

DR. TITIKSHYA MOHAPATRA

Bhubaneswar, India | +91 8598882846 | mohapatratitikshya@gmail.com

ORCID: 0000-0003-2101-4789

PROFESSIONAL SUMMARY

Ph.D. in Chemical Engineering with strong expertise in chemical processes, technical documentation, and analytical content creation. Demonstrated ability to analyze complex chemical processes, extract key technical insights, and communicate findings through comprehensive written reports. Proven track record of producing high-quality technical content including peer-reviewed publications, detailed technical summaries, and review articles.

EDUCATION

Ph.D., Chemical Engineering

National Institute of Technology Raipur (NIT Raipur), Chhattisgarh, India | 2018-2024

M.E., Environmental Engineering

Anna University, Chennai, India | 2016-2018

B.Tech., Chemical Engineering

Gandhi Institute of Engineering & Technology, Gunupur, India | 2011-2015

CORE COMPETENCIES RELEVANT TO PATENT CONTENT ANALYSIS

Chemical Engineering Domain Knowledge

- Chemical Engineering Foundation:** Strong understanding of organic synthesis, reaction engineering, process chemistry, and material science
- Technical Characterization:** Advanced proficiency in analytical techniques (XRD, FTIR, XPS, SEM, BET, UV-VIS spectroscopy)
- Process & Technology Understanding:** Deep expertise in chemical processes, catalyst design, and technology applications

Technical Analysis & Content Creation Skills

- Technical Documentation:** Authored 6+ peer-reviewed research articles requiring precise technical descriptions and comprehensive literature analysis
- Abstract Writing:** Extensive experience creating concise, informative abstracts summarizing complex technical content for research publications
- Critical Analysis:** Proven ability to analyze technical literature, identify novel features, advantages, and key information from research documents
- Review Writing:** Authored comprehensive review articles synthesizing information from 100+ technical sources
- Content Summarization:** Skilled in distilling complex technical information into clear, accurate summaries

Information Processing & Research Skills

- Literature Review:** Extensive experience reviewing and analyzing technical patents and research articles
 - Data Extraction:** Skilled in identifying key technical information, novel features, and advantages from technical documents
 - Systematic Analysis:** Methodical approach to technical content analysis and information organization
 - Technology Understanding:** Quick learner with ability to comprehend new chemical technologies and processes
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PROFESSIONAL EXPERIENCE

Doctoral Researcher | National Institute of Technology Raipur | 2018-2024

Technical Content Development & Analysis:

- Produced 6+ high-quality technical publications requiring comprehensive analysis of existing literature and clear articulation of novel findings
- Created detailed technical summaries including descriptive titles, uses, novel features, advantages, and key information related to chemical inventions
- Authored comprehensive review articles synthesizing complex technical information from multiple sources

Key Achievements:

- Published in high-impact journals (Chemical Engineering Journal, Journal of Molecular Liquids, Chemical Papers)
- Authored comprehensive review on plant-mediated biogenic synthesis of nano-catalysts and fluidized-bed Fenton process for wastewater remediation

PUBLICATIONS & TECHNICAL CONTENT (Demonstrating Content Creation Ability)

Selected First-Author Publications:

1. **Mohapatra, T., & Ghosh, P. (2024).** "Utilization of waste citrus limetta peel for green synthesis of iron catalyst and fluidized-bed Fenton-like process applications." *Journal of Molecular Liquids*, 126273.
2. **Mohapatra, T., & Ghosh, P. (2023).** "Photo-Fenton remediation using modified laterite in fluidized-bed reactor: Process optimization and kinetic studies." *Chemical Engineering Journal*, 145324.
3. **Mohapatra, T., et al. (2023).** "Plant-mediated synthesis of nano-catalysts for advanced oxidation processes: A comprehensive review." *Chemical Engineering Journal*, 146941. (*Comprehensive review of 100+ technical sources*)
4. **Mohapatra, T., & Ghosh, P. (2023).** "Fenton-like oxidation in circulating fluidized-bed reactor: Process parameter optimization and kinetic modeling." *Chemical Papers*, 1-13.

Complete Publication List: [Google Drive Link](#)

Journal Reviewer:

- **Chemical Engineering Journal | Water Resources and Industry**
Experience in evaluating technical content for accuracy, clarity, and novelty

CONFERENCE PRESENTATIONS

- RECYCLE 2020, IIT Guwahati: "Heterogeneous Fenton-like catalyst development in fluidized bed reactor"
- ACEE-2021, NIT Raipur: "Process parameter optimization for Fenton degradation in circulating fluidized bed"

ADDITIONAL INFORMATION

- **Languages:** English (Excellent), Hindi (Fluent), Odia (Native)
 - **Gender:** Female
 - **DOB:** 22.06.1995
 - **Availability:** Immediate
 - **Location Flexibility:** Open to relocation
 - **Nationality:** Indian
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