

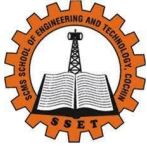
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Vidya Nagar, Palissery, Karukutty, Kerala 683576

# **CRITERIA 1**

## **CURRICULAR ASPECTS**

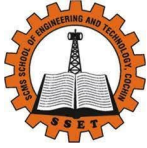
### **1.3: Curriculum Enrichment**



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### **1.3.2: Percentage of students undertaking project work/field work/ internships**



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Vidya Nagar, Palissery, Karukutty, Kerala 683576

# **PROJECT WORK**

## **M.TECH**



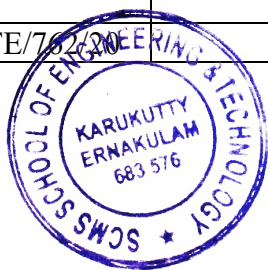
# SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

Vidya Nagar, Palissery, Karukutty, Kerala 683576

## Department of Civil Engineering M. Tech (Environmental Engineering)

### Batch 21-23

Sl.No	Roll No.	Name of student	Project title
1	MTE/826/21	Adwaith B	Optimization Of Time-Integrated Sediment Sampler And Sediment Characterization
2	MTE/807/21	Agnas Devassy	Vertical Flow Reed Bed System
3	MTE/825/21	Ann Marria Assissi	Threat Assessment in Water Distribution Networks
4	MTE/800/21	Arathi Sreekumar	Mitigation And Analysis of Scaling in Irrigation Pipelines at Chittur
5	MTE/822/21	Devika J	Climate Change Modelling
6	MTE/797/21	Diya Faizel S	Sampling And Characterization of Airborne Microplastics in An Urban Area
7	MTE/812/21	Gopika Krishnan	Modelling Of Sea Water Intrusion in Selected Coastal Areas of Alappuzha District
8	MTE/801/21	Keerthu Anil	Phytoremediation Of Heavy Metals In Kadambayar River By Water Hyacinth
9	MTE/817/21	Nitu Haridas	Sediment Transport Modelling In Watershed Of Kadambayar River Using Hec-Hms And Hec-Ras
10	MTE/816/21	Rithu Ullas	Study On Feasibility Of Double Chambered Mfc For The Treatment Of Textile Waste Water
11	MTE/818/21	Rose Mary Jojo	Modeling Of Ground Water
12	MTE/806/21	Shahana Younus	Modeling Of Ground Water Fluctuations In Chittur
13	MTE/813/21	Sona B K	Flood-Induced Changes In Soil Properties And The Mobility Of Potentially Toxic Elements (Ptes) In Soils.
14	MTE/798/21	Vismaya G Kumar	Analysis Of Waste Bins Location & Route Optimization Using Matlab
15	MTE/762/21	Ashitha K S	Air Pollution Modelling



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ERNAKULAM, KERALA-683 576



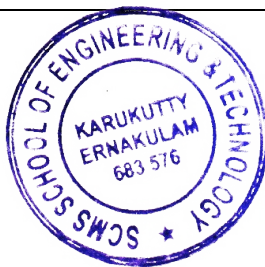
# SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

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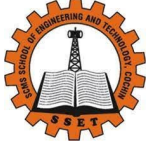
## Department of Civil Engineering M. Tech (Computer Aided Structural Engineering)

### Batch 21-23

Sl.No	Roll No.	Name of student	Project title
1	MTC/821/21	Abhijith T S	Seismic behavior of welded connection with replacable damage control fuses
2	MTC/811/21	Althaf Ahammed D H	Seismic performance of RC frames after fire exposure
3	MTC/823/21	Anisha Peter Kp	Numerical simulation of fire resistance for hybrid GFRP sandwich panel with different core configuration
4	MTC/796/21	Divya Sahadevan	FEA of different configurations of beam-column junction of a tubular GFRP by bond sleeve connection
5	MTC/809/21	Irin Sabu	Performance of crumb rubber in concrete
6	MTC/810/21	Jerome Joy	Bridge deterioration prediction using machine learning techniques
7	MTC/824/21	Jineesha George	concrete technology using plastic fibers
8	MTC/815/21	Keerthi K Menon	Prediction of compressive strength of concrete using machine learning algorithms
9	MTC/808/21	Lakshmipriya M P	Topology Optimization of Bridge Girder
10	MTC/802/21	Nivya Mary	Optimisation and strengthening of Plastic Hinge
11	MTC/820/21	Saaya Leons	FEA investigation on fillet welds to hollow structural sections
12	MTC/804/21	Sithara K	numerical analysis of an auxetic honey comb core sandwich panel subjected to explosion
13	MTC/799/21	Sneha J Raj	Finite Element Investigation on performance of Circular Hyperboloid Base Isolation System with SMA
14	MTC/819/21	Sniya Leons	comparative assessment of batter pile and under-reamed pile under dynamic loads
15	MTC/803/21	Timna P Martin	Exploring the application of Adaptive structure which adapts through large shape changes



*Timna P Martin*  
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# SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

Vidya Nagar, Palissery, Karukutty, Kerala 683576

# INTEGRATION OF TOPOLOGY OPTIMIZATION IN KOCHI METRO GIRDER

PROJECT REPORT

Submitted by

**LAKSHMIPRIYA M P**

**SCM21CECS09**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree of Master of Technology

in

*Computer Aided Structural Engineering*



Department of Civil Engineering  
SCMS School of Engineering & Technology  
Vidya Nagar, Karukutty, Kerala - 683 576

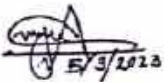
MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

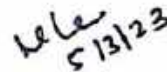
This is to certify that the report entitled "INTEGRATION OF TOPOLOGY OPTIMIZATION IN KOCHI METRO GIRDER" submitted by Lakshmipriya M P to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
5/3/2023

**Internal supervisor**  
Ms. Anju Mary Ealias  
Assistant Professor  
Department of Civil Engineering  
SCMS school of Engineering & Technology



**PG Coordinator**  
Ms. Nandita Mohan  
Assistant Prof.  
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5/3/23

**Head of the Department**  
Dr. Nisha.L  
Associate Professor and Head  
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SCMS school of Engineering &  
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# NUMERICAL ANALYSIS OF AUXETIC SANDWICH PANELS UNDER EXPLOSION

A PROJECT REPORT

submitted by

**SITHARA K**

**SCM21CECS12**

to the APJ Abdul Kalam Technological University  
in partial fulfilment of the requirements for the award of the Degree of Master of Technology in  
*Computer Aided Structural Engineering*



**Department of Civil Engineering**  
SCMS School of Engineering & Technology  
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MAY 2023


**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled "NUMERICAL ANALYSIS OF AUXETIC SANDWICH PANELS UNDER EXPLOSION" submitted by **Sithara K** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
31/5/2023  
**Internal supervisor**  
Geethu.R.Babu  
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31/5/23  
**PG Coordinator**  
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SCMS school of Engineering & Technology

  
31/5/23  
**Head of the Department**  
Dr.Nisha.L  
Associate Professor and Head  
of the Department  
Civil Engineering Department  
SCMS school of Engineering &  
Technology

# **INTEGRATION OF TOPOLOGY OPTIMIZATION IN KOCHI METRO GIRDER**

PROJECT REPORT

Submitted by

**LAKSHMIPRIYA M P**

**SCM21CECS09**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree of Master of Technology

in

*Computer Aided Structural Engineering*



Department of Civil Engineering  
SCMS School of Engineering & Technology  
Vidya Nagar, Karukutty, Kerala - 683 576

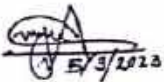
MAY 2023

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**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



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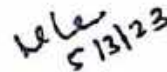
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5/3/2023

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Assistant Professor  
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SCMS school of Engineering & Technology



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SCMS school of engineering and technology

  
5/3/23

**Head of the Department**  
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Associate Professor and Head  
of the Department  
Department of Civil Engineering  
SCMS school of Engineering &  
Technology

# NUMERICAL ANALYSIS OF AUXETIC SANDWICH PANELS UNDER EXPLOSION

A PROJECT REPORT

submitted by

**SITHARA K**

**SCM21CECS12**

to the APJ Abdul Kalam Technological University  
in partial fulfilment of the requirements for the award of the Degree of Master of Technology in  
*Computer Aided Structural Engineering*



**Department of Civil Engineering**  
SCMS School of Engineering & Technology  
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MAY 2023


**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



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31/5/2023  
**Internal supervisor**  
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31/5/23  
**Head of the Department**  
Dr.Nisha.L  
Associate Professor and Head  
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Civil Engineering Department  
SCMS school of Engineering &  
Technology

# **MECHANICAL MODEL ANALYSIS ON NEGATIVE STIFFNESS SCRAGGED SPRING BASED DAMPER OVER SEISMIC RESPONSE**

## **A PROJECT REPORT**

submitted by

**SNEHA J RAJ**

**SCM21CECS13**

*to the APJ Abdul Kalam Technological University  
in partial fulfillment of the requirements for the award of the Degree of  
Master of Technology*

*in*  
*Committee of Structural Engineering*



**Department of Civil Engineering  
SCMS School of Engineering & Technology  
Vidya Nagar, Karukutty, Kerala - 683 576**

MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING**

**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled “**MECHANICAL MODEL ANALYSIS ON NEGATIVE STIFFNESS SCRAGGED SPRING – BASED DAMPER OVER SEISMIC RESPONSE**” submitted by **Sneha J Raj** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

*Jerry*  
03/05/23

**Internal supervisor**

Mr. Jerry Anto  
Assistant Professor  
Department of Civil Engineering  
SCMS School of Engineering & Technology

*Nisha*  
3/5/23

**Head of the Department**

Dr. Nisha.L  
Associate Professor and Head  
of the Department  
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SCMS School of Engineering  
& Technology

*Nandita*  
21/4/23

**PG Coordinator**

Ms. Nandita Mohan  
Assistant Professor  
Department of Civil Engineering  
SCMS School of Engineering and Technology



**FINITE ELEMENT ANALYSIS OF DIFFERENT  
CONFIGURATIONS OF BEAM – COLUMN JUNCTION  
OF A TUBULAR GFRP BY BOND SLEEVE  
CONNECTION**

PROJECT REPORT

Submitted by

**DIVYA SAHADEVAN**

**SCM21CECS04**

to the APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for the award of the Degree of Master of Technology

in

*Computer Aided Structural Engineering*



Department of Civil Engineering  
SCMS School of Engineering & Technology  
Vidya Nagar, Karukutty, Kerala - 683 576

MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled “FINITE ELEMENT ANALYSIS OF DIFFERENT CONFIGURATIONS OF BEAM-COLUMN JUNCTION OF A TUBULAR GFRP BY BOND SLEEVE CONNECTION” submitted by Divya Sahadevan to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal supervisor**  
Mr. Jerry Anto  
Assistant Professor  
Department of Civil Engineering  
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**Head of the Department**  
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**PG Coordinator**  
Ms. Nandita Mohan  
Assistant Prof.  
Department of Civil Engineering  
SCMS school of engineering and technology

PROJECT REPORT ON

**EFFECT OF GRAPHENE OXIDE ON  
CONCRETE INDUCED WITH RICE HUSK ASH**

Submitted by

**ALTHAF AHAMMED D H**

SCM21CECS02

to the APJ Abdul Kalam Technological University in partial  
fulfillment of the requirements for the award of the Degree of Master  
of Technology in  
Computer Aided Structural Engineering



Department of Civil Engineering  
SCMS School of Engineering &  
Technology  
Vidya Nagar, Karukutty, Kerala - 683576

May 2023

**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled "EFFECT OF GRAPHENE OXIDE ON CONCRETE INDUCED WITH RICE HUSK ASH" submitted by **ALTHAF AHAMMED D H** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by his under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal supervisor**  
Tenu Syriac  
Assistant Professor  
Department of Civil Engineering  
SCMS school of Engineering & Technology

**Head of the Department**  
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Associate Professor and Head  
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Department of Civil Engineering  
SCMS school of Engineering &  
Technology

**PG Coordinator**  
Nandita Mohan  
Assistant Professor  
Department of Civil Engineering  
SCMS school of engineering and technology

# **COMPARATIVE ASSESSMENT OF DYNAMIC BEHAVIOUR OF STEEL AND STEP-TAPERED COMPOSITE BATTER PILE UNDER HORIZONTAL EXCITATION**

PROJECT REPORT

submitted by

**SNIYA LEONS**

**Reg. No. SCM21CECS14**

to the APJ Abdul Kalam Technological University in partial  
fulfilment of the requirements for the award of the Degree of  
Master of Technology

in

*Computer-Aided Structural Engineering*



Department of Civil Engineering  
SCMS School of Engineering & Technology  
Vidya Nagar, Karukutty, Kerala – 683 576

May 2023

DEPARTMENT OF CIVIL ENGINEERING  
SCMS SCHOOL OF ENGINEERING & TECHNOLOGY



CERTIFICATE

This is to certify that the project report titled **“COMPARATIVE ASSESSMENT OF DYNAMIC BEHAVIOR OF STEEL AND STEP-TAPERED COMPOSITE BATTER PILE UNDER HORIZONTAL EXCITATION”** submitted by **Sniya Leons**, to the APJ Abdul Kalam Technological University in partial fulfilment of the requirement for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not being submitted to any other university or institute for any purpose.

Internal supervisor  
**Ms. Anjana Susan John**  
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PG Coordinator  
**Ms. Nandita Mohan**  
Assistant professor,  
Department of Civil Engineering,  
SCMS School of Engineering  
and Technology, Karukutty

**EFFECT OF NANOFILLER ON STRENGTH OF  
HIGH-STRENGTH STEEL TRUSS JOINTS  
BONDED WITH ACRYLIC ADHESIVES BY  
USING SOLID-STATE WELDING**

PROJECT REPORT

submitted by

**SAAYA LEONS**

**Reg. No. SCM21CECS11**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the degree of

Master of Technology

In

*Computer-Aided Structural Engineering*



**Department of Civil Engineering**

**SCMS School of Engineering & Technology**  
Vidya Nagar, Karukutty, Kerala – 683 576

May 2023

**DEPARTMENT OF CIVIL ENGINEERING SCMS  
SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the project report titled “ **EFFECT OF NANOFILLER ON STRENGTH OF HIGH STRENGTH STEEL TRUSS JOINTS BONDED WITH ACRYLIC ADHESIVES BY USING SOLID–STATE WELDING**” submitted by **Saaya Leons** to the APJ Abdul Kalam Technological University in partial fulfilment of the requirement for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other university or institute for any purpose.

**Internal supervisor**  
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Assistant professor,  
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SCMS School of Engineering  
& Technology

**PG Coordinator**  
Ms. Nandita Mohan  
Assistant Professor  
Department of Civil Engineering  
SCMS School of Engineering and Technology



PROJECT REPORT ON

**ANALYTICAL STUDY AND OPTIMISATION OF PLASTIC HINGE LENGTH**

submitted by

**NIVYA MARY KATISSERY**

**Reg. No. SCM21CECS10**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree of

Master of Technology

*Computer Aided Structural Engineering*



Department of Civil Engineering

SCMS School of Engineering & Technology

Vidya Nagar, Karukutty, Kerala - 683 576

May 2023

**DEPARTMENT OF CIVIL ENGINEERING SCMS**  
**SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled “ANALYTICAL STUDY AND OPTIMISATION OF PLASTIC HINGE LENGTH” submitted by Nivya Mary Kattissery to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal supervisor**  
Ms. Tenu Syriac  
Assistant Professor  
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**Head of the Department**  
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Civil Engineering Department  
SCMS school of  
Engineering & Technology

**PG Coordinator**  
Ms. Nandita Mohan  
Assistant Prof.  
Department of Civil Engineering  
SCMS school of engineering and technology

**APPLICATION OF ADAPTIVE STRUCTURE CONCEPT IN MULTI  
STOREYED STRUCTURE**

**PROJECT REPORT**

submitted by

**TIMNA P MARTIN**

**Reg. No. SCM21CECS15**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree

of

Master of Technology in

*Computer Aided Structural Engineering*



**Department of Civil Engineering**

SCMS School of Engineering & Technology

Vidya Nagar, Karukutty, Kerala - 683 576

MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled “APPLICATION OF ADAPTIVE STRUCTURE CONCEPT IN MULTI STOREYED STRUCTURE” submitted by **Timna P Martin** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
31/5/23

**Internal Supervisor**

Ms. Geethu R Babu

Assistant Professor

Department of Civil Engineering

SCMS School of Engineering &

Technology

  
31/5/23

**PG Coordinator**

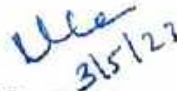
Ms. Nandita Mohan

Assistant Professor

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SCMS School of Engineering and

Technology

  
31/5/23

**Head of the Department**

Dr. Nisha L

Associate Professor and Head of  
the Department

Department of Civil Engineering

SCMS School of Engineering &

Technology

# **BEHAVIOUR OF BAC MIXED CONCRETE WITH GRAPHENE OXIDE**

Submitted by

**JINEESHA GEORGE**

**SCM21CECS07**

*To the APJ Abdul Kalam Technological University  
in partial fulfillment of the requirements for the award of the Degree of  
Master of Technology  
in  
Computer Aided Structural Engineering*



**Department of Civil Engineering**  
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MAY 2023

**DEPARTMENT OF  
CIVIL ENGINEERING SCMS SCHOOL  
OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled **Behaviour of BAC Mixed Concrete with Graphene Oxide** submitted by **Jineesha George** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpo

**Internal Supervisor**  
Ms. Nandita Mohan  
Assistant Professor  
Department of Civil Engg.  
SCMS School of Engineering  
& Technology.

**PG Coordinator**  
Ms. Nandita Mohan  
Department of Civil Engg  
SCMS School of Engineering  
& Technology

**Head of the Department**  
Dr. Nisha L  
Associate Professor  
Department of Civil Engg  
SCMS School of Engineering  
& Technology

*External Evaluation  
has done on 05/06/23*  
*AMM*  
*Positive AP/6*  
*C&E Through*  
*External Examiners*

**NUMERICAL SIMULATION OF FIRE RESISTANCE FOR  
HYBRID FRP SANDWICH PANEL**

PROJECT REPORT

Submitted by

**ANISHA PETER K.P**

**SCM21CECS03**

to the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree of Master of Technology

in

*Computer Aided Structural Engineering*



Department of Civil Engineering  
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MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING**  
**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the report entitled "NUMERICAL SIMULATION OF FIRE RESISTANCE FOR HYBRID FRP SANDWICH PANEL" submitted by **Anisha Peter K.P** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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*External Exam Evaluation*  
*MM*  
*Approved by*  
*05/06/23*  
*External Examiners*



# **EFFECT OF GRAPHENE OXIDE IN RUBBERIZED CONCRETE**

## **PROJECT REPORT**

Submitted by

**IRIN SABU**

**SCM21CECS05**

to

the APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for the award of the Degree

of

Master of Technology

In

*Computer Aided Structural Engineering*



**Department of Civil Engineering**

SCMS School of Engineering & Technology

Vidya Nagar, Karukutty, Kerala - 683576

MAY 2023

**DEPARTMENT OF CIVIL ENGINEERING  
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**CERTIFICATE**

This is to certify that the project report entitled “**EFFECT OF GRAPHENE OXIDE IN RUBBERIZED CONCRETE**” was submitted by **IRIN SABU**, Reg No. **SCM21CECS05**, to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of Degree of Master of Technology in Civil Engineering (Computer Aided Structural Engineering), is a bonafide record of the work carried out by her under guidance and supervision.

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# **SEISMIC BEHAVIOUR OF HIGH-STRENGTH STEEL-MOMENT FRAME WITH REPLACEABLE DAMAGE-CONTROL FUSES**

PROJECT REPORT

Submitted by

**ABHIJITH T S**

**SCM21CECS01**

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*Computer Aided Structural Engineering*



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MAY 2023

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This is to certify that the report entitled "Seismic Behaviour of High-Strength Steel Moment Frame with Replaceable Damage Control Fuses" submitted by Abhijith T S to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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Internal Project evaluation  
done on 5/6/23

*MM*  
Approved APIC  
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External Exam

# **PREDICTION OF EARLY AGE COMPRESSIVE STRENGTH OF CONCRETE USING MACHINE LEARNING**

Submitted by

**KEERTHI K MENON**

**SCM21CECS08**

*to the APJ Abdul Kalam Technological University  
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**CERTIFICATE**

This is to certify that the report entitled **“Prediction of Early Age Compressive Strength of Concrete using Machine Learning”** submitted by **Keerthi K Menon** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
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# **FATIGUE LIFE ASSESSMENT OF CHALAKUDY RAILWAY BRIDGE GIRDER UNDER STOCHASTIC TRAIN LOADS**

PROJECT REPORT

Submitted by

**JEROME JOY**

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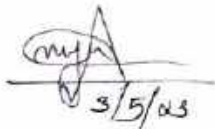
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**DEPARTMENT OF CIVIL ENGINEERING**  
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**CERTIFICATE**

This is to certify that the report entitled “**Fatigue Life Assessment of Chalakudy Railway Bridge Girder Under Stochastic Train Loads**” submitted by **Jerome Joy** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Technology in Computer Aided Structural Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.



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**ROUTE OPTIMIZATION AND BIN LOCATION ANALYSIS FOR  
MATTANCHERRY USING GIS**

PROJECT REPORT

submitted by

**VISMAYA G KUMAR**

**Reg. No: SCM21CEEE14**

to

the APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for the award of the Degree

of

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This is to certify that the project report entitled **“ROUTE OPTIMIZATION AND BIN LOCATION ANALYSIS FOR MATTANCHERRY USING GIS”** was submitted by **VISMAYA G KUMAR**, Reg No. **SCM21CEEE14**, to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of Degree of Master of Technology in Civil Engineering (Environmental Engineering), is a bonafide record of the work carried out by her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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# **STUDY ON FEASIBILITY OF DOUBLE CHAMBERED MICROBIAL FUEL CELL FOR THE TREATMENT OF TEXTILE WASTE WATER**

A PROJECT REPORT

Submitted by

**RITHU ULLAS**  
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to

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This is to certify that the project report entitled “STUDY ON FEASIBILITY OF DOUBLE CHAMBERED MICROBIAL FUEL CELL FOR THE TREATMENT OF TEXTILE WASTE WATER” was submitted by RITHU ULLAS, Reg No. SCM21CEEE10, to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of Degree of Master of Technology in Civil Engineering (Environmental Engineering), is a bonafide record of the work carried out by her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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# MODELLING OF GROUND WATER FLUCTUATIONS IN CHITTUR

A PROJECT REPORT

Submitted by

**SHAHANA YOUNUS**

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# **OPTIMIZATION OF TIME-INTEGRATED SEDIMENT SAMPLER AND SEDIMENT CHARACTERIZATION**

**A PROJECT REPORT**

submitted by

**ADWAITH B**

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to

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in partial fulfillment of the requirements for the award of the Degree

of

Master of Technology

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**Department of Civil Engineering**

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**Karukutty, Ernakulam - 683576**

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**KARUKUTTY**



**CERTIFICATE**

This is to certify that the project report entitled “**OPTIMIZATION OF TIME-INTEGRATED SEDIMENT SAMPLER AND SEDIMENT CHARACTERIZATION**” was submitted by **ADWAITH B**, Reg No. **SCM21CEEE01**, to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of Degree of Master of Technology in Civil Engineering (Environmental Engineering), is a bonafide record of the work carried out by him under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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# **SAMPLING AND CHARACTERISATION OF MICROPLASTICS IN AIR IN AN URBAN AREA**

**A PROJECT REPORT**

Submitted by

**DIYA FAIZEL S**

**Reg. No: SCM21CEEE06**

to

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of

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**MAY 2023**

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