaboration in multicultural environments. Committed to professional development with certifications in PMBOK 6th Edition, rubber processing, and OHSAS 18001. Passionate about leveraging expertise to solve complex challenges, drive innovation, and contribute to the dynamic field of chemical engineering.

Experience

Kangan Petro Refining Co. (KPRC)

Commissioning & Start-Up Manager
August 2026 - Present (2 months)
Kangan County

PADJAM Polymer Development

9 years 3 months

Director of Production & Operations
July 2025 - Present (1 year 3 months)
Asalouyeh

Responsibilities:

· Strategic Leadership: Direct and oversee all production operations, technical services (engineering, process control, laboratory, and inspection), maintenance, warehousing, and HSE departments. Develop and implement strategic plans for production, and ensure alignment with sales and marketing objectives.

· Operational Management: Manage the entire production lifecycle, from planning and goal setting to execution. Lead operational excellence, ensuring high product quality and efficiency. Guide new product development and manage Management of Change (MOC) processes.

· Safety and Compliance: Champion a culture of safety, health, and environmental protection. Oversee all related activities, including industrial safety, fire prevention, and waste management. Ensure strict adherence to all regulations and standards.

· Resource Management: Optimize resource allocation, including personnel, equipment, and materials. Oversee the management of product and spare parts warehouses.

Stakeholder Relations: Act as the primary point of contact for internal and external stakeholders. Lead the senior on-call team for the complex.

Commissioning & Start-Up Manager
January 2023 - July 2025 (2 years 7 months)
Asalouyeh

ABS/Rubber Production Project (200KTPA ABS & 60KTPA Rubber, 400 M€)| PADJAM Polymer Development.
Role Description and Responsibilities:
Led the development and execution of commissioning and start-up strategies for a large-scale ABS and Rubber production complex, ensuring a safe and efficient transition from construction to operations. Managed preparation of commissioning scopes of work, tender documents, contractor qualification processes, and contract development activities.
Directed commissioning planning in accordance with OPERCOM methodology, including systemization, subsystem definition, responsibility matrices, schedule reviews, and interface management among engineering, construction, operations, and contractor teams.
Oversaw pre-commissioning and commissioning activities, including conformity checks, static testing, system preservation, functional and operational testing, dynamic commissioning, Mechanical Run Tests (MRT), and introduction of live process fluids. Verified system readiness through structured reviews of commissioning task registers and achievement criteria.
Ensured compliance with HSE requirements by supervising Permit-to-Work (PTW), Lockout/Tagout (LOTO), SIMOPS coordination, and implementation of critical safety measures.
Managed punch list identification, tracking, and close-out activities. Monitored project progress using ICAPS and commissioning management tools, providing regular reports on milestones, testing status, and commissioning performance.
Reviewed and approved commissioning dossiers, red-line markups, test records, and handover documentation. Coordinated start-up activities, validated plant performance against design specifications, supervised performance testing, and supported seamless transfer of facilities to operations.
Led multidisciplinary commissioning teams, established priorities, monitored performance, and promoted a culture of safety, accountability, and operational excellence throughout project execution.

Process Engineering Dept. Head
July 2017 - January 2023 (5 years 7 months)
Tehran

ABS/Rubber Production Project (200KTPA ABS & 60KTPA Rubber 400 M€)| PADJAM Polymer.

Role & Responsibilities:

As Process Engineering Department Lead at PJPC, managed a team of five process engineers overseeing process design reviews for the ABS/ Rubber Production Project. Ensured technical alignment among the Licensor (Versalis-Eni), Basic Engineering Consultant (Tecnimont), and EPC contractor through document reviews, technical evaluations, and process optimization. Participated in HAZOP studies, procurement meetings, and contractor claim management, contributing to project delivery within scope, schedule, and budget.

• Reviewed 800+ MDR and VDR documents (PFDs, P&IDs, H&MBs, datasheets, C&E diagrams, and process specifications), ensuring compliance with licensor requirements and operational feasibility.

• Participated in KOMs, PIMs, and 3D Model Reviews with licensors, consultants, and EPC contractors, ensuring early resolution of process engineering concerns.

• Prepared technical reports for senior management and the Board of Directors on process issues, bottlenecks, and optimization opportunities, supporting decisions that generated €3 million in savings.

• Served as the process focal point for coordination with mechanical, electrical, and instrumentation disciplines.

• Acted as a core member of the contractor claims management team, handling six major claims and successfully defending five cases worth $55 million in PJPC's favor.

• Conducted feasibility studies for plant expansion, proposing modifications to enable HIPS and GPPS production in the ABS plant.

• Managed process control software development and integration with DCS and SIS systems.

• Participated in FATs for critical control systems, validating functionality prior to site installation.

• Led HAZOP studies, identifying safety and operational risks and ensuring mitigation measures were implemented and closed out.

SPG Steiner GmbH

Commissioning & Start-Up Supervisor

November 2024 - December 2024 (2 months)

Silivri

Supervised commissioning and start-up for the Kuzey Marmara Gas Storage Expansion Project, ensuring DCS logic validation, BMS software review, and system conformity checks. Led adsorber bed vessel filling, packing installation, and pre-commissioning activities for the Silica Gel Unit. Developed

commissioning and start-up procedures, including DFGH dry-out steps, ensuring seamless project execution.

Roles and Responsibilities:

· Reviewed DCS logic software with Silica Gel Unit Logic and C&E (SAT).

· Prepare and develop filling procedure and supervised internal installations, packing loading, and top distributor nozzle installation for Adsorber Bed Vessel Inspection in Silica Gel Unit.

· Pre-Commissioning & Functional Tests, Witnessed conformity checks, static tests, and system preservation activities for the Gas Processing Unit.

· Fired Heater BMS logic Software Review with Vendor documents.

Prepared and develop commissioning and start-up procedures for DFGH dry-out steps.

Kayson Inc.

Process Engineering Head

May 2022 - November 2022 (7 months)

Tehran

Persian Gulf Petrochemical Industries PGPIC

Advisor To Chief Executive Officer and Engineering Manager

December 2019 - March 2021 (1 year 4 months)

Tehran

Rubber Production Project (137KTPA E-SBR, 250 M€)|, Licensed by Versalis-ENI S.p.A, Assalouyeh Port

· Provided strategic advice on engineering challenges and help managing Engineering consultant by reviewing at least 50 major engineering documents.

· Supervised EPCC contractors, resolving claims and ensuring project alignment with client objectives.

Over viewing and define the structure of at least 5 technical contracts such as feed stock purchase, design modification.

Fanavaran Petrochemical Co.

Advisor To Chief Executive Officer and Engineering Manager

April 2019 - December 2019 (9 months)

Tehran

GTM, MTO Plants Projects|Fanavaran Petrochemical Co.

Offered expert guidance in engineering, project planning, and risk management for large-scale petrochemical operations.

Facilitated conflict resolution with contractors, safeguarding project progress and budgets.

TJPC (Takht-E-Jamshid petrochemical company)

4 years

Process Engineering Dept. Head

February 2016 - February 2017 (1 year 1 month)

Bandar-e Mahshahr

SBR/PBR Production Plants (40KTPA SBR Goodyear®,15KTPA PBR, BFGoodrich®, 150 M€

· Role Overview:

As the Process Engineering Department Head at Takht-e Jamshid Petrochemical Company, led seven process engineers across Process Engineering, Process Control, and Production Planning & Process Control sub-departments. Focused on managing Technical Service Requests (TSRs) for process modifications, optimizing plant performance, and ensuring operational stability. Maintained process control by monitoring key parameters, mitigating fluctuations, and driving efficiency improvements.

Led 15+ major process modifications, resolving bottlenecks and increasing throughput by 5%. Managed TSR workflow, coordinating with electrical, instrumentation, and mechanical teams.

- Designed structured process log sheets for operators and implemented a data-driven decision-making approach. Trained 30+ operators and engineers, ensuring accurate documentation and compliance with process control standards.
- Evaluated and extend 25+ new chemical suppliers, reducing procurement costs by 1% without impacting performance.
- Generated weekly, monthly, and annual reports on plant efficiency, product quality, and waste. Resolved 5 recurring inefficiencies, improving plant reliability.
- Established a systematic approach for predicting product costs by analyzing feedstock, chemicals, utilities, personnel, and logistics. Improved cost allocation accuracy, leading to a 6% reduction in unaccounted and hidden process costs.
- Led capacitor bank tuning, reducing reactive power losses and cutting electricity costs by 2% with an 8-month ROI.
- Completed Process Engineering Training courses such as: Honeywell Experion PKS 50, Introduction of Elastomers, Physical Testing of Rubber, HazOp Study, Corrosion Mechanisms in Boiler & Heat Exchanger, Rubber Processing and Compounding Technology, applying advanced strategies to reduce downtime by 15%.

Production Planning & Process Control Lead

July 2014 - February 2016 (1 year 8 months)
Bandar-e Mahshahr

SBR/PBR Production Plants (40KTPA SBR, Goodyear®, 15KTPA PBR, BFGoodrich®, 150 M€ | TJPC (Takht-E-Jamshid petrochemical company), Bandar-e-Mahshahr County
Role Overview:

· As the Production Planning & Process Control Supervisor, focused on optimizing plant efficiency by managing feedstock, chemical usage, production output, and waste material analysis. Led quantitative monitoring and forecasting efforts to ensure accurate inventory control, minimize costs, and enhance overall plant performance.

· Production Efficiency & Performance Analysis – Monitored feedstock intake, chemical consumption, and production output, conducting root cause analysis for process inefficiencies.

· Utility Consumption Monitoring – Tracked daily, weekly, and monthly utility usage, identifying deviations from design parameters and implementing corrective actions.

· Quantitative Reporting & Forecasting – Prepared detailed weekly, monthly, and annual reports on feedstock inventory, chemical usage, product output, and sales.

· Power Factor Optimization – Managed reactive electricity power generation, reducing total electricity costs by 2% through capacitor bank installation and tuning, achieving ROI within 8 months.

Product Cost Analysis & Prediction – Established a systematic approach for predicting product costs, factoring in feedstock, chemicals, utilities, labor, and logistics, enhancing financial planning accuracy.

SBR and Utility Plants Operation Head

April 2014 - July 2014 (4 months)
Bandar-e Mahshahr

SBR/PBR Production Plants (40KTPA SBR, Goodyear®, 15KTPA PBR, BFGoodrich®, 150 M€

· Supervised 24/7 plant operations across SBR and utility plants, ensuring adherence to operational and safety standards leading shift teams of 30+ operators and shift supervisors by periodically reviewing plants log sheets, site visits, control system monitoring etc.

· Monitored and managed control systems, ensuring 99.5% uptime for production-critical equipment and ensured real-time response to process deviations, reducing plant shutdown incidents by 30% within four months.

· Managed root cause analyses for 15+ plant incidents, implementing corrective actions to prevent recurrence with the assistance of technical service department.
Optimized water, steam, and power consumption, reducing plant utility costs, ensured uninterrupted supply of cooling water, steam, and compressed air, preventing
downtime in polymerization units.

Junior Commissioning Engineer
March 2013 - April 2014 (1 year 2 months)
Bandar-e Mahshahr

SBR/PBR Production Plants (40KTPA SBR Goodyear®,15KTPA PBR, BFGoodrich®, 150 M€

· Completed comprehensive theoretical and practical training in Synthetic Rubber Plant operations over period of seven months.
· Actively participated in pre-commissioning, commissioning, and start-up activities for TJPC Utility and Rubber Plants under expert guidance, utilizing system-based approach from TOTAL's OPERCOM methodology.
· Performed detailed process conformity checks and operational tests in alignment with OPERCOM methodology checklists and test sheets, ensuring adherence to operational standards.
· Facilitated and managed Pre-Startup Safety Review (PSSR) committee, including checklist reviews, punch item follow-ups, and verification of plant readiness for start-up.
Collaborated with cross-functional teams to identify and resolve commissioning challenges, ensuring seamless integration of systems and compliance with project timelines.

Rahsaz Ouje Pars
Project Site Supervisor
June 2012 - July 2013 (1 year 2 months)
Arak

Role & Responsibility:
· Supervision of the Civil Works of the Artificial Lake Project in a Recreational and Amusement Park
· Preparing 3 contracts for subcontractors
· Coordinate the Financial payment and Insurance affairs of 20 workers
Follow up on five invoices until their payment is received from the client

Jam Petrochemical Company
Olefin Plant Operator Apprentice

April 2012 - May 2012 (2 months)
Asalouyeh

Olefin Plant (1.3MTPA) Jam Petrochemical Company

· Familiarize with the overall plant by studying process description along with process flow diagrams (PFDs) and piping and instrumentation diagrams (P&IDs) and Operating Manual of the plant.

· Observing startup/shutdown/change over sequences of specific plant rotary equipment.

· Collect and log operational data, compare these values to expected ranges and identify potential discrepancies.

· Observe in identifying and resolving operational issues such as fouling, leaks, or equipment malfunctions.

Preparing detailed apprenticeship report summarizing learnings, challenges faced, and recommendations for process improvements, guided by mentor.

Education

Islamic Azad University

Bachelor of Science, Chemical Engineering, Petrochemical Industries · (January 2008 - January 2012)