



Indian Institute of Technology–Guwahati

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upadhyay.rajesh@gmail.com

Rajesh Kumar Upadhyay

Associate Professor

Department of Chemical Engineering

Date: November 10th 2019

To Whom It May Concern

Here with, I certify that **Miss Priyambada Prakash**, who is a M.Tech student in Chemical and Polymer Engineering of Tripura University, has worked under me on a project titled “**Study on CFD Simulation of Fluidized Bed**” for a period of Four Weeks starting from **May 25th to June 24th 2019**.

Rajesh Kumar Upadhyay



Indian Institute of Technology - Guwahati

Department of Chemical Engineering,
Guwahati – 781 039, Assam, India

Dr. Vimal Katiyar
Professor

email: vkatiyar@iitg.ernet.in

Tel: +91 361 258 2278

Fax: +91 361 258 2291

June 27, 2019

Certificate of Internship

This is to certify that **Ms. Rupashree Sinha**, pursuing M. Tech., 1st year in the Department of Chemical Engineering at Tripura University, India has done internship training from 25th May 2019 to 27th June 2019 at “CoE-SusPol” laboratory, IIT Guwahati. Her internship project entitles “**Studies on Gel Permeation Chromatography and Microtomy**”. She has executed her work under the mentorship of Dr. Purabi Bhagabati, a Post-doctoral Fellow in the Department of Chemical Engineering.

During the period of her internship, she was found to be sincere, hardworking, self-motivated and inquisitive. I wish her the very best in all her future endeavors.

Vimal Katiyar



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

Dr. Mahuya De
Associate Professor
Department of Chemical Engineering
Email: mahuya@iitg.ernet.in

Phone: +91-361-258-2270 (O)
+91-9957172983 (M)
Fax: +91-361-258-2291 (O)

Certificate for Summer Trainee

Mr. BISWAJIT SARKAR, M.Tech 2nd year student of Department of Chemical and Polymer Engineering, Tripura University, Tripura, India, has worked as Summer Trainee from 23 June to 26 July, 2019 in our laboratory in Department of Chemical Engineering, IIT Guwahati. He worked in the area of “Synthesis and Characterization of porous carbon from Waste Residue”. He was very sincere and has done appreciable amount of work.

Mahuya De
Mahuya De 17/8/19

Dr. Mahuya De
Associate Professor
Department of Chemical Engineering
Indian Institute of Technology Guwahati
Guwahati-781039, Assam, INDIA

BONAFIDE CERTIFICATE

This is to certify that the project titles **PREPARATION OF BIOCHAR FROM BIOMASS AVAILABLE IN NORTH EAST INDIA AND ITS FEASIBILITY STUDY FOR SOIL AMENDMENT**

Is a bonafide record of the work done by

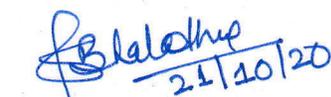
Biswajit Sarkar (1806060006)

In partial fulfilment of the requirements for the award of the degree of Master of Technology in **Chemical and Polymer Engineering** of the **TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)**, during the year 2018-2020.


21/10/2020

Sri Harjeet Nath

(Supervisor)


21/10/20

Dr. Sachin Bhaladhare

H.O.D(I/C)

Project Viva-voce held on 14/09/2020

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022


21/10/20

Internal Examiner

External Examiner

BONAFIDE CERTIFICATE

This is to certify that the project titled **CFD MODELING OF A TYPICAL FLUIDIZED
BED COLUMN**

is a bonafide record of the work done by

Shubhankar Debnath (018295/2018-19)

In partial fulfillment of the requirements for the award of the degree of **Master of
Technology in Chemical and Polymer Engineering** of the **TRIPURA UNIVERSITY (A
CENTRAL UNIVERSITY)**, during the year 2020-2021.


21/10/2020.

Sri. HARJEET NATH

(Supervisor)

Project Viva-voce held on

14/09/2020


21/10/2020

Dr. SACHIN BHALADHARE

(HOD)

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022


21/10/20

Internal Examiner

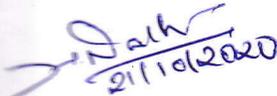
External Examiner

BONAFIDE CERTIFICATE

This is to certify that the project titled **GASIFICATION STUDIES OF HIGH ASH INDIAN COALS USING ASPEN PLUS SIMULATION** is a bonafide record of the work done by

TAMAL RUDRA PAUL (Roll Number: 1806060002)

in partial fulfilment of the requirements for the award of the degree of **Master of Technology in Chemical and Polymer Engineering** of the **TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)**, during the year 2019-2020.


21/10/2020

HARJEET NATH
(Supervisor)


21/10/20

DR. SACHIN BHALADHARE
(HOD)

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022

Project Viva-voce held on _____

14/09/2020


21/10/20

Internal Examiner

External Examiner

THESIS CERTIFICATE

This is to certify thesis entitled "SYNTHESIS AND CHARACTERIZATION OF SUPERABSORBENT CELLULOSE BASED HYDROGEL FOR AGRICULTURAL APPLICATION" submitted by PRIYAMBADA PRAKASH to the Tripura University (A Central University) for the award of the degree of Master of Technology (M.Tech) is a bonafide of research work carried out by her under my supervision. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.

Sachin Bhaladhare
21/10/2020

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022

Sachin Bhaladhare
21/10/2020

Dr. Sachin Bhaladhare
Assistant Professor,
Deptt. of Chemical and Polymer Engineering
Tripura University (A Central University),
Surymaninagar-799022, Tripura, INDIA

Agartala-799022

DR. SACHIN BHALADHARE

Date: 14/09/2020

(Guide)

Department of Chemical and Polymer Engineering

Internal Examiner

Sachin Bhaladhare
21/10/2020

BONAFIDE CERTIFICATE

This is to certify that the project titled **TEMPERATURE RESPONSIVE CHITOSAN BASED HYBRID NANOGEL FOR SENSING AND DRUG DELIVERY** is a bonafide record of the work done by

SUSHANTA DHAR (Roll Number: 1806060001)

in partial fulfilment of the requirements for the award of the degree of **Master of Technology in Chemical and Polymer Engineering** of the **TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)**, during the year 2019-2020.


21/10/2020

DR. SACHIN BHALADHARE
(Guide)

Dr. Sachin Bhaladhare
Assistant Professor,
Deptt. of Chemical and Polymer Engineering
Tripura University (A Central University),
Surymaninagar- 799022, Tripura, INDIA

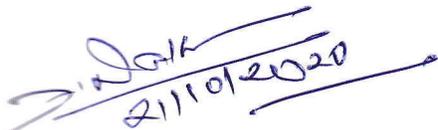

21/10/20

DR. SACHIN BHALADHARE
(HOD)

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022

Project Viva-voce held on

14/09/2020


21/10/2020

Internal Examiner

External Examiner

BONAFIDE CERTIFICATE

This is to certify that the project titled is **COMPARISON OF SPIRAL WOUND UF AND HOLLOW FIRE UF FOR RECOVERY OF SURFACTANT FROM GREY WATER ALONG WITH SPIRAL WOUND RO FOR POTABLE WATER REUSE**

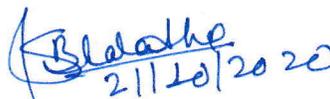
Is a bonafide record of the work done by

SUKANTA REANG (Roll Number: 1806060003)

in partial fulfilment of the requirements for the award of the degree of **Master of Technology in Chemical and Polymer Engineering** of the **TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)**, during the year 2018-2020.


21/10/2020

HARJEET NATH
(Guide)


21/10/2020

DR. SACHIN BHALADHARE
(HOD)

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022

Project Viva-voce held on _____


21/10/20

Internal Examiner

External Examiner

THESIS CERTIFICATE

This is to certify that the thesis entitled **pH-RESPONSIVE CHITOSAN BASED NANOGEL** submitted by **RUPASHREE SINHA** to the **Tripura University (A Central University)** for the award of the degree of **Master of Technology** is a bonafide record of research work carried out by her under my supervision. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.

Sachin Bhaladhare
21/10/20

Dr. Sachin Bhaladhare
HOD (I/C)
Chemical and Polymer Engg.
Tripura University-799022

Agartala-799022

Date: 11-09-2020

Sachin Bhaladhare
21/10/2020

DR. SACHIN BHALADHARE

(Guide)

Department of Chemical & Polymer Engineering

Project viva-voce on - 14/09/20

Tripura University (A Central University)

Agartala-799022 India

External Examiner

S. D. Saha
21/10/2020

Dr. Sachin Bhaladhare
Assistant Professor,
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