2.3

Teaching-Learning Process

2.3.1. Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT Tools

Supporting Document: Major Project Allotment / Certificates Sample Copy from Different Departments

HYBRID REINFORCEMENT IN ALUMINIUM MATRIX COMPOSITES

Report submitted to
Regent Education and Research Foundation Group of Institutions
for the partial fulfillment of the degree
of
Bachelor of Technology in
Mechanical Engineering
by

Titas Sarkar (26300719007)
Swarup Biswas (26300719008)
Abujafar Malita (26300719009)
Aadrish Dey (26300719010)
Divya Bani Pandit (26300719011)
Ashok Kumar Mandal (26300719012)
Pijush Ranjan Naskar(26300719013)

Under the Guidance of
Mr. Puspendu Chandra Chandra
Assistant professor ME dept
and
Mr. Sougata Barik
NIT Durgapur PhD, MME, RS

Department of Mechanical Engineering
Regent Education and Research Foundation Group of Institutions
Affiliated to Maulana Abul Kalam Azad University of Technology

MAY 2023

REPORT APPROVAL

This project report entitled "HYBRID REINFORCEMENT IN ALUMINIUM MATRIX COMPOSITES" by "Titas Sarkar, Swarup Biswas, Abujafar Malita, Aadrish Dey, Divya Bani Pandit, Ashok Kumar Mandal, Pijush Ranjan Naskar" are approved for the degree of Bachelor of Technology in Mechanical Engineering.

Examiners

A. Biswas 24/5/23

DR. ABHIJIT BISWAS

24/5/23

DR. RAHUL KANTI NATH

24/5/23

DR. PABITRA MAJI

Supervisor(s)

Puspendu chandra chandra

MR. PUSPENDU CHANDRA CHANDRA

Chairman

MR. SABYASACHI MUKHERJEE

HOD, ME RERFGOI

Regent Education & Research Foundation ★ HOD, ME

Date: 24/5/2023

Place: BARRACKPORE

DESIGN & DEVELOPMENT OF A PICK & PLACE MECHANICAL ARM

PROJECT-IV (PW-ME-881)

Report submitted to

Regent Education and Research Foundation Group of Institution for

The partial fulfilment of degree

Of

Bachelor of Technology

In

Mechanical Engineering

BY

Asis Sarkar	[26300720052]
Arghya Roy	[26300720053]
Ankit kr. Gupta	[26300720054]
Sambodhi Ghosh	[26300720055]
Sudipta Sarkar	[26300720056]
Tanmay Dutta	[26300720057]

Under the guidance of

Aninda Das

Assistant Professor, Department of Mechanical Engineering

Department of Mechanical Engineering

Department of Mechanical Engineering

Regent Education and Research Foundation Group of Institute

Affilicated to Maulana Abul Kalam Azad University of Technlogy

May 2023

REPORT APPROVAL

This project report entitled **"Design & Development of a Pick & Place Mechanical Arm"** by **"Asis Sarkar, Arghya Roy, Ankit kr. Gupta, Sambodhi Ghosh, Sudipta Sarkar, Tanmay Dutta"** is approved for the degree of Bachelorof Technology in Mechanical Engineering.

Examiners

Prosenjit Chandra Chandra

Arpan Mandal

Debtanu Pal

Supervisor(s)

24/5/23

Chairman

Date: 24/5/2023

Place: Barrackpore

DEVELOPMENT OF COOLING SYSTEM FOR INDUCTION MELTING FURNACE

Report submitted to

Regent Education and Research Foundation Group of Institutions
for the partial fulfillment of the degree
of
Bachelor of Technology
in Mechanical Engineering
by

ADIL EJAZ (26300720028)
LABONI SEN (26300720032)
MILAN PORIA (26300720060)
PRITAM NANDI (26300720034)
RIPA BAKSHI (26300720062)
SAHIL MONDAL (26300720061)
SUBHASHIS MAITY(26300720027)
SUBIR DAS (26300720031)

Under the guidance of
Dr. Rahul Kanti Nath
Assistant Professor in Department of Mechanical Engineering

Department of Mechanical Engineering
Regent Education and Research Foundation Group of Institutions
Affiliated to Maulana Abul Kalam Azad University of Technology

MAY 2023

Report Approval

This project report entitled "DEVELOPMENT OF COOLING SYSTEM FOR INDUCTION MELTING FURNACE by "RIPA BAKSHI; ADIL EJAZ; LABONI SEN; SAHIL MONDAL; SUBIR DAS; MILAN PORIA; PRITAM NANDI; SUBHASHIS MAITY" is approved for the degree of Bachelor of Technology in Mechanical Engineering.

Examiners

Puspendu Chandra Chandra

Benard Pandey

Abhijit Biswas

Supervisor(s)

Rahul Kartik Nath.

Chairman

HOD, ME

Date: 24/5/2023

Place: Barrackpore

Project Report On

Ecommerce Website

"A dissertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Computer Science and Engineering of the Maulana Abul Kalam Azad University of Technology for the year 2022-2023"

Submitted by

SUDIP BISWAS (26300120044)

SHUBHAJEET KOHAR (26300119047)

SOUMYASREE MAJUMDER (26300119004)

Under the guidance of

Ms. BARNITA DAS

Assistant Professor

Dept of Computer Science & Engineering

Regent Education and Research Foundation

Department of Computer Science and Engineering

Regent Education and Research Foundation

(Affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal)

Barrackpore - 700121, Barrackpore, WB

Certificate of Approval

This is to certify that this report of B. Tech. Final Year project on online shopping website, entitled **"CustomMonkey"** is a record of bona-fide work, carried out by **Sudip Biswas, Shubhajeet Kohar and Soumyasree Majumder** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech. program in Computer Science and Engineering in the year 2022-2023.

Guide

24/05/23

Ms. Barnita Das

Department of Computer Science and Engineering

Regent Education and Research Foundation

24/05/23

Examiner(s)

24/05/2023

Head of the Department

Computer Science and Engineering

Regent Education and Research Foundation

Project Report On

"ONLINE LIBRARY MANAGEMENT SYSTEM"

"A dissertation submitted in partial full fillment of the requirements of Bachelor of Technology Degree in Computer Science and Engineering of the Maulana Abul Kalam Azad University of Technology for the year 2022-2023"

Submitted by

Name	Roll No
1. Priti Yadav -	(26300119056)
2.Durba Paul -	(26300119015)
3. Radha Rani -	(26300119003)

Under the guidance of

Ms. Pragati Ghosh

Assistant Professor

Dept of Computer Science &Engineering

Regent Education and Research Foundation

Department of Computer Science and Engineering

Regent Education and Research Foundation

(Affiliated to West Bengal University of Technology, West Bengal)

Barrackpore Kolkata -700121

REGENT EDUCATION & RESEARCH FOUNDATION
GROUP OF INSTITUTIONS

Certificate of Approval

This is to certify that this report of B. Tech. Final Year project, entitled "**Online Library Management System**" is a record of bona-fide work, carried out by **Radha Rani, Durba Paul, Prity Yadav** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the **Regent Education and Research Foundation** and as per regulations of the Maulana Abul Kalam Azad University of Technology. In fact, it has attained the standard necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech. programme in Computer Science and Engineering in the year 2022-2023.

Guide / Supervisor

24/5/23.

Ms. Pragati Ghosh

Designation: Assistant Professor

Department of Computer Science and Engineering

Regent Education and Research Foundation

24/05/23

Examiner(s)

24/05/2023

Head of the Department

Computer Science And Engineering

Regent Education and Research Foundation

Project Report On

Fake News Detection with Python

"A dissertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Computer Science and Engineering of the Maulana Abul Kalam Azad University of Technology for the year 2022-2023"

Submitted by

ROHIT KARMAKAR(26300119016)
ANKUSH CHOWDHURY(26300119021)
SOUVIK KUNDU(26300119032)

Under the guidance of

Shri. INDRAJIT DAWN

Dept of Computer Science & Engineering
Regent Education and Research Foundation

Department of Computer Science and Engineering
Regent Education and Research Foundation
(Affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal)
Barrackpore - 700121, Barrackpore, WB

Certificate of Approval

This is to certify that this report of B. Tech. Final Year project, entitled "Fake news detection with python" is a record of bona-fide work, carried out by Rohit Karmakar, Ankush Chowdhury, Souvik Kundu under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the Regent Education and Research Foundation and as per regulations of the Maulana Abul Kalam Azad University of Technology. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech. programme in Computer Science and Engineering in the year 2022-2023.

Guide / Supervisor

24/05/23

Department of Computer Science and Engineering
Regent Education and Research Foundation

24/05/23

Examiner(s)

24/05/2023

Head of the Department
Computer Science and Engineering
Regent Education and Research Foundation

Project Report On
IOT Based Home Appliances System

dissertation submitted in partial fulfillment of the requirements for the Degree of Bachelor of echnology in Electronics and Communication Engineering from the Maulana Abul Kalam Azad University of Technology"

Submitted by

SUBIR MAITY 26300320011

SAIKAT BHOWMICK 26300320020

MD USHAMA ANSARI 26300320013

Under the guidance of

Ms. Poulmi Banerjee

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)

BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled **"IOT Based Home Appliances System"** is a record of bonafide work, carried out by **SUBIR MAITY, SAIKAT BHOWMICK & MD USHAMA ANSARI** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B.Tech in Electronics and Communication Engineering.

Guide / Supervisor

28/5/23

29/5/23

Examiner(s)

27/05/2023

Head of the Department

Electronics and Communication Engineering
Regent Education and Research Foundation

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Regd. Office : 88, Chowringhee Road, Kolkata - 700 020, E-mail : rerfkolkata@gmail.com, Website : www.rerf.co.in
City Office : 3rd Floor, 168B, Chowringhee Road, Kolkata - 700 020, Tel : (+91 33) 2290 0142/1574, Fax No. : 033-2290 0115

Project Report On

DESIGN AND DEVELOPMENT OF AUTOMATIC RETRACTABLE ROOF FOR CLOTHESLINE

" A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Technology in Electronics and Communication Engineering from the Maulana Abul Kalam Azad University of Technology"

Submitted by

Sagnik Adhikari (26300319004)

Sourav Sarkar (26300320039)

Under the guidance of

Mr. Milan Majumder

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

(Affiliated to Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)

BARRACKPORE, KOLKATA -700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled "DESIGN AND DEVELOPMENT OF AUTOMATIC RETRACTABLE ROOF FOR CLOTHESLINE" is a record of bona-fide work, carried out by Sagnik Adhikari , Sourav sarkar under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfilment of all the requirements, as specified by the Regent Education and Research Foundation and as per regulations of the Maulana Abul Kalam Azad University of Technology. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Guide / Supervisor

Nilan Mazumdar
27/05/2023

27/05/23
Examiner(s)

27/05/2023
Head of the Department

Electronics and Communication Engineering

Regent Education and Research Foundation

REGENT EDUCATION AND RESEARCH FOUNDATION

EFFECT OF VARIOUS PROPORTION MIXING STYNTHETIC CHINA NYLON CHORD FIBER ON OMC AND MDD OF SOIL

A Project report submitted in partial fulfillment of the requirements for The Bachelor of Technology in Civil Engineering.

SESSION-2020-2023

By

▷ SAYAN RAKSHIT	26301320109
▷ SOURAV CHATTERJEE	26301320110
▷ TANIYA MONDAL	26301320111
▷ SHUVRANIL DAS	26301320112
▷ PRITAM SAHA	26301320113
▷ SOUGATA DEY	26301320114
▷ TAMAL KOLEY	26301320116
▷ ASHMITA MANNA	26301320117

⇌ Under the guidance of ⇌

SUBHADEEP MONDAL

(ASSISTANT PROFESSOR)

DEPARTMENT OF CIVIL ENGINEERING

ACKNOWLEDGEMENT

We would like to express our sincere gratitude and appreciation to all those who have contributed to the successful completion of this project. Their support, guidance, and assistance have been invaluable throughout the entire process.

First and foremost, we would like to extend our deepest thanks to our Professor Souvik Sarkar (Head of Department, Civil Engineering) & Professor Ishika Ghosh (Civil Engineering Department), for their exceptional guidance and unwavering support. Their expertise, knowledge, and insightful feedback have been instrumental in shaping this project and ensuring its successful execution.

We would also like to extend our gratitude to Regent Education & Research Foundation Group of Institutions, for providing us with the necessary resources and facilities to carry out this project. Their continuous support and encouragement have been crucial in overcoming various challenges and achieving our objectives.

Additionally, we would like to acknowledge the contributions of our colleagues and fellow team members who have worked tirelessly alongside us. Their collaboration, dedication, and teamwork have been essential in accomplishing the project goals.

Furthermore, we extend our appreciation to all the participants and individuals who generously shared their time and expertise during data collection, experiments, or surveys. Their valuable input and cooperation have significantly enriched the quality of our research.

Finally, we would like to express our heartfelt gratitude to our friends and family members for their understanding, encouragement, and unwavering support throughout the project duration. Their belief in our abilities has been a constant source of motivation.

Although it is not possible to mention everyone individually, please accept my sincere thanks if you have contributed to this project in any way.

Once again, we express our deepest gratitude to all those mentioned and the countless others who have played a role, however small, in the successful completion of this project. Without their support, this achievement would not have been possible.

Thank you.

SOUVIK SARKAR
HEAD OF DEPARTMENT
DEPARTMENT OF CIVIL ENGINEERING

23/08/23

ISHIKA GHOSH
PROFESSOR
DEPARTMENT OF CIVIL ENGINEERING

Civil Engg. Department
Regent Education & Research Foundation
Kolkata - 121

REGENT EDUCATION & RESEARCH FOUNDATION

PROGRESS REPORT OF PROJECT-USE OF INDUSTRIAL WASTE MATERIAL FOR LIGHT WEIGHT CONCRETE

BACHELOR OF TECHNOLOGY, CIVIL ENGINEERING

4TH YEAR

CERTIFICATE

I hereby forward the Project Report entitled "Sedimentation tank design" from Name & Roll no mention below under my guidance and supervision in partial fulfilment of requirements for the degree of Bachelor of Technology in Civil Engineering for the Project work from, REGENT EDUCATION AND RESEARCH FOUNDATION, Kolkata-700121.

23/05/2023

Civil Engg. Department
Regent Education & Research Foundation
Hay- Barrackpore, Kolkata - 121

23/5/23

ASSISTANT PROFESSOR | **ASSISTANT PROFESSOR**

DEPARTMENT OF CIVIL ENGINEERING

NAME OF STUDENTS	ROLL NO
1. KALYAN GHORAI	26301320091
2. SUPRIYO BISWAS	26301320092
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4. NURJAHAN KHATUN	26301320094
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7. SUMANA ROY	26301320097
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15. SUPRIYA GANTAIT	26301320105
16. PALASH MONDAL	26301320106
17. SUJOY GHARAMI	26301320107
18. SUSHMITA RAI	26301320108

REGENT EDUCATION & RESEARCH FOUNDATION
GROUP OF INSTITUTION

REGENT EDUCATION AND RESEARCH FOUNDATION

PROJECT REPORT ON SEDIMENTATION TANK DESIGN

A report submitted in partial fulfilment of the requirements for Bachelor of Technology in Civil Engineering.

SESSION-2022-2023

UNDER GUIDANCE OF

Mr. SWARNENDU SEKHAR DAS & Mr. SK SAFIN IMRAN

DEPARTMENT OF CIVIL ENGINEERIG

NAME: SUBHODEEP MUKHERJEE **ROLL NO: 26301320098**

SECTION: B **YEAR: 4TH** **SEM: 8TH**

REGENT EDUCATION AND RESEARCH FOUNDATION GROUP OF INSTITUTIONS

DEPARTMENT OF CIVIL ENGINEERING

B.TECH

CERTIFICATE OF APPROVAL

This is to certify that SOMNATH ROY, SUDIPTA SARKAR, SHAHRUK MONDAL, SADAF RAHAMAN, AMIT SHAW, SAYANI CHAKRABORTY, IFTIKAR ALAM, PRIYA SAHA, AMITAVA BASU, SUMIT KUMAR SARKAR have prepared this project report entitled "**DESIGN OF A FACTORY SHED**" under our supervision as a part of their 4th year (Session 2019-2023) curriculum of Department of Civil Engineering, RERF and allowed for submission.

Mrs. LABANI NANDI
Asst. Prof. of Civil Engineering, RERF

Miss. MOUMITA MONDAL
Lecturer of Civil Engineering, RERF

Mr. SOUVIK SARKAR
Head of the Department
Department of Civil Engineering, RERF

Mr. YUBARAJ MANDAL
Ex. Head of the Department
Department of Civil Engineering, RERF

Civil Engg. Department
Regent Education & Research Foundation
Regent Education & Research Foundation

Project Report On
Arduino based wireless notice board using Bluetooth module

"A dissertation submitted in partial fulfillment of the requirements for the Degree of Bachelor of Technology in Electronics and Communication Engineering from the Maulana Abul Kalam Azad University of Technology"

Submitted by

Ayush Manna (26300320024)
Joy Sadhukhan (26300320026)
Debanjan De (26300320028)

Under the guidance of
Mr./Dr/Ms.
Sukdeb Saha

Department of Electronics and Communication Engineering
Regent Education and Research Foundation
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BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled **"Name of Project"** is a record of bona-fide work, carried out by **Names of students separated by commas** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Guide / Supervisor

27/05/2023

29/05/23

Examiner(s)

27/05/2023

Head of the Department

Electronics and Communication Engineering
Regent Education and Research Foundation

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Regd. Office : 88, Chowringhee Road, Kolkata - 700 020. E-mail : rerfkolkata@gmail.com. Website : www.rerf.co.in
City Office : 3rd Floor, 60B, Chowringhee Road, Kolkata - 700 020. Tel. : (+91 33) 2290 0112/13/14. Fax No. : 033 2290 0115

FINAL YEAR PROJECT REPORT

ON

IOT SMART DOORBELLS

"A dissertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Electronics and Communication Engineering of the Maulana Abul Kalam Azad University of Technology"

SUBMITTED BY

Ranajit Ghosh – 26300318018

Arijit Hazra – 26300318023

Dipankar Roy – 26300319027

UNDER THE GUIDANCE OF

Dr. Himeli Chakrabarti

Dr. Saurav Ganguly

Department of Electronics and Communication Engineering,
Regent Education and Research Foundation

(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)

BARRACKPORE, KOLKATA – 700122, MAY, 2022

Certificate of Approval

This is to certify that this report of B.Tech final year project, entitled "**IOT SMART DOORBELLS**" is a record of bona-fide work, carried out by **Ranajit Ghosh, Arijit Hazra & Dipankar Roy** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B.Tech. in Electronics and Communication Engineering.

Guide/Supervisor

Saurav Ganguly

Dr. Saurav Ganguly

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

Guide/Supervisor

Himeli Chakrabarti

Dr. Himeli Chakrabarti

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

Pulak Mazumdar

Examiner(s)

Dipankar Biswas.

Head of the Department

Electronics and Communication Engineering

Regent Education and Research Foundation

Project Report On
DRIVER DROWSINESS DETECTION AND ALEARTING SYSTEM

ertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree
lectronics and Communication Engineering of the Maulana Abul Kalam Azad University of Technology"

Submitted by

ARPITA CHAKROBORTY 26300319022
SOUVIK DAS 26300319037
TRISHA BAG 26300319038

Under the guidance of
MR MILAN MAJUMDER

Department of Electronics and Communication Engineering
Regent Education and Research Foundation
(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)
BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled **"Driver Drowsiness Detection And Alearting System"** is a record of bona-fide work, carried out by **Arpita Chakroborty, Souvik Das, Trisha Bag** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Milan Mazumdar 15/06/2022
Guide / Supervisor

MR. MILAN MAJUMDER

Pulak Mazumdar
Examiner(s)

Dipankar Basu
Head of the Department

Electronics and Communication Engineering
Regent Education and Research Foundation

Campus : Regent Education & Research Foundation Group of Institutions
Barra Kanthalia (Barrackpore), Post : Sewli Telinipara, P.S. : Titagarh, Kolkata - 700 121, Tel. : 033 2535-3051/3052, Fax : 033 2535-3052
Regd. Office : 88, Chowringhee Road, kolkata - 700 020, E-mail : rerfkolkata@gmail.com, Website : www.rerf.co.in
City Office : 3rd Floor, 60B, Chowringhee Road, Kolkata - 700 020, Tel : (+91 33) 2290 0412/13/14, Fax No. : 033 2290 0115

Project Report On
SOLAR TRACKER SYSTEM

'A dissertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Electronics and Communication Engineering of the Maulana Abul Kalam Azad University of Technology"

Submitted by

NASHIM IKBAL 26300218021
ANIRBAN DAS 26300319029
BISWA MALLICK 26300319026

Under the guidance of
MR MILAN MAJUMDER

Department of Electronics and Communication Engineering
Regent Education and Research Foundation
(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)
BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled "***Solar Tracker System***" is a record of bona-fide work, carried out by NASHIM IKBAL, ANIRBAN DAS & BISWA MALLICK under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Milan Mazumdar 15/06/2022
Guide / Supervisor

MR. MILAN MAJUMDER

Saurav Ganguly
Examiner(s)

Dipankar Bhimra.
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Regent Education and Research Foundation

DEPERTMENT OF CIVIL ENGINEERING

REGENT EDUCATION AND RESEARCH FOUNDATION GROUP OF INSTITUTIONS

KOLKATA –700121, WEST BENGAL, INDIA ,2022

GROUP- 4

A PROJECT REPORT ON CAUSES OF SURFACE WATER POLLUTION AND REMEDIAL METHODS

SUBMITTED BY: (B.TECH 4TH YEAR. LAT)

1) DIPTANU DEB – 26301319032

2) MADHURA DEY – 26301319033

3) DIBYENDU KARGUPTA – 26301319031

4) SOUVIK CHAKRABORTY- 26301319030

5) BISWARUP GUCHHAIT- 26301319034

6) SAPTARSHI ROUT- 26301319036

7) ANJAN KUMAR NANDAN- 26301319037

8) UJJWAL BERA- 26301319038

9) SOURAV SHAW- 26301319039

YUVARAJ MONDAL & Dr. KAUSHIK DUTTA

Assistant Professor) (Associate Professor)

DEPARTMENT OF CIVIL ENGINEERING

RERF BARRACKPORE

CERTIFICATE

This is to certify that the dissertation entitled" CAUSES OF SURFACE WATER POLLUTION AND REMEDIAL METHODS " is project work done by Roll Number 9030, 9031, 9032, 9033, 9034, 9036, 9037, 9038, 9039 under our guidance and supervision . This is the project being submitted of the regent education & research foundation the partial fulfillment of the requirement of the degree of bachelor of technology in civil engineering.

15.06.22

Mr. Yuvaraj Mondal/ Mrs. Labani Nandi

H.O.D/ A.HO.D

15/6/2022

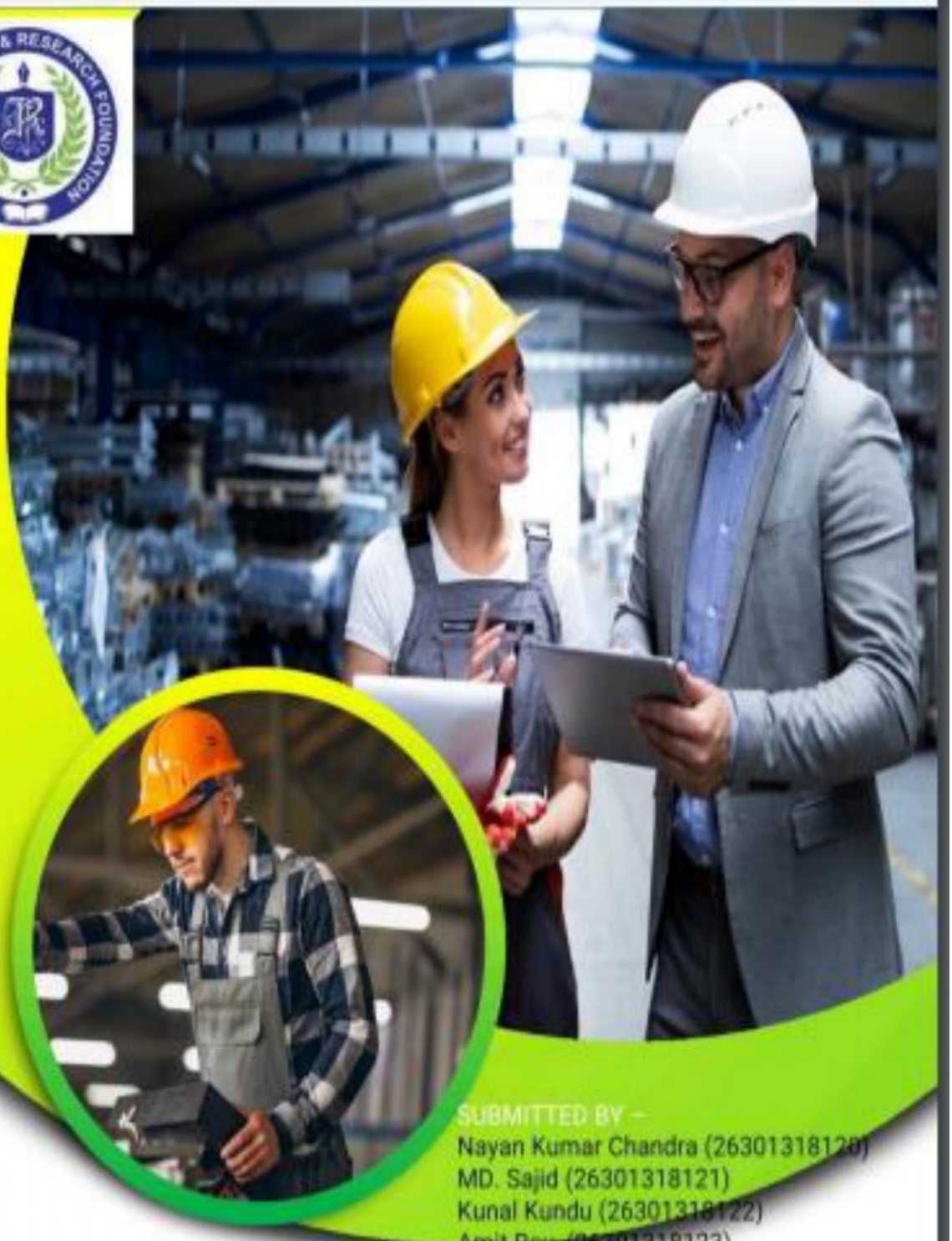
Dr. Kaushik Dutta Roy[1]

Mr. Yuvaraj Mondal[2]

Project guide[1], Associate professor Civil engineering department[1]

Co-Guide[2], H.O.D/ Assistant Professor[2]

Department of Civil Engineering



SUBMITTED BY –
Nayan Kumar Chandra (26301318120)
MD. Sajid (26301318121)
Kunal Kundu (26301318122)
Amit Roy (26301318123)
Abhishek Singh (26301318124)
Snehasish Bose (26301319011)
Moslem Ali Mondal (26301319012)
Supravat Singha Roy (26301319013)
Ujjayanta Goswami (26301319015)
Prosen Dhar (26301319016)

REGENT EDUCATION & RESEARCH FOUNDATION

PROJECT TOPIC

FLY ASH BRICK: AN EXPERIMENTAL STUDY

SUPERVISION BY – ISHIKA GHOSH

We hereby declare that the project work as FLYASH BRICKS is an authentic record of our work carried out at REGENT EDUCATION AND RESEARCH FOUNDATION as required for the six months project semester for the award of degree of B.TECH. (Civil Engineering) under the guidance of ISHIKA GHOSH.

Date : 17/06/2022

Ishika Ghosh
Your Signature

Certified That the above statement made by student is correct to the best of your knowledge made belief

Ishika Ghosh

GUIDE

Ishika Ghosh 17/06/2022
SIGNATURE

17.06.22
HOD/AHOD

GUIDE NAME : Ishika Ghosh

REGENT EDUCATION & RESEARCH FOUNDATION

YEAR :- 2019-2022

GROUP PROJECT

for the partial fulfillment of

B.TECH IN CIVIL ENGINEERING

UNDER THE GUIDENCE OF

Mr. SWARNENDU SHEKHAR DAS

ASSISTANT PROFESSOR
Civil Engineering Department
REGENT EDUCATION AND RESEARCH FOUNDATION

TO WHOM EVER IT MAY CONCERN

This is to certify that the following project has been dully completed by Pranjoy Debnath, Pallab Mandal, Rana Day, Debu Maji, Tanmoy Mondal, Pradip Guha Thakurta, Chirantan Biswas.It can be accepted as a creditable study of final semester project report for prerequisite of a B.tech Degree.It has been undertaken under my guidance abiding by norms and format.

The report has been based on rigorous collection of data and then analysis.The roport is open to certain recommendation.

16.06.22

AHOD ; HOD, Civil Department

16/06/2022

Supervisor

REGENT EDUCATION AND RESEARCH FOUNDATION

EFFECT OF VARIOUS PROPORTION MIXING STYNTHETIC CHINA NYLON CHORD FIBER ON COMPACTION OF SOIL

A Project report submitted in partial fulfillment of the requirements for The Bachelor of Technology in Civil Engineering.

SESSION-2019-2022

By

▻ ADHIP GHOSH	26301319084
▻ MOMINUL ISLAM	26301319090
▻ PRATUL KUMAR DUTTA	26301319092
▻ HAIDAR ALI MOLLA	26301319085
▻ ARFAT HOSSAIN	26301319088
▻ SALAUDDIN SK	26301319089
▻ ABU SELIM SK	26301319091
▻ RAUNAK HOSSAIN	26301319093
▻ NAHAL KARAK	26301319094
▻AMAL BHOWMIK	26301319086

=Under the guidance of=

SUBHADEEP MONDAL & SUDESHNA GHOSH

(ASSISTANT PROFESSOR)

DEPARTMENT OF CIVIL ENGINEERING

REGENT EDUCATION AND RESEARCH FOUNDATION

Kolkata, West Bengal

CERTIFICATE

I hereby forward the Project Report entitled "EFFECT OF VARIOUS PROPORTION MIXING STYNTHETIC CHINA NYLON CHORD FIBER ON COMPACTION OF SOIL", presented by ROLL-9084-9094, under my guidance and supervision in partial fulfillment of requirements for the degree of Bachelor of Technology in Civil Engineering for the Project work from, **REGENT EDUCATION AND RESEARCH FOUNDATION**, Kolkata-700121.

Subhadeep Mondal
21/06/22

.....

SUBHADEEP MONDAL

ASSISTANT PROFESSOR

Sudeshna Ghosh
21.06.22

.....

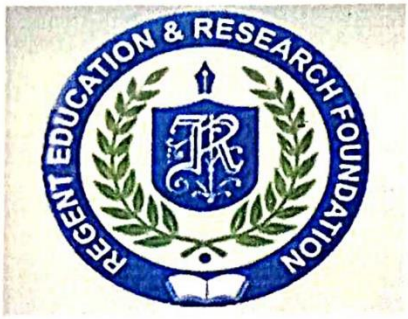
SUDESHNA GHOSH

ASSISTANT PROFESSOR

DEPARTMENT OF CIVIL ENGINEERING

Project Report On
DESIGNING OF TRIPLE BAND MICROSTRIP PATCH ANTENNA FOR MOBILE COMMUNICATION

ssertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree Electronics and Communication Engineering of the Moulana Abul Kalam Azad University of Technology"



Submitted by

MOUMITA HALDER	26300315011
SARMISTHA ROY	26300315015
MD. PEARUL SK.	26300315009
INDRANI BANERJEE	26300315006

Under the guidance of
Mr. MILAN MAZUMDAR

Department of Electronics and Communication Engineering
Regent Education and Research Foundation
(Affiliated to Moulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)
BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled **"Designing of Triple band Microstrip patch antenna design for mobile communication"** is a record of bona-fide work, carried out by **Moumita Halder, Sarmistha Roy, Md. Pearul Sk., and Indrani Banerjee** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Moulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Guide / Supervisor

Milan Mazumdar.

Mr.

1. Sukdeb Saha
2. Pulak Mazumder

Examiner(s)

PULAK MAZUMDER
Pulak Mazumder
H.O.D
ECE- DEPARTMENT
Head of the Department

21/05/17

Electronics and Communication Engineering
Regent Education and Research Foundation

Project Report On

BLUETOOTH CONTROLLED HOME AUTOMATION SETUP USING ARDUINO

ertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Electronics and Communication Engineering of the Maulana Abul Kalam Azad University of Technology"

Submitted by

TUIN ROY- 26300316001

SRIPARNA ROY- 26300316006

RITA KARMAKAR- 26300316013

JOY CHATTOPADHYAY- 26300316021

BIPUL PANDIT- 26300316025

AMIT MUDI- 26300316080

Under the guidance of

Mr. DIPANKAR BISWAS

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)

BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled "Bluetooth Controlled Home Automation Setup Using Arduino" is a record of bona-fide work, carried out by Tuin Roy, Sriparna Roy, Rita Karmakar, Joy Chattopadhyay, Bipul Pandit, Amit Mudi under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Guide / Supervisor

B Biswas.
21/05/19

Mr.

1. Milan Mazumdar.
2. Sukdeb Saha 21/05/19

Examiner(s)

Pulak Mazumdar. 21/05/19

Head of the Department

Electronics and Communication Engineering
Regent Education and Research Foundation

Project Report On
Automatic Maze Solving Robot

"A dissertation submitted in partial fulfillment of the requirements of Bachelor of Technology Degree in Electronics and Communication Engineering of the Moulana Abul Kalam Azad University of Technology"

Submitted by:

Abhinil Bose - (26300315001)

Anjan Misra - (26300315002)

Ankita Kumari Tiwari - (26300315003)

Dip Narayan Chowdhury - (26300315005)

Md Ashif Haque - (26300315008)

Soubhik Biswas - (26300315018)

Srijita Mukherjee - (26300315019)

Under the guidance of

Prof. Himeli Chakrabarty

Department of Electronics and Communication Engineering

Regent Education and Research Foundation

(Affiliated to Maulana Abul Kalam Azad University of Technology formerly known as WBUT, West Bengal)

BARRACKPORE, KOLKATA – 700121

REGENT
EDUCATION &
RESEARCH FOUNDATION

Certificate of Approval

This is to certify that this report of B. Tech final year project, entitled **"Automatic Maze Solving Robot"** is a record of bona-fide work, carried out by **"Abhinil Bose, Anjan Misra, Ankita Kumari Tiwari, Dip Narayan Chowdhury, Md Ashif Haque, Soubhik Biswas, Srijita Mukherjee"** under my supervision and guidance.

In my opinion, the report in its present form is in partial fulfillment of all the requirements, as specified by the ***Regent Education and Research Foundation*** and as per regulations of the ***Maulana Abul Kalam Azad University of Technology***. In fact, it has attained the standard, necessary for submission. To the best of my knowledge, the results embodied in this report, are original in nature and worthy of incorporation in the present version of the report for B. Tech in Electronics and Communication Engineering.

Guide

Himeli Chakrabarty

Prof. Himeli Chakrabarty 21/5/19

1. Milan Mazumdar
2. Sukdeb Saha 21/05/19

Examiner(s)

PULAK MAZUMDER
Pulak Mazumder
H.O.D
ECE DEPARTMENT

Head of the Department

Electronics and Communication Engineering
Regent Education and Research Foundation

Campus : Regent Education & Research Foundation Group of Institutions
Bara Kanthalia (Barrackpore), Post : Sewli Tehinipara, P.S. : Jiragarh, Kolkata - 700 121, Tel. : 033 2535-3051/3052, Fax : 033 2535-3052
Regd. Office : 88, Chowringhee Road, Kolkata - 700 020, E-mail : rerfkolkata@gmail.com, Website : www.rerf.co.in
City Office : 3rd Floor, 60B, Chowringhee Road, Kolkata - 700 020, Tel : (+91 33) 2290 0412/13/14, Fax No. : 033-2290-0115

TO ANALYZE THE DIFFERENT TYPES OF STRESSES DEVELOPED IN THE BASE PLATE USING THE PROCESS OF FRICTION STIR WELDING LIKE, EQUIVALENT (VON -MISSES), MAXIMUM PRINCIPAL STRESS, PRESSURE INTENSITY ETC.

Maulana Abdul Kalam Azad University of Technology , Kolkata , West Bengal

Saikat Chakraborty

A Project Report Submitted to

REGENT EDUCATION & RESEARCH FOUNDATION

In Fulfillment of the requirements for

The Degree of Bachelor of Engineering in Mechanical Engineering.

2016 - 2019

Under the guidance of

Shri Puspendu Chandra

Assistant professor

(Mechanical engineering Department,)

REGENT EDUCATION & RESEARCH FOUNDATION

CERTIFICATE

This is to certify that the research work embodied in this thesis entitled "To analyze the different types of stresses developed in the Base plateusing the process of friction stir welding like, Equivalent (Von - Misses), maximum principal stress, pressure intensity etc." was presented by **Saikat Chakraborty. (26300716011)** at REGENT EDUCATION & RESEARCH FOUNDATION for fulfillment of B.E. in Mechanical Engineering to be awarded by MAULANA ABDUL KALAM AZAD INSTITUTE OF TECHNOLOGY. This work has been carried out under my supervision and is to the satisfaction of department.

Date: 28/05/2019

Place: RERF

Guide: Puspendu chandra chandra

Mr. Puspendu Chandra
Assistant Professor,
RERF, Kolkata

H.O.D: 27/5/19

Mr. Krisnendu Mandal
Head of department
RERF, Kolkata

Seal of Institute

CORROSION BEHAVIOUR OF REBAR IN PORE SOLUTION

A Thesis Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Technology
In
Mechanical Engineering
By

SUBHADIP DAN

University Roll Number: 26300715028 ***Registration Number:*** *152630110081*

Under the supervision of

ANINDA DAS

Assistant Professor, Department of Mechanical Engineering

Department of Mechanical Engineering

REGENT EDUCATION AND RESEARCH FOUNDATION, BARRACKPORE, KOLKATA

MAKAUT

MAY, 2019

Regent Education and Research Foundation
Barrackpore, Kolkata, West Bengal 700121

BONAFIDE CERTIFICATE

This is to certify that **Subhadip Dan** having Roll No.**26300715028** and Registration No.**152630110081** of **2015 - 2016**, have successfully completed the project **"Corrosion Behaviour of Rebar in Pore Solution"** at Regent Education & Research Foundation under the supervision and guidance of the Professor and college authority for fulfillment of the requirement of Final Semester students of Bachelor of Technology in Mechanical Engineering, from Maulana Abul Kalam Azad University of Technology (formerly) known as West Bengal University of Technology), Kolkata, West Bengal.

KRISHNENDU MONDAL
HOD (Mechanical Engg. Dept.)
Regent Education & Research Foundation

Mr. Krishnendu Mondal (H.O.D)
Department of Mechanical Engineering
Regent Education and Research Foundation
Barrackpore, Kolkata

Mr. Aninda Das
Department of Mechanical Engineering
Regent Education and Research Foundaton
Barrackpore, Kolkata

Date of Report Submission :

CORROSION BEHAVIOUR OF MILD STEEL IN OIL FIELD ENVIRONMENT

A Thesis Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Technology
In
Mechanical Engineering
By

SAMRAT

University Roll Number: 26300715025 **Registration Number** : 152630110078

Under the supervision of

ANINDA DAS

Assistant Professor, Department of Mechanical Engineering

Department of Mechanical Engineering
REGENT EDUCATION AND RESEARCH FOUNDATION,
BARRACKPORE, KOLKATA
MAKAUT

MAY, 2019

Regent Education and Research Foundation
Barrackpore, Kolkata, West Bengal 700121

BONAFIDE CERTIFICATE

This is to certify that **Samrat** having Roll No.**26300715025** and Registration No.**152630110078** of **2015 - 2016**, have successfully completed the project **"Corrosion Behaviour of Mild Steel in Oil Field Environment"** at Regent Education & Research Foundation under the supervision and guidance of the Professor and college authority for fulfillment of the requirement of Final Semester students of Bachelor of Technology in Mechanical Engineering, from Maulana Abul Kalam Azad University of Technology (formerly) known as West Bengal University of Technology), Kolkata, West Bengal.

Mondal 25/05/19

KRISHNENDU MONDAL (Mechanical Engg. Dept.) Regent Education & Research Foundation

Mr. Krishnendu Mondal (H.O.D)
Department of Mechanical Engineering
Regent Education and Research Foundation
Barrackpore, Kolkata

Das 25/5/19

Mr. Aninda Das
Department of Mechanical Engineering
Regent Education and Research Foundaton
Barrackpore, Kolkata

Date of Report Submission :

A Project Report

EXPERIMENTAL STUDY ON THE BEHAVIOUR OF PLASTIC REINFORCED CONCRETE

In partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING *in* CIVIL ENGINEERING

Regent Education and Research Foundation, Group of Institution
KOLKATA 700121

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY
KOLKATA 700064

Submitted By : Final Year Students of C.E(2019)

Satarupa Nandy, Arunava Mukherjee ,Sabari Mukherjee, Anusree Das, Priyanki Majumder, Aditya Karmakar, Manish Karmakar, Bittu Ghosh, Argha Jana, Sovan Mishra, Wasim Parvez , Sukanya Roy & Poulami Paul

REGENT EDUCATION AND RESEARCH FOUNDATION

Kolkata, West Bengal

CERTIFICATE

I hereby forward the Project Report entitled "EFFECT OF VARIOUS PROPORTION MIXING STYNTHETIC CHINA NYLON CHORD FIBER ON OMC AND MDD OF SOIL", presented by ROLL-26301320109-26301320118, under my guidance and supervision in partial fulfillment of requirements for the degree of Bachelor of Technology in Civil Engineering for the Project work from, REGENT EDUCATION AND RESEARCH FOUNDATION, Kolkata-700121.

Subhadeep Mondal

.....

SUBHADEEP MONDAL

ASSISTANT PROFESSOR

DEPARTMENT OF CIVIL ENGINEERING

Civil Engg. Department
Regent Education & Research Foundation
Barrackpore, Kolkata - 121

A PROJECT

REPORT ON

EARTHQUAKE RESISTANT RESIDENTIAL BUILDINGS

PRESENTED BY:-

Subhankar Chaki (26301316023)
Shambo Das (26301316039)
Pritam Ghosal (26301316051)
Pranab Swarnakar (26301316053)
Gourabmoy Dey (26301316070)
Dwijesh Bose (26301316072)
Debashis Dutta (26301316075)
Atanu Das (26301316085)
Anirban Chatterjee (26301316095)
Abhisek Dutta (26301316099)

UNDER GUIDENCE OF:-

MR. KADUNATH MURMU

Year
2019

REGENT EDUCATION & RESEARCH FOUNDATION

Dept. of Civil Engineering

Certificate

This is to certify that this project work entitled "***EARTHQUAKE RESISTANT RESIDENTIAL BUILDINGS***" has been examined and it has been declared successful for the fulfillment of the academic requirement towards the completion of the Bachelor's Degree in Civil Engineering.

28/05/19

Mrs. SATABDI SAHA

(HOD, CE)

Regent Education & Research Foundation

Barrackpore, Kolkata-700121

28/5/19

Mr. KADUNATH MURMU

(Supervisor)

Civil Engineering Department

Head
Civil Engg. Department
Regent Education & Research Foundation
Barrackpore, Kolkata - 121

A PROJECT REPORT

ON

MARSHALL MIX DESIGN

CIVIL ENGINEERING DEPARTMENT

4th year

By

Sk Shariful Islam (26301315034)

REGENT EDUCATION AND RESEARCH FOUNDATION

GROUP OF INSTITUTIONS

Under the guidance of

Asst prof .Kadunath Murmu

REGENT EDUCATION AND RESEARCH FOUNDATION

GROUP OF INSTITUTIONS

Certificate

This is to certify that the Project Report entitled "A LABORATORY STUDY OF MARSHALL MIX DESIGN" submitted by Sk shariful Islam in partial fulfilment of the requirements for the award of Bachelor of Technology Degree in Civil Engineering at Regent education and research foundation is an authentic work carried out by them under my supervision and guidance.

To the best of my knowledge, the matter embodied in this Project Report has not been submitted to any other University/Institute for the award of any Degree or Diploma.

Mrs. Satabdi Saha
Head of Department
Department of Civil Engineering

28/05/19

Civil Engg. Department
Regent Education & Research Foundation
Barasat, Kolkata - 121

Mr. Jaydeep Chowdhury
Additional Head of Department
Department of Civil Engineering

28/05/19

Mr. Kadunath Murmu
Asst prof. of Department
Department of Civil Engineering

28/5/19