

# Abhishek Kumar

EChE19-002 | UG Final Year (B.Tech)

Chemical Engineering | Rajiv Gandhi Institute of Petroleum Technology Male | 11/10/2000

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**OBJECTIVE:** Looking for opportunities that offer me chances to take up challenging task that not only help me in mine but also help in my organization growth.

## EDUCATIONAL BACKGROUND

COURSE	CPI/CGPA/%	Year
B.Tech in <b>Chemical Engineering</b>	8.07/10* *Up to 6 <sup>th</sup> Semester	2019-2023
XII, (CBSE)	80.2%	2018
X, (CBSE)	10 CGPA	2016

## INTERNSHIPS

### Processing of Crude oil in AVU unit and designing of Heat Exchanger. IOCL, PARADIP

May,2022-July,2022

Mentor: **R.N Patel** (DGM, AVU, IOCL, PARADIP)

- Learned the operating parameters of processing crude oil in mother unit of refinery and distribution of products to various secondary units like DHDT, NHT, DCU units etc.

**PROJECT:** We were given to design a heat exchanger to cool kerosene stream from 178 °C using boiler feed water at 100°C at a pressure of 40Kg/cm<sup>2</sup> having constraints

### Overview of different process units in a refinery. IOCL, BARAUNI

December,2021-January,2022

- It was my first visit to any refinery and there I came to know the difference between theoretical and practical knowledge, had a great time there and learnt many new things, how exactly an actual refinery and all the units work there.

## ACADEMIC PROJECTS

### Nanoparticle aided hydrodynamics of liquid-liquid flow through millimeter sized channels.

- We have carried out mass transfer and flow pattern for various nanoparticle aided hydrodynamics system in a 2mm internal diameter channel. The objective was to increase range of slug flow regime as slug flow is a tool for process intensification. Nanoparticle system enhances the micro mixing and hence greater mass transfer in nano aided systems.
- Identified the mass transfer data through refractometry analysis.

### Reducing frictional loss and thereby reducing pumping cost in oil transportation through pipelines

- In transportation of highly viscous oil high pumping cost is experienced as flow is mostly dispersed and highly viscous oil sticks in pipelines but if we go for annular and slug annular flow regimes than water comes in contact with wall and water being less viscous reduces the pumping cost.

## ACHIEVEMENTS

- Secured Jee Advanced rank of 13819 in year 2019 and 23692 in year 2018.
- Secured WBjee rank of 910 in year 2019 and 4268 in year 2018.
- Became C-Programming tutor and taught **C, Python and MATLAB** basics to 1<sup>st</sup> year IT students.
- Abstract for our experiment has been approved for **Oral Presentation at CHEMCON 2022** (I am presenting author).

## POSITION OF RESPONSIBILITIES

- Maintenance Secretary** | Student representative from the batch. 2021
- Designing Head** | IICHE-RGIPT Student Chapter. 2021- 2022
- Designing team (Film and Media Cell)** | Cultural Team 2022-present

## SKILLS AND INTEREST

- Software:** Aspen HYSYS| Canva| PCC 3.6| Phantom Video Player| PowerPoint| Photoshop
- Programming Languages:** C, C++, Python, Java, MATLAB  
Data Processing, Data Analysis and Data visualization in MATLAB.
- Hobbies:**  
Designing, Painting, Cooking