
ELECTRICITY FROM FLOWING WATER

A Project Report

In Partial Fulfilment of the Requirement for Award of Degree of
Bachelor of Technology of the 3rd Year in Chemical Engineering

Submitted By

Vikash kumar - 22021162
Ujjawal maravi - 22021159

Under the Guidance of
Professor Dr. Anuradha N Joshi



DEPARTMENT OF CHEMICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

May 2025

DECLARATION

We hereby declare that the work presented in this report entitled **electricity from flowing water** in fulfillment of the requirement for the award of the degree of Bachelor of Technology in Chemical Engineering, School of Studies of Engineering & Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) is an authentic record of our own work carried out during our degree under the guidance of "**Dr. Anuradha N Joshi**".

The work reported in this has not been submitted by us for any other degree or diploma.

Name	Roll No.	Signature
Vikash kumar	22021162	Vikash Kumar
Ujjawal maravi	22021159	Anuradha

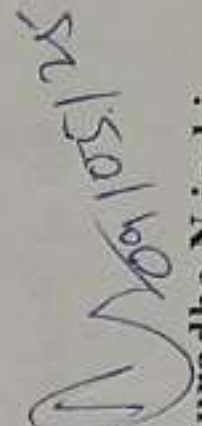
CERTIFICATE

Certified that the Project Report entitled "**electricity from flowing water**" submitted by **Vikash kumar** and **Ujjawal maravi** of B.Tech. 6th Semester, in partial fulfillment of the requirements for the award of degree in Bachelor of Technology (B. Tech) in Chemical Engineering, is according to the students their own investigation carried out by them in the Department of Chemical Engineering, School of Studies of Engineering & Technology, GGV, during the session 2024-25.

Prof. Amit Jain

HoD

Department of Chemical Engineering
SoS of Engineering & Technology, GGV


Dr. Anuradha N. Joshi

Supervisor

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Department of chemical Engineering
School of Studies Engineering and Technology
Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G)

CERTIFICATE

This is to certify that the work contained in this project entitled "**Wear test of Mica reinforced Epoxy Composite**" by VIKASH RAJ (22021163) are students of the Department of chemical Engineering, School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyalaya, for the award of degree of Bachelor of Technology has been carried out under my supervision and that this work has not been submitted elsewhere for any degree.

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Associate Professor

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Prof. Amit Jain
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Department of Chemical Engineering
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Report on wear test of Mica-reinforced Epoxy Composite



Submitted in partial fulfilment of the requirement of the degree
Bachelor of Technology of the 3rd Year in Chemical Engineering

SUBMITTED BY

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May 2025

MINI PROJECT REPORT
"GREEN HYDROGEN: A FUEL OF FUTURE "



**BACHELOR OF TECHNOLOGY IN CHEMICAL
ENGINEERING**

SUBMITTED BY

ASTHA AGARWAL
ALOK SANGAM
VISHAL PRATAP

GUIDED BY

DR. RAGHWENDRA SINGH THAKUR

Department of Chemical Engineering School of Studies in Engineering
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2024-25

DECLARATION BY CANDIDATES

We hereby declare that this submission is of our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in text.

Astha

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PRODUCTION OF AROMATICS HYDROCARBONS FROM LIGNIN: A REVIEW

A Project Report

In Partial Fulfilment of the Requirement for Award of Degree of
Bachelor of Technology of the 3rd Year in Chemical Engineering

Submitted By

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Pankaj Kumar (22021133)

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**DEPARTMENT OF CHEMICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)**

May 2025

CERTIFICATE

Certified that the Major Project Report entitled “ *Production Of Aromatics Hydrocarbons from Lignin* ” submitted by Sakshi Kumari, Sakshi Priya, Pankaj Kumar, Mukesh Kumar Sahu, Ganesh Nayak of B.Tech. 6th Semester, in partial fulfillment of the requirements for the award of degree in Bachelor of Technology (B. Tech) in Chemical Engineering, is according to the students their own investigation carried out by them in the Department of Chemical Engineering, School of Studies of Engineering & Technology, GGV, during the session 2024-25.

Prof. Amit Jain

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Nicotinic Acid Extraction From Tobacco Waste

A

Mini Project Report

Submitted in partial fulfilment of the requirement of the degree of

Bachelor of Technology in Chemical Engineering



Submitted by

TANU SINGH

Session 2024-25

Guided by

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(A central university established by the central university Act, 2009)

CERTIFICATE OF APPROVAL

This is to certify that the project entitled "**Nicotinic Acid Extraction From Tobacco Waste**" submitted by **Tanu Singh** (Roll No. : 22021169) in fulfilment of the requirements for the degree of **Bachelor of Technology in Chemical Engineering** is a record of bonafide and original research work carried out by them under our guidance and this project does not include any work which has previously been submitted for the award of other degree, diploma, associate- ship, fellowship, or other similar titles to them. We, further certify that the work reported in this project was carried out independently by the candidate.

Approved by

Dr. Amit Jain

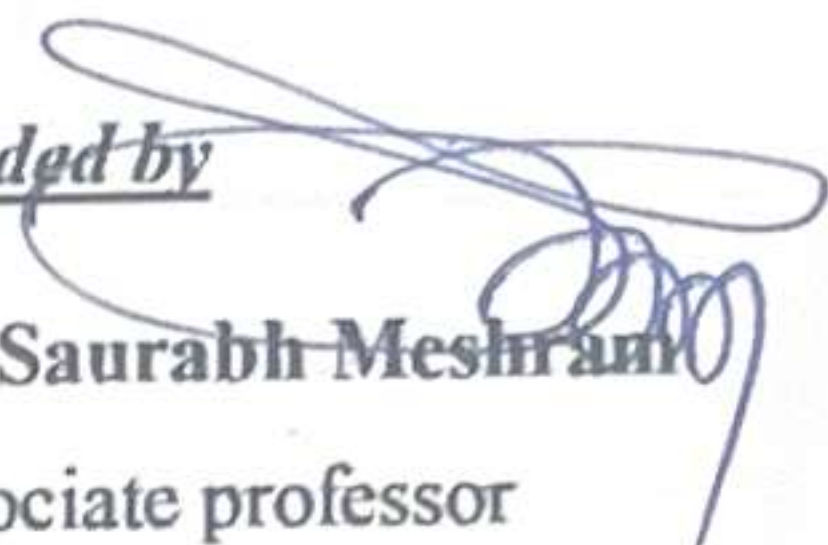
Head

Department of Chemical Engineering

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Guru Ghasidas Vishwavidyalaya Bilaspur, Chhattisgarh

Guided by


Dr. Saurabh Meshram

Associate professor

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A
PROJECT REPORT
ON
LITHIUM-ION BATTERY RECYCLING BY BIOLEACHING



Submitted in partial fulfilment of the requirement of the degree
Bachelor of Technology of the 3rd Year in Chemical Engineering

SUBMITTED BY
ANKUR KUMAR (22021111)
BUNTY KUMAR RAJAK (22021117)

Under the Guidance of
Dr. SANDEEP DHARMADHIKARI
ASSISTANT PROFESSOR

Department of Chemical Engineering
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May 2025

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A
Project Report
On

PRODUCTION OF BIODIESEL FROM MAHUA OIL



Submitted in partial fulfillment of the requirement of the degree of
Bachelor Of Technology of the 3rd Year
In
Chemical Engineering

Submitted by

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DEPARTMENT OF CHEMICAL ENGINEERING

School Of Studies Engineering & Technology

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

(A Central University Established By The Central University Act 2009 No. 25 of 2009)

May 2025

DEPARTMENT OF CHEMICAL ENGINEERING
School Of Studies Engineering & Technology
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)
(A Central University Established By The Central University Act 2009)



CERTIFICATE OF APPROVAL

It is certified that the mini project entitled “**PRODUCTION OF BIODIESEL FROM MAHUA OIL**” submitted by **Adarsh P, Ajay Ghildiyal**, in partial fulfillment of the requirements of the award of the degree of Bachelor of Technology in Chemical Engineering, School of studies Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur, is carried out by them in the Department of Chemical Engineering during session 2024-25 under supervision and guidance of **Prof. Amit Jain & Mr. Satyajit Bhattacharjee**, Department of Chemical Engineering, School of Studies Engineering & Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G).

Guided By

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Co-Guided By

Signature

Mr. Satyajit Bhattacharjee
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Approved By

Signature

Prof. Amit Jain
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Department of Chemical Engineering
School of Studies of Engineering and
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Soap preparation with natural ingredients

A Project Report

In Partial Fulfilment of the Requirement for Award of Degree of
Bachelor of Technology of the 3rd Year in Chemical Engineering

Submitted By

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Guided by

Dr.Sandeep dharmadhikari

Assistant Professor

Co-Guided by

Mr. Satyajit bhattacharjee

Assistant Professor



DEPARTMENT OF CHEMICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

May 2025

CERTIFICATE

Certified that the Major Project Report entitled "*SOAP PREPARATION WITH NATURAL INGREDIENTS*" submitted by M.swathi and K.Dhikshith kumar of B.Tech. 6th Semester, in partial fulfillment of the requirements for the award of degree in Bachelor of Technology (B. Tech) in Chemical Engineering, is according to the students their own investigation carried out by them in the Department of Chemical Engineering, School of Studies of Engineering & Technology, GGV, during the session 2024-25.


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A Project Report

On

**Production of Biodiesel from Coconut Oil
Using Acidic Catalyst**

Submitted for the partial fulfilment of award of degree of

Bachelor of Technology of the 3rd Year

in

Chemical Engineering



Submitted by

Saurabh Raj (22021152)

Dheeraj Kumar (22021167)

Guided by

Satyajit Bhattacharjee

Assistant Professor

Department of Chemical Engineering

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Guru Ghasidas Vishwavidyalaya

Bilaspur, Chhattisgarh

**Department of Chemical Engineering
School of Studies of Engineering and Technology
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)**

May 2025

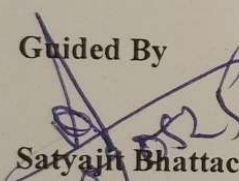


Department of Chemical Engineering
School of Studies of Engineering and Technology
Guru Ghasidas Vishwavidyalaya, Bilaspur

Certificate

This is to certify that the project entitled **Production of Biodiesel from Coconut Oil Using Acidic Catalyst** submitted by **Saurabh Raj** (Roll No:22021152) and **Dheeraj Kumar** (22021167) partial fulfilments for the requirements for the award of Bachelor of Technology degree in Chemical Engineering is a Bonafide record of the work carried out by them under my supervision and guidance.

Guided By


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Assistant Professor

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Approved by

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Head

Department of Chemical Engineering
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TREATMENT OF TOBACCO WASTE WATER

A Project Report

In Partial Fulfilment of the Requirement for Award of Degree of
Bachelor of Technology of the 3rd Year in Chemical Engineering,

Submitted By

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Prashant Sahay (Roll no. 22021135)

Rangari Tejus (Roll no.22021143)

Under the Guidance of

Dr. Saurabh Meshram (Associate Professor)



**DEPARTMENT OF CHEMICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)**

May 2025

CERTIFICATE

Certified that the Major Project Report entitled "*Treatment of tobacco waste water*" submitted by of BTech. 6th Semester, in partial fulfillment of the requirements for the award of degree in Bachelor of Technology (B. Tech) in Chemical Engineering, is according to the students their own investigation carried out by them in the Department of Chemical Engineering, School of Studies of Engineering & Technology, GGV, during the session 2024-25.

Prof. Amit Jain
HoD

Department of Chemical Engineering
SoS of Engineering & Technology, GGV

**Dr. Saurabh Meshram (Associate
Professor)**
Supervisor

Department of Chemical Engineering
SoS of Engineering & Technology, GGV

A
PROJECT REPORT
ON
**REMOVAL OF ARSENIC FROM WASTEWATER
USING RICE HUSK**

In Partial Fulfilment of the Requirement for Award of Degree of
Bachelor of Technology of the 3rd Year in Chemical Engineering

Submitted By

Janhavi Patel (22021119)

Mayank Dewangan (22021124)

Under the Guidance of

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Associate Professor

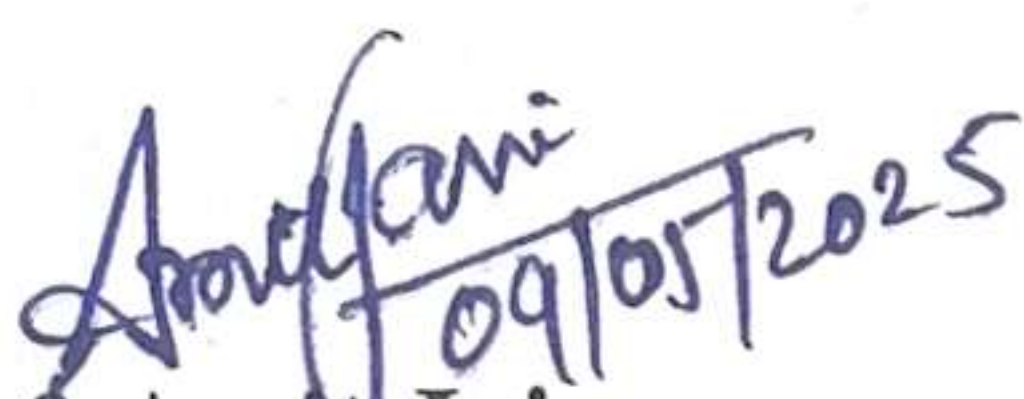


**DEPARTMENT OF CHEMICAL ENGINEERING
SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)**

May 2025

CERTIFICATE

Certified that the mini Project Report entitled "*Removal of Arsenic from wastewater using rice husk*" submitted by Janhavi Patel and Mayank Dewangan of B.Tech. 6th Semester, in partial fulfillment of the requirements for the award of degree in Bachelor of Technology (B. Tech) in Chemical Engineering, is according to the students their own investigation carried out by them in the Department of Chemical Engineering, School of Studies of Engineering & Technology, GGV, during the session 2024-25.


Prof. Amit Jain

HoD

Department of Chemical Engineering
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