

## SAUDAGAR SUDHAKAR BHOSALE

B.Tech Chemical Engineering | Pune, Maharashtra, India | +91-88059 07074 |  
[saudagarbhosale9493@gmail.com](mailto:saudagarbhosale9493@gmail.com)

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### SUMMARY

Detail-oriented Chemical Engineer with expertise in process design, Pilot-Scale operations, and reactor systems. Skilled in Aspen, CHEM-CAD, DWSIM, UNISIM, Auto-CAD, HTRI, Lab View, and heat/mass balance calculations. Experienced in safety audits, HAZOP, SOP development, and cross-functional coordination.

### TECHNICAL SKILLS

- **Process Simulation & Design:** Aspen HYSYS, Chem-CAD, DWSIM, UNISIM, HTRI.
- **Engineering Tools:** PFD, P&ID, UFD, piping layout, instrumentation datasheets, AutoCAD
- **Process Calculations:** Reactor sizing, heat exchanger design, pump/tank sizing, mass balance
- **Safety & Compliance:** HAZOP studies, SOP/Manual development, EHS coordination
- **Laboratory Analysis:** Lab View, HPLC, GC, phase equilibrium studies

### EXPERIENCE

#### Process & Design Engineer • PILON Engineering Pvt Ltd, Pune

*Oct 2024 – Present*

- Developed PFDs, P&IDs, UFDs, and piping layouts for multiple reactor-based chemical systems.
- Performed sizing and design calculations for reactors (100 KL pilot plant, 20 L system, fixed-bed units).
- Executed heat exchanger and line sizing; produced datasheets, GA/detail drawings for equipment and instrumentation.
- Prepared SOPs, operating manuals; conducted HAZOP studies to ensure operational safety and compliance.
- Managed procurement workflows—created BOMs and POs, coordinated vendor clarifications, reviewed GAD/fabrication drawings.
- Supported FAT, dispatch logistics, and commissioning—ensuring seamless project delivery.

#### *Key Projects:*

- **100 KLD Chemical Recycling Pilot Plant** – Delivered basic engineering documentation and facilitated pilot testing.
- **20 L Pilot Reactor System** – Assisted in instrumentation selection and safety procedure drafting.
- **Continuous Fixed-Bed Reactor Commissioning** – Coordinated vendor tasks and participated in FAT activities.

#### Shift In-Charge (Operations & EHS Coordinator) • Radiant Indus Chemical Pvt Ltd,

Aurangabad

*May 2023 – Jul 2024*

- Oversaw operations of CSTR, crystallization, evaporation, drying units, absorption towers, and scrubber systems.
- Implemented permit-to-work protocols; supervised rotating shifts and emergency shutdown/startup procedures.
- Participated in plant-level HAZOP studies; managed maintenance scheduling and corrective actions.
- Coordinated EHS compliance, handled hazardous chemicals (HCl, HNO<sub>3</sub>), and enforced safety protocols during operations.

#### **Project Trainee (CEPD- Division) • CSIR-NCL, Pune.**

*May – Oct 2022*

- Investigated liquid–liquid equilibrium and oxalic acid recovery using 2-Octanol extraction processes.
- Conducted experiments using reactor setups, HPLC and GC equipment; analyzed phase behavior and extraction efficiency.

#### **EDUCATION**

##### **Bachelor of Engineering (Chemical Engineering)**

- MGM's Jaharlal Nehru Engineering College, Aurangabad – 2022 | CGPA: 8.14

##### **Diploma of Engineering (Chemical Engineering)**

- Government Polytechnic, Thane, Mumbai – 2019 | 60.73%

##### **MSBSHSE (HSC/SSC)**

- Shri Shivaji Mahavidyalaya Barshi 2015 | Percentage: 44.92%

- Madhyamika Vidyalaya Ambegaon, BK Pune 2013 | Percentage: 68.40%

#### **OTHER DETAILS**

- **Languages:** Marathi (native), English, Hindi
- **DOB:** 14 December 1997 | **Nationality:** Indian | **Marital Status:** Unmarried
- **Permanent Address:** At/Post-Kalambwadi(Pan) Post-Pangaon, Tal-Barshi, DistSolapur,413403

#### **DECLARATION**

I hereby declare that above mentioned information is correct up to my knowledge and verified till date.

**Date :**

**Place :**

**SAUDAGAR SUDHAKAR BHOSALE**