# PRASHANTA KUMAR ROY

GUWAHATI, INDIA, 8724821874, prasantdps79@gmail.com

A highly motivated and detail-oriented Chemical Engineering graduate with a solid foundation in process design, heat transfer, and reaction engineering. Skilled in applying analytical and problem-solving skills to develop innovative solutions in chemical processes. Strong communication and collaboration abilities, with a proven track record of working effectively in diverse environments. Seeking to contribute to a dynamic engineering team and drive sustainable practices in the chemical industry.

## - EXPERIENCES

# Indian Oil Corporation Limited, Bongaigaon Refinery • Bongaigaon • India Industrial Training Internship

07/2023 - 08/2023

- Observed operations personnel performing tasks to gain an understanding of their duties.
- Acquired knowledge about crude oil and its products and by-products along with various process equipment used in the refinery.

## 2. NEHU, Shillong • Shillong • India

# **Summer Academic Internship**

08/2022 - 09/2022

• Nanomaterial Drug Delivery to make cancer treating drugs.

#### 3. Internshala Trainings • India

#### **Mathworks MATLAB**

10/2021 - 11/2021

- Introduction, Foundations, Mathematics, Functions, Plotting, Programming and Case Studies.
- Completed a final project module assigned securing 90% marks.

#### 4. Team Everest NGO • India

#### **Curriculum Development**

09/2021 - 10/2021

- Developed curriculum and learning materials to increase comprehension.
- Developed sets of questions on English Grammar.

#### 5. TEQIP-3 • Kokrajhar • India

#### 3D Printing and Designing

09/2021 - 09/2021

• Acquired foundational knowledge in designing 3D models using Fusion 360 software.

### 6. NABA NIRMAN TRUST • Bongaigaon • India

#### **Social Internship**

07/2021 - 07/2021

• Helped bringing awareness about cleanliness of streets.

SKILLS -

Chemical Reaction Engineering Fluid Mechanics

Process Design MS Office

Heat Transfer Material Balance Calculations

Instrumentation and Process Control C and C++ Language

Mass Transfer Mathworks MATLAB

#### EDUCATION —

# 1. BINESWAR BRAHMA ENGINEERING COLLEGE, KOKRAJHAR • Assam • India B.Tech Chemical Engineering (2020-2024)

CGPA 8.32 (First Class with Honours)

Under Assam Science and Technology University, Assam

2. DELHI PUBLIC SCHOOL, DHALIGAON • Assam • India

**CLASS XII (2020)** 

 $88.8\,\%$ 

3. DELHI PUBLIC SCHOOL, DHALIGAON • Assam • India

**CLASS X (2018)** 

89.8 %

# - B.TECH PROJECT WORK -

## Topic: Extraction of Silica Nanoparticles from Fly Ash

Conducted a project focused on the extraction of silica nanoparticles from coal fly ash, a byproduct from NTPC, Salakati. The process involved water washing, drying, and chemical treatment using a NaOH solution. Key steps included heating in a magnetic stirrer with a condenser, separation of supernatants, titration with HCl, and filtration. Final silica nanoparticle samples were characterized through FTIR (Fourier Transform Infrared Spectroscopy) and SEM (Scanning Electron Microscopy) to analyze their structural and compositional properties. This project demonstrated proficiency in laboratory techniques, chemical handling, and nanoparticle characterization methods.

#### — LANGUAGES —

- 1. English
- 2. Assamese
- 3. Hindi