

## BRIEF SUMMARY

"To obtain a challenging role as a Chemical Engineer in a reputable organization where I can utilize my technical knowledge and experience in designing, developing, and implementing innovative solutions for complex chemical processes and systems, while continuously improving and enhancing my skills."

## KEY EXPERTISE

Microsoft Excel   Matlab   Aspen HYSYS   Aspen Plus   HTRI Exchanger   ANSYS   DwSim   Aspen EDR   Chemcad

## EDUCATION

**MIT Academy of Engineering, Pune** 2020 - 2024  
B.Tech. - Chemical Engineering | CGPA: 8.97 / 10.00

**Government Polytechnic Thane, Thane** 2021  
Diploma | Diploma - Chemical Engineering | MSBTE | Percentage: 91.83 / 100.00

**Sarswati Vidya Mandir, Yawal** 2018  
10<sup>th</sup> | MSBSHSE | Percentage: 91.40 / 100.00

## INTERNSHIPS

**Bhusawal Thermal Power Station** 12 Jun, 2023 - 22 Jul, 2023  
Internship Trainee

**Key Skills:** Boilers   Emissions   Combustion   Maintenance   Efficiency

In 6 weeks of inplant training, I Learned about how they are converting chemical energy to thermal energy then to kinetic energy then it is converted into mechanical energy and at last to electrical energy, i.e. Electricity.

**Tata Steel** 01 Jun, 2020 - 31 Jul, 2020

**Key Skills:** Process Safety   Heat Treatment   Metallurgy   Casting

In 8 weeks of virtual training, I Learned about how they are converting raw material i.e. iron ore to usable substance i.e. Steel.

## PROJECTS

**Synthesis Of Biodiesel From Extracted Senna Tora Seeds Oil And Optimization Study.** 01 Aug, 2022 - 31 Dec, 2023

**Mentor:** Dr. Abhijeet D. Patil | **Team Size:** 3

**Key Skills:** Soxhlet extractor   Separation Technics   Process Safety   Recovery   Yield

As a team leader, The outcome of an extraction of oil and biodiesel from Senna tora seed and optimization project is to gain knowledge and skills in the extraction of oil from Senna tora seeds, its suitability for biodiesel production, and optimization of biodiesel from senna tora oil seeds by using transesterification process and results the properties are meet with other biodiesel products.

**Thermal Design of Evaporative Condenser.** 01 Aug, 2020 - 30 Jun, 2021

**Mentor:** Mrs. S. M. Wasake | **Team Size:** 3

**Key Skills:** Evaporative Condenser   Equipment Design   MATLAB   ANSYS   Excel

As a team leader, The outcome is to understanding of heat transfer principles, simulation techniques such as computational fluid dynamics (CFD) and main advantage of evaporative condenser is energy conservation , two evaporative condenser , replace system of 5 condenser, 5 cooling tower and 10 water circulation pumps which result in huge power saving.

## ACHIEVEMENTS

- 1st Price In State Level General Knowledge And Aptitude Competition At Government Polytechnic, Jalgaon.
- 2nd Rank In State Level Poster Presentation Competition At Bharati Vidyapeeth College Of Engineering, Navi Mumbai
- 2nd Rank In State Level Technical Quiz Competition At Bharati Vidyapeeth College Of Engineering, Navi Mumbai.

## ASSESSMENTS / CERTIFICATIONS

### CFD Simulation Through a Centrifugal Pump

**Key Skills:** Boundary Conditions Design Modeler Meshing Plots

By completing a CFD Simulation Through a Centrifugal Pump course, I have gained expertise in utilizing computational fluid dynamics to analyze and optimize the performance of centrifugal pumps. This includes assessing the impact of various design parameters on pump efficiency, reliability, and overall effectiveness. I am proficient in using CFD software and have developed skills in designing and implementing simulation studies, as well as interpreting and presenting results. Through this course, I have developed a strong understanding of fluid dynamics and its applications in pump engineering.

Link : <https://coursera.org/verify/5S8CWLE52EW>

### Safety in the Utility Industry

**Key Skills:** Audits Communications Maintenance

The utility industry prioritizes safety by implementing various measures such as strict regulations, training programs for employees, and regular safety audits. This helps prevent accidents, protect workers and the public, and maintain the reliability of essential services such as electricity and water.

Link : <https://coursera.org/verify/PHVPU92BT5S8>

## SEMINARS / TRAININGS / WORKSHOPS

**Instrument And Control System Institute Name:** Tata Steel

06 Apr, 2020 - 05 May, 2020

**Key Skills:** Process Control Instruments Process Instrumentation And Control Troubleshooting

The outcome of an instrument and control system training is to learn the knowledge and skills necessary to design, install, operate, maintain, and troubleshoot instrumentation and control systems in industrial settings. This includes a comprehensive understanding of sensors, transmitters, actuators, control valves, and control algorithms, as well as experience in SCADA system design, maintenance, and troubleshooting.

### Industrial Water System

10 Mar, 2020 - 18 Apr, 2020

**Institute Name:** Tata Steel

**Key Skills:** Water Treatment Plant Operations Aspen HYSYS Process Safety Water Treatment Technologies

An industrial water treatment plant training aims to learn with a comprehensive understanding of water treatment technologies, processes, and regulations, as well as the ability to design, operate, troubleshoot, and maintain water treatment systems. The outcome of the training includes knowledge of water chemistry, contaminant removal methods, industrial regulations and standards, sustainability and environmental considerations.

## CO-CURRICULAR ACTIVITIES

- Participated in "Technical Paper Presentation" at state level organized by MIT Academy Of Engineering,Pune.
- Participated in "Industrial Design Problem" Competition organized by Azeotropy 2022, Chemical Engineering Association, IIT Bombay.
- Participated in Paper Presentation in National Level Technical Symposium Chemstorm-2k23 organized by Pravara Rural Engineering College,Loni
- Participated in "Technical Paper Presentation" at state level organized by K.K.W.I.E.E.R.Nashik.

## EXTRA CURRICULAR ACTIVITIES

- Worked as Executive member in IICHE (Indian Institute Of Chemical Engineers) at MIT Academy of Engineering, Pune.-2022-23.
- Events coordinator under IIC (Institution's Innovation Council) at MIT Academy of Engineering, Pune 2022-2023.

## PERSONAL INTERESTS / HOBBIES

- Carrom
- Listening Music
- Reading Books
- Travelling

## WEB LINKS

- Personal - <https://nyanbari.github.io/nyanbari.github.io.com/>

## PERSONAL DETAILS

**Gender:** Male

**Marital Status:** Single

**Current Address:** Near Mit Art And Science College, Alandi (D), Pune, Maharashtra, India - 412105

**Emails:** nayan.bari@mitaoe.ac.in , nayanbari2002@gmail.com

**Date of Birth:** 01 Apr, 2002

**Known Languages:** English, Marathi, Hindi, Sanskrit

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