

# POOJA PATEL

## Process Engineer

(647)914-1602 | patelpooja9595@gmail.com

<http://linkedin.com/in/poojapatel9595>

### SUMMARY

A professional in Chemical Engineering specializing in Process Engineering having an overall 4.5 years of experience in Technical Services and project planning. Worked as a Technology Engineer in one of the world's largest CB&I licensed Petcoke Gasification plant. Provided technical support to Gasification team to ensure integrity of design and commissioning, operating and emergency procedures are safe and consistent with plant's design. Gained pre-commissioning and commissioning experience of Gasification plant. & In Project Planning department at Reliance Composite Division, Vadodara

### INDUSTRIAL EXPERIENCE

#### Reliance Industries Limited, Vadodara

June 2018 – November 2018

- Worked for Reliance Composites Solutions site start-up
- Coordinating with all the stake-owners for quick closers of open issues & ensuring deliverables are available within or before time with proper planning & careful execution strategies

#### Reliance Industries Limited, Jamnagar

July 2014 – May 2018

- Developed a Profit Improvement Opportunity worth **USD 0.60 million** using Heat loss model and validated in-house
- Finalized feed flux matrix for RIL Gasification with Microbeam Technologies
- Studied the Economic feasibility of Surface modified filters for replacing Char Filter elements
- Optimized gasifier temperature by analyzing Licensor operating data, thus **doubling refractory** life
- Reduced the start-up time of gasifier by **15 hours** using dynamic simulation thus increasing the availability of gasifiers
- Study the feasibility of early start-up of gasifier with available downstream units
- Modeled section of gasification plant PFD in Aspen and validated result with HMB
- Worked on UNISIM M3 model of gasification complex. Analyzed various scenarios to study the impact of gasifier trip on the entire complex
- Modeled heat exchanger in HTRI, performed vibration analysis and accordingly suggested modifications in the heat exchangers to avoid chances of failure in heat exchanger due to impingement rods
- Prepare and publish daily performance monitoring reports for the unit and highlighting any deviations from optimized operation
- Involved in Performance Guarantee Test Run for pumps and Compressors

#### Indian Farmers Fertilizer Co-operative Limited, Kalol

August- September 2013

- To study the feasibility of replacing cryogenic distillation with PSA in ammonia purge gas recovery plant
- Carried out mass and energy balance of the plant
- Designed an absorber tower for PSA
- Estimated capex for the addition of PSA unit to the plant
- The project had a pay back of **10 months**

### TECHNICAL SKILLS

#### Software

- UniSim, Aspen Plus, HTRI, Phast, Microsoft Office

### ACADEMIC PROFILE

#### Bachelor's of Engineer in Chemical

July 2010 – June 2014

L.D. College of Engineering, Ahmedabad , India

## SCHOLASTIC ACHIVEMENTS

- Successfully operationalized world's largest gasification plant worth \$6bn. My dedication and efforts were highly appreciated by RIL higher management.
- Set up plant database for trend analysis through IP21 software by identifying all critical parameters required for optimal operation of the plant.

## EXTRA-CURRICULAR ACHIEVEMENTS

- Donated blood as part of voluntary blood donation camp organized at LDCE
- Secured first position in CHEM-QUIZ event in TECHNIX held at LDCE
- Member of culture committee of LDCE
- 1st runners-up at CHEMISOL event in TECHNIX, held at LDCE
- Member of Cultural committee of RIL and organized various events in RIL township

## VOLUNTEER EXPERIENCE

### **Mentor**

VSK school

- Mobilized new joiners at RIL for voluntary participation in social activities
- Organized sale of 2nd hand items for poor children of nearby villages
- Delivered learning sessions on English, Hygiene and moral short stories to children of nearby villages

### **Sponsorship team member**

Vision Technico.

- Vision Technico is 1st Technical magazine of L.D. collage of engineering
- Interacted with numerous stakeholders and generated funds for publishing our college first Technical Magazine Was also involved in publicizing and creating awareness regarding the need and benefits of this initiative

### **Committee Member**

Invincible NGO

- Contributed at channelizing positive energy of youth by installing the spirit of adventurism and team work in them during the various activities
- Motivated female participation in one of the trekking camp to polo forest by exhibiting leadership qualities

### **Mentor**

Reliance Industries Limited

- Mentored GETs and developed them for roles in Technology. Developed their technical competency in a structured Manner and prepared them for future to take on higher technical roles

### **Volunteer**

L.D. College of Engineering

- Volunteer in Orientation Program for chemical engineering department