

Development and Performance Assessment of Biological Systems for Effective Biodegradation of *p*-Cresol from Synthetic Wastewater

*Thesis submitted in partial fulfilment
for the Award of Degree*

DOCTOR OF PHILOSOPHY

by

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“To my beloved family”



CERTIFICATE

It is certified that the work contained in the thesis titled **“Development and Performance Assessment of Biological Systems for Effective Biodegradation of *p*-Cresol from Synthetic Wastewater”** by Vivek Kumar Jaiswal has been carried out under my supervision and that this work has not been submitted elsewhere for a degree.

It is further certified that the student has fulfilled all the Ph.D.'s Comprehensive Examination, Candidacy, and SOTA requirements for the Ph.D. Degree award.

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DECLARATION BY THE CANDIDATE

I, **Vivek Kumar Jaiswal**, certify that the work embodied in this Ph.D. thesis is my own bona fide work and was carried out by me under the supervision of **Prof. R. S. Singh** from **July 2019 to February 2024** at the **Department of Chemical Engineering & Technology**, Indian Institute of Technology (Banaras Hindu University), Varanasi. The matter embodied in this thesis has not been submitted for any other degree/diploma award. I declare that I have faithfully acknowledged and given credits to the research workers wherever their works have been cited in my work in this thesis. **I further declare that I have not wilfully copied any other's work, paragraph, text, data, results, etc., reported in the journals, books, magazines, reports, dissertations, thesis, etc., or available at websites and have not included in this thesis and have not cited as my own work.**

Date: 16/02/2024

Place: IIT (BHU) Varanasi

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It is certified that the statement made by the student above is correct to the best of my knowledge.

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