

MD. SOHEL RANA

CHEMICAL ENGINEER

Dhaka, Bangladesh

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PROFILE

A highly motivated and results-driven chemical engineer with over a year of experience in supply chain and logistics within the LPG industry. Demonstrated expertise in import management, demand and supply planning, inventory management, and process automation. Possesses strong analytical and critical thinking skills, pressure handling abilities, adaptability, and a high capacity for learning. Adept at leading projects to implement innovative systems and improve overall business performance.

PROFESSIONAL EXPERIENCE

SHV Energy (Petromax LPG Ltd.)

Dhaka, Bangladesh

Assistant Manager – Supplies & Logistics

Nov 2023 – Present

- **Responsibilities:** LPG import, demand & supply planning, inventory management & reconciliation, MIS reporting, data analysis, budget preparation and cost optimization.
- **Projects:** Implementing vehicle surveillance system, developing automated inventory management system, automating daily processes for increased efficiency, developing KPI management system.
- **Achievements:** Reduced inventory reconciliation time by over 90% and increased MIS reporting efficiency through automation.

INDUSTRIAL EXPERIENCE

Karnaphuli Fertilizer Company Limited (KAFCO)

Chittagong, Bangladesh

Industrial Attachment Program

Apr 2022 – May 2022

- Learned about ammonia and granular urea production processes, safe operating procedures and environmental policies,
- Developed comprehensive understanding of effluent and water treatment, boiler operation, cooling tower, quality testing and control, and various equipment functions such as heat exchangers, pumps, waste heat reboiler, valves, etc.

Industrial Visits

- Rashidpur 3000 BPD Catalytic Reforming Unit (CRU) Plant Habiganj (Jun 2022)
- LafargeHolcim Bangladesh Limited (LHBL) Sylhet (Dec 2022)
- ASM Chemical Industries Limited Gazipur (Mar 2019)

SKILLS

Technical Skills: Microsoft Office 365, Python 3, C/C++, MATLAB & Simulink, AutoCAD, Aspen HYSYS, OpenFOAM, etc.

Soft Skills: Problem solving ability, interpersonal skills, leadership, project management, communication, adaptability, teamwork.

EDUCATION

Bangladesh University of Engineering and Technology (BUET)

Dhaka, Bangladesh

Bachelor of Science (B.Sc.) in Chemical Engineering

Mar 2018 – May 2023

CGPA: 3.79/4.00 (Ranked 8th among class of 60)

Govt Azizul Haque College

Bogura, Bangladesh

Higher Secondary Certificate (HSC)

Apr 2015 – Mar 2017

GPA: 5.00/5.00 (General Scholarship)

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

BUET AIChE Student Chapter

Dhaka, Bangladesh

Vice-President

Jul 2018 – Feb 2023

- Executed webinars on professional development, higher studies, skill development where my responsibilities included event planning, delegate communication, technical team leadership for online events and team coordination.

- Developed annual working plan, engaged with domestic and international chapters and ensured fruitful collaboration. Created engaging and fun quizzes and other competitions on a global scale.

BUET Entrepreneurship Development Club (EDC)

Dhaka, Bangladesh

Vice-President

Apr 2018 – May 2023

- Managed the logistics and event management team where my responsibilities involved engaging with participants of events, workshops, seminars and competitions, and providing them with necessary support. It also involved overseeing the official procedures.
- Executed business case competitions such as Hult Prize regional, PIONEER competitions.

BUET Rover Scout Group

Dhaka, Bangladesh

General Secretary

Apr 2018 – Jan 2023

- Prepared annual budget and working plans, lead a volunteer team of about hundred people during admission exams of BUET for two years and motivated people to join us.
- Organized training sessions in scout head quarter, Bangladesh, arranged programs like tree plantation, exercises, etc.

Chemical Day 2023

Dhaka, Bangladesh

Event Manger

Feb 2023

- Managed and executed job seminars with professionals from various leading companies, liaised with delegates and ensured a successful event.
- Coordinated cultural events, decorations, competitions like Chem-E-Car, poster presentations, laminar competitions, scavenger hunting, etc.

COURSES & CERTIFICATIONS

Excel Skills for Business Specialization

Coursera (9RX86F9CHKEP), Jun 2020

- Learned how to use Excel for various business applications, such as data analysis, visualization, and automation.
- Gained proficiency in using formulas, functions, charts, tables, pivot tables, and macros to perform calculations and manipulate data.
- Developed skills in formatting and organizing spreadsheets, applying data validation and protection, troubleshooting errors and bugs.

Python 3 Programming Specialization

Coursera (4G7TSLGQLZSX), Aug 2020

- Learned the basics of Python 3 programming language and syntax including classes, modules, and packages.
- Applied Python libraries such as NumPy, matplotlib, pandas, pillow, openCV etc., for data manipulation, visualization, and image processing.

PROJECTS

CFD Simulation of a Natural Convection Mixed-mode Solar Dryer using OpenFOAM

Undergraduate Thesis Project

- Developed several 3D models of a natural convection solar dryer using Onshape and Ansys Fluent to generate mesh.
- Formulated boundary conditions and governing equations to run CFD simulations.
- Analyzed simulation results to find optimum design parameters for best efficiency and economic feasibility.

Design of a 2400 BPD Reformate and 5 MTPD iso-Butane Plant

Capstone Project (Plant Design)

- Performed feasibility study, process selection, PBD, PFD, technical specifications, material and energy balance, cost estimation & economic analysis, plant layout, safety, and environmental hazard analysis of an industrial plant.
- Prepared detailed design of a distillation column including P&I diagram, control system design, engineering drawings.

HONORS & AWARDS

- Won the first prize in the “Laminaire Competition 2018”, a national contest on chemical engineering skills and knowledge, hosted by the Department of Chemical Engineering, BUET and BUET AIChE Student Chapter.
- Secured **Dean’s list** scholarship and **university merit** scholarship for academic excellence at BUET.