

CERTIFICATE

This is to certify that research work embodied in this thesis entitled "*Treatment of Industrial Wastewater by Adsorption using Low Cost Adsorbents*" was carried out by **Mr. Hardevsinh Bharatsinh Chauhan** (Enrolment No: 2126002001) at **Swarnim Institute of Technology** for partial fulfillment of **Master of Technology** degree in **Environmental Engineering** to be awarded by **Swarnim Startup & Innovation University**. This Research work has been carried out under my supervision and guidance and is to my satisfaction.

Date: May 31st

Place: Gandhinagar


Dr. Savan Tank

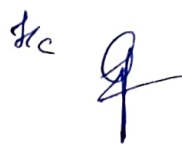
Assistant Professor,

Department of Environmental Engineering

Swarnim Institute of Technology,

Swarnim Startup & Innovation University,

Gandhinagar



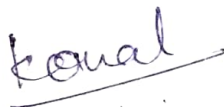
Dr. M.B Dholakiya

Principle,

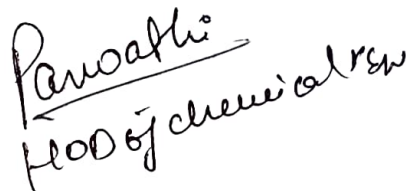
Swarnim Institute of Technology,

Swarnim Startup & Innovation University,

Gandhinagar



External Examiner


Pooja Chaudhary

Seal of Institute



SWARNIM INSTITUTE OF
TECHNOLOGY

THESIS APPROVAL CERTIFICATE

This is to certify that research work embodied in this entitled "**TREATMENT OF DAIRY INDUSTRY WASTEWATER USING REED BED TECHNOLOGY**" was carried out by **Ms. Mayuri B Jain** (Enrolment No: 2126002002) at **Swarnnim Institute of Technology** for partial fulfillment of **Master of Technology** degree in Environmental Engineering to be awarded by Swarnnim Startup & Innovation University.

Date: July 31st 2023

Place: Gandhinagar.

For

Examiner's Name & Sign.

Dr. Kenu Derai

(Pawarti)

HOD of
chemical &
Env.

(Gurjan)

Principal.

(Saran)

Guide

SWARNNIM INSTITUTE OF
TECHNOLOGY

SWARNIM INSTITUTE OF TECHNOLOGY, SSIU

CERTIFICATE

This is to certify that research work embodied in this thesis entitled "*Assessment of Particulate Matter Emission using AERMOD Software: A case study of Smritivan Memorial and Museum Project*" was carried out by **Zeel Kiranbhai Adhikari (212600203)** at **Swarnnim Institute of Technology, Gandhinagar** to be awarded for fulfillment of M.Tech degree to be awarded by **Swarnnim Institute of Technology**. This research work has been carried out under my supervision and is satisfaction of department.

Date: 20/05/2023

Place: Gandhinagar

Guide:

Dr. Savan Tank,

Head of Department,

Department of Environmental Engineering

Swarnnim Institute of Technology, SSIU.

Dr. M.B. Dholakiya

Dean & Director

Dr. M.B. Dholakiya.

Swarnnim Institute of Technology, SSIU,

Swarnnim Startup & Innovation University

Dr. K. K. Desai

External Examiner

Dr. K. K. Desai

Dr. P. K. Desai
Head of Chemical
& Env.

SWARNIM INSTITUTE OF
TECHNOLOGY

CERTIFICATE

This is to certify that research work embodied in this thesis entitled “**COD REDUCTION AND ELECTRICITY GENERATION BY USING MICROBIAL FUEL CELL IN PULP AND PAPER INDUSTRY WASTE WATER**” was carried out by **Miss. Poonam H Panchal (2126002004)** at **Swarnim Startup and Innovation University, Gandhinagar** for fulfilment of M.Tech degree to be awarded by Swarnim Startup and Innovation University. This research work has been carried out under my supervision and is to the satisfaction of department.

Date: *May 31st 2023*

Place: *Gandhinagar*



Signature of Guide

Dr. Savan Tank

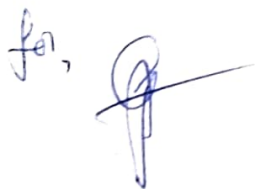
Asst. Prof.



Head of Department

Dr Parwathi Pillai

(Chemical and Environment Engineering)



Dean and Director

Dr M B Dholakia

Swarnim Startup and Innovation University



External Examiner

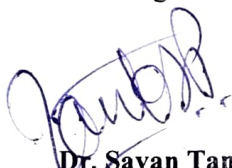
SWARNIM INSTITUTE OF
TECHNOLOGY

CERTIFICATE

This is to certify that research work embodied in this dissertation titled **“COMPARATIVE STUDY OF DYE WASTE WATER TREATMENT WITH USE OF ADVANCED OXIDATION PROCESSES”** was carried out by Mr. **Ujjaval Ghanshyambhai Mistry (Enrolment No: 2126002005)** at **Environmental Engineering Department of Swarnnim Institute of Technology** for partial fulfillment of Master of Technology degree in Environmental Engineering to be awarded by **Swarnnim Startup & Innovation University**. This research work has been carried out under my guidance and supervision and it is up to my satisfaction.

Date: *May 31st 2023*

Place: Gandhinagar



Dr. Savan Tank
Assistant Professor

Department of Environment Engineering
Swarnnim Institute of Technology
Swarnnim Startup & Innovation University



Dr. M.B Dholakiya
Principle

Swarnnim Institute of Technology
Swarnnim Startup & Innovation University
Gandhinagar



External Examiner

D. Konde Desai

Panwale
Head of chemicals
En

Seal of Institute

SWARNNIM
INSTITUTE OF
TECHNOLOGY



SWARNNIM
STARTUP & INNOVATION
UNIVERSITY
WHERE IDEAS COME ALIVE