

# Dr. Swati Chandrawanshi, Ph.D.

AECS Layout, Kundalahalli, Bangalore, Karnataka – 560037

 [swatichandrawanshi11@gmail.com](mailto:swatichandrawanshi11@gmail.com) |  +91 8871194449

---

## Professional Summary

Life Sciences professional with a **Ph.D. in Chemical Engineering** and over **8 years of experience spanning R&D, clinical research, bioprocess engineering, and scientific consulting**. Expertise in **analytical methods (HPLC, GC-MS, AAS, FTIR), SOPs, regulatory documentation, and interdisciplinary research**. Experienced in **collaborating with global stakeholders, mentoring teams, and translating scientific data into actionable insights**. Published researcher with experience in **clinical microbiology (ISRO – Gaganyaan Mission), environmental biotechnology, and biomedical manuscript review**, now seeking to leverage expertise as a **Life Sciences Subject Matter Expert (SME)** in analytics and R&D strategy.

---

## Core Competencies

- **Commercial & R&D Analytics:** Translating clinical/biotech data into insights, patient-centric research, scientific consulting.
  - **Healthcare & Regulatory Knowledge:** ICH-GCP, cGxP, FDA compliance, SOP/protocol writing, regulatory documentation.
  - **Analytical & Research Expertise:** HPLC, GC-MS, AAS, FTIR, PCR, microbial assays, fermentation scale-up.
  - **Data & Insights:** Literature mining, clinical data interpretation, evidence-based recommendations.
- 

## Professional Experience

**Editor** | *Cactus Communications* | Remote | Mar 2025 – Present

- Reviewed and edited **biomedical and life sciences manuscripts** for international researchers.
- Ensured clarity, compliance with regulatory/journal standards, and impactful communication.
- Delivered **structured summaries and evidence-based insights**, strengthening decision-making for global clients.

**Senior Clinical Researcher** | *ISRO – Human Space Flight Center (Gaganyaan Mission)* | Jan 2021 – May 2023

- Conducted **clinical/microbiological studies** for astronaut health and safety.
- Developed **SOPs, medical kits, and mission protocols** ensuring compliance with spaceflight standards.
- Analyzed **human adaptation datasets** (physiological, microbiological) to support risk mitigation strategies.
- Collaborated across **multidisciplinary teams**, including clinicians, engineers, and safety experts.

**Senior Research Fellow (DST Projects) | NIT Raipur – Environmental Engineering Lab |**  
2017 – 2020, 2024

- Designed and optimized **fermentation and downstream processes** for bioproduct recovery.
- Led projects on **bioremediation, bioprocess optimization, and microbial assays**.
- Authored publications, protocols, and regulatory-style documentation.

**Young Professional | ICAR – NIBSM |** 2014 – 2016

- Conducted **soil and microbial studies**, contributing to sustainable agriculture initiatives.
- Applied **data analysis and microbial analytics** to drive evidence-based farming practices.

---

## Education

- **Ph.D. in Chemical Engineering**, NIT Raipur (2024)  
*Thesis: Microbial Depolymerization of Lignin for Value-Added Biochemicals*
- **M.Tech in Chemical Engineering**, RITEE – CSVTU Raipur (2016) – University Topper
- **B.Tech in Biotechnology**, RITEE – CSVTU Raipur (2014) – Honors

---

## Selected Recent Publications

- Chandrawanshi S., Chang C., Gupta P. *Microbial electrochemical conversion of kraft lignin into ferulic acid*. **Biomass Conv. Bioref.** (2025)
- Chandrawanshi S., Anandkumar J. *Bioremediation of Kraft Lignin in Wastewater*. **J. Environ Nanotechnol.** (2024)
- Chandrawanshi S., Anandkumar J. *Microbial Depolymerization for Vanillic Acid*. **J. Indian Chem. Soc.** (2024)
- Ghosh G., Chandrawanshi S. *Astronauts' water survival training roadmap*. **Indian J. Aerosp Med.** (2023)

(Additional publications and book chapters available on request)

---

## Declaration

I hereby declare that the above information is true to the best of my knowledge and belief.

**Dr. Swati Chandrawanshi**