

AUTONOMOUS (NAAC & NBA)



EGS PILLAY
ENGINEERING COLLEGE



NAGAPATTINAM

[AFFILIATED TO ANNA UNIVERSITY | APPROVED BY AICTE]

DEPARTMENT OF CIVIL ENGINEERING

MAGAZINE 23



SRISHTI 23

PEACE ASSOCIATION OF CIVIL ENGINEERING

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SHRI G. SHANKAR GANESH
JOINT SECERATARY

MESSAGE FROM SECRETARY'S DESK

I FEEL PROUD TO HEAR THAT OUR CIVIL DEPARTMENT IS ORGANIZING A LOT OF TECHNICAL EVENTS LIKE SYMPOSIUM, WORKSHOP, SEMINAR, AND WEBINAR INNOVATIVE PROJECTS, FACULTY ACHIEVEMENTS AND STUDENT ACHIEVEMENTS ARE COMING UP WITH A MAGAZINE ON THE OCCASION OF THE EVENT. THIS TYPE OF TECHNICAL EVENTS WILL GIVE THE BUDDING ENGINEERS, A PLATFORM TO SHOW CASE THEIR TALENTS AND LEADERSHIP QUALITIES. I WISH THE FACULTIES AND STUDENTS OF CIVIL DEPARTMENT. A WONDERFUL TECHNICAL EVENTS AND A GOOD LEARNING EXPERIENCE. I WISH YOU ALL FOR THE SUCCESS.



Dr.S. RAMABALAN., M.E., PhD.,

MESSAGE FROM PRINCIPAL

WARM AND HAPPY GREETINGS TO ALL. IT'S MY IMMENSE PLEASURE THAT **DEPARTMENT OF CIVIL ENGINEERING** IS ORGANIZING THE LOT OF TECHNICAL EVENTS.

UNDER THE ABLE GUIDANCE OF OUR SECRETARY SHRI. S. SNTHILKUMAR, Jt. SECRETARY SHRI. S. SANKAR GANESH CONTINUES TO MARCH ON THE WAY OF SUCCESS WITH CONFIDENCE, SHARP, CLEAR TO STAY COMPETITIVE, SIGHTED VISION AND PRECISE AND DECISION MAKING OF HIM HAS BENEFITED OUR COLLEGE.

THIS TECHNICAL EVENTS ARE EFFORT ON IN THE DIRECTION TO GIVE AN EXPOSURE TO THE STUDENTS ON THE RECENT DEVELOPMENT IN CIVIL ENGINEERING FIELD. IT ALSO PROVIDES A PLATFORM TO OUR STUDENTS TO EXHIBIT THEIR INHERENT WITH APPRECIATION THE HARD WORK, INVOLVEMENT AND EFFORT TAKEN BY THE TEAM OF FACULTY AND STUDENTS IN ORGANIZING THE EVENTS.

I CONGRATULATE ALL THE CONCERNED WITH GRATITUDE AND WISH THEM.



Dr.S.ANAND KUMAR VARMA., PhD.,

MESSAGE FROM HOD

I AM GLAD THAT OUR DEPARTMENT WAS ORRGANIZED THE LEVEL OF TECHNICAL EVENTS AND A GREAT NUMBER OF YOUNG BUDDING TECHIES FROM DIFFERENT PARTS OF THE WORLD ARE GOING TO MEET UNDER ONE UMBRELLA AND INDULGE IN DISCUSSING AND DELIBERATING ON VARIOUS TOP-NOTCH CONCEPTS IN HUMANIZING TECHNOLOGY. SCIENCE IS EXPONENTIALLY GROWING BY LEAPS AND BOUNDS AND WE HAVE TO KEEP OURSELVES ABREAST OF THE LATEST TECHNOLOGIES AND EMBRACE INTERDISCIPLINARY APPROACH. STUDENTS NEED TO PURSUE INTERDISCIPLINARY, MULTI-SKILLED AND APPLICATION-ORIENTED EDUCATION AFTER GRADUATION IN ORDER TO ENHANCE NOT ONLY THEIR EMPLOYABILITY OPPORTUNITIES BUT ALSO THE PROSPERITY OF THEIR FUTURE. THINKING OUT-OF-THE-BOX IS THE BASIC ROOT FOR ALL INNOVATIONS AND INVENTIONS. I STRONGLY BELIEVE THAT THE TECHNICAL EVENTS ARE PROVIDED THE WONDERFUL OPPORTUNITY FOR THE YOUNG MINDS TO VOICE THEIR OWN IDEAS AND VIEWS SO THAT THE FUTURE GENERATION WOULD BE BENEFITED. I WOULD SUGGEST THE SLOGAN “THINK AND LINK; LINK AND THINK” SHOULD DEVELOP INTERDISCIPLINARY RESEARCH WHICH IS THE MOST SOUGHT-AFTER ACTIVITY FOR THE BETTERMENT OF THE HUMAN KIND. I LIKE TO CONGRATULATE OUR DEPARTMENT STUDENTS, AND FACULTY MEMBERS AND ALL THOSE WHO HAVE CONTRIBUTED FOR THE SUCCESSFUL EVENTS.

MY SINCERE AND HEARTY WISHES FOR THE GRAND SUCCESS OF CIVIL DEPARTMENT..

VISION & MISSION OF THE INSTITUTE

Vision of the Institute

Envisioned to transform our institution into a "Global Centre of Academic Excellence"

Mission of the Institute

- To provide world class education to the students and to bring out their inherent talents
- To establish state-of-the-art facilities and resources required to achieve excellence in teaching-learning, and supplementary processes
- To recruit competent faculty and staff and to provide opportunity to upgrade their knowledge and skills
- To have regular interaction with the industries in the area of R&D, and offer consultancy, training and testing services
- To establish centers of excellence in the emerging areas of research
- To offer continuing education, and non-formal vocational education
- programmes that are beneficial to the society

VISION & MISSION OF THE DEPARTMENT

VISION

To evolve a centre of excellence by imparting quality technical education and promote research to meet the emerging challenges in the field of civil Engineering.

MISSION

- **M1:** Provide quality education through innovative teaching and learning practices.
- **M2:** Encourage faculty and students to pursue higher education and carry out socially relevant innovative research thereby establishing centre of excellence in emerging areas of research.
- **M3:** Offer consultancy services using state of the art facilities fulfilling the needs of the industry and society.
- **M4:** Enable of students and faculty to play leadership roles in a sustainable manner by adopting of professional ethics, entrepreneurship activities, interpersonal skills and lifelong learning attitude.

OBJECTIVES & OUTCOMES

Program Educational Objectives

After successful completion of the programme, students will be able to

PEO1: Become as a successful Civil Engineer to meet the demand driven needs in the field of Civil Engineering and related profession or pursue higher study and research or become an entrepreneur.

PEO2: Develop core competence by analyzing ad design of Civil engineering systems with social awareness and responsibilities.

PEO3: Build professionalism, ethical approach, communication skills, and team work in their profession and adapt to modern trends by engaging in lifelong learning.

Program Outcomes

PO1	Application knowledge of mathematics, science, engineering fundamentals
PO2	Problem Analysis.
PO3	Design and Development of Solutions
PO4	Conduct investigations by designing experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions
PO5	Modern Tool Usage
PO6	Assessing societal, health, safety, legal and cultural issues
PO7	Examining Environmental impact and Sustainability
PO8	Commitment to professional ethics.
PO9	Function effectively as an individual, and as a member or leader in diverse teams and in multi disciplinary settings
P10	Communicate effectively on complex engineering activities with the engineering community and with society at large, such as ,being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
PO11	Examine Project Management and Financial aspects
PO12	Instil Life-long Learning

Program Specific Outcomes (PSOs)

Graduates will able to

1. Analyze the effects of natural calamities like Tsunami, storms, earthquakes, landslides etc. in design of stable structures.
2. Use co-friendly materials and mechanism for sustainable and life-line infrastructures



CHIEF EDITOR'S CORNER

Dr.ASHWINI.B.,M.E.,Ph.D.,

Assistant Professor/CIVIL

Department of Civil Engineering,

E.G.S. Pillay Engineering College,Nagapattinam.

It is an occasion of immense pleasure for the Department of CIVIL Engineering to publish the magazine "NIRMAN 24". The Editorial board of department of NIRMAN 24 wants to thanks all the faculty members and students who have made this issue a success by providing an article. This magazine focuses on the recent trends evolved in the field of CIVIL engineering & wants to provide advanced knowledge and awareness among the students about the same. The Editorial board also wants to thanks the Management of the Institute and Head of the department for inspiring us to go forward in publishing this magazine.



Civil engineering is an important profession because it helps us make our world a better place. Engineers work to improve our transportation systems, our buildings, our water supplies - anything that has an impact on human life

Engineers are responsible for creating solutions that make life easier for everyone involved - from the builders who erect the buildings, to the motorists who use the roads, to the people who live in them.

In our department faculties and students are creating the success to the core of environment and we are establishing the signature of the branch in our district. Our Sincere thanks to all

ASSOCIATE EDITOR MESSAGE

Greetings, fellow CIVIL enthusiasts!

I'm ARISH, a Final year student and Associate Editor for our departmental magazine. This issue wouldn't be possible without the unwavering dedication of my fellow editors and the invaluable guidance of our Chief Editor, Dr. ASHWINI B. We're also incredibly grateful to the entire department faculty, led by our esteemed Head of the Department for their constant support throughout this journey.

A special thank you goes to EGSPEC management and our department fraternity for recognizing the vitality of student publications and providing us with this exciting opportunity.

Within these pages, you'll discover a diverse and captivating collection of articles and projects showcasing the remarkable talent and innovation brewing within our department. Dive into the world of groundbreaking discoveries in Civil Department, and be inspired by ideas that push the boundaries of our field.

Whether you're a seasoned professional or just embarking on your CIVIL journey, this magazine offers something for everyone. As you explore its content, I encourage you to be inspired, gain new knowledge, and perhaps even contribute your own voice in future editions.

Happy reading!

Sincerely,

ARISH.K

IV-YEAR

Associate Editor - NIRMAN 24



Comparison of mechanical properties of concrete incorporated with Multiwalled Carbon nanotube and partial replacement of cement with flyash

Dr.ASHWINI.B .,Assistant Professor

Department of Civil Engineering

E.G.S. Pillay Engineering College, Nagapattinam.

ashwini@egspec.org

Concrete incorporated with Carbon Nanotubes is an evolving research area. The major reason for this research is due to the significant properties of the Multiwalled Carbon Nanotubes (MWCNT). This research article explained the comparison of the mechanical properties of the concrete. The cement is replaced with fly ash at 20% in its volume. The concrete mechanical properties such as compressive strength, Flexural and Split Tensile strength of the concrete were done. In this research three different levels of incorporations of MWCNTs were done. They are 0.025%, 0.050% and 0.075% in weight of cement were done. In this research three test specimens were casted in each mixes. Totally five mixes were done. They are Conventional Concrete (CC), Fly ash replaced concrete (CF), Fly ash replaced concrete and 0.025% of MWCNT (CNT 1), Fly ash replaced concrete and 0.050% of MWCNT (CNT 2) and flyash replaced concrete and 0.075% of MWCNT (CNT 3). Totally, 84 specimens were 42 cubes, 21 cylinder and 21 prisms were casted in this research. The magnetic stirring method was used for surface decoration or dispersion in Poly Carboxylate Ether for MWCNT.



Optimization Of Strength Properties Of Reactive Powder Concrete By Response Surface Methodology

Dr.N.SAKTHESWARAN. Professor
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The main objective of this study is to optimize the fresh and strength properties of reactive powder concrete incorporated with industrial by-products like ultra-fine ground granulated blast furnace slag as cement substitute and added with coal bottom ash and recycled concrete fines as partial replacement of quartz sand by response surface methodology through design of experiment approach. Totally four responses namely slump, compressive strength (C-28), flexural strength (F-28), and split-tensile strength (S-28) after 28 days of curing period were considered. The statistical study on the reactive powder concrete includes the modeling of regression, normal probability plots, surface plot analysis, and optimization of process variables. The regression models of the considered responses (slump, C-28, F-28, and S-28) were tested. The results obtained from the analysis of variance (ANOVA) and Pareto chart were used to determine the statistical significance of the process variables. The influence of the variables on the responses was studied by means of the surface plot analysis. The optimal proportion of the variables against the responses was obtained through optimization response. The resulted regression equations were in the form of second-order polynomial equation and the prediction of strength properties was found to be in line with the experimental results. The difference of proportion of variance indicated that only 0.43%, 6.42%, 5.15%, and 9.7% of deviations cannot be expressed by the analysis. The ANOVA and Pareto charts represented the high significance and appropriateness of the linear term of slump response and the two-way interaction term of strength responses. The results of the optimization response revealed the optimal proportions of recycled concrete fines and coal bottom ash as 19.15% and 7.02%, respectively.



A Multi-Objective Robust Grey Wolf Optimization Model For The Study Of Concrete Mix Using Copper Slag And Glass Powder

Mr. Balasubramani, A.P.

Department of Civil Engineering

E.G.S. Pillay engineering college

Concrete belongs to the most often utilized materials for the building globally. Concrete has many advantages such as flexibility in shaping, high compressive strength, durability, fire resistance ease of production, and, finally, less cost of production over other construction materials. Conventional concrete is composed of natural sand as fine aggregates and ordinary Portland cement (OPC) as binders. In the present construction scenario, the manufacturing of cement is associated with CO₂ emission and larger energy consumption and there is a deficiency of sand. So, recent studies are focused on designing concrete by replacement of sand and cement with other alternatives. Waste materials which are byproducts of industries can be a possible replacement material for natural sand and cement in concrete mixtures, which in turn can pave way for waste management. In recent times, machine learning approaches have become more significant in analysing the characteristics of innovative concrete combinations. The concrete's strength is influenced by the particle's strength. Poor-quality aggregate causes concrete to lose strength. The quantity of aggregate also affects the characteristics of hardened concrete. Concrete with a set cement concentration becomes weaker when the aggregate percentage increases. In this study, we used an artificial neural network to examine the strength properties of concrete made with copper slag as fine aggregates and glass powder in place of cement (ANN). The multi-objective robust grey wolf optimization (MORGWO) technique is used to optimize the model in order to increase the precision of the estimation of concrete attributes. The illustrated model's performance was compared with existing techniques in terms of mean absolute error (MAE), mean absolute percentage error (MAPE), root mean square error (RMSE), and correlation coefficient (R²). Our technique was more effective in predicting the strength of concrete. his study confirms that copper slag and glass powder can be employed as partial replacement to sand and cement respectively in concrete for the construction work to decrease the material and construction cost and can help reduce.



Mr.A.Arjunan, A.P.
Department of Civil Engineering
E.G.S. Pillay engineering college

Supplementary Cementitious Materials (SCMs) have been utilised for decades to lower the OPC concrete's alkalinity. However, the usage of SCMs to lower the alkalinity of Vegetation Porous Concrete (VPC) is limited. The present study examined the effects of Fly Ash (FA) and Silica Fume (SF) on the alkalinity, strength and planting properties of VPC. Since the Coarse Aggregate Size Ratio (CASR) has a substantial impact on the VPC strength, the current-study also examines the influence of CASR on the void content, strength and planting properties of VPC. The blending of cement with FA and SF reduced the alkalinity of the VPC, and that increasing the dose rate of FA and SF lowered the alkalinity of the VPC even more. The pozzolonic reaction of FA and SF in the VPC consumes CH crystals to form C-S-H gels, and the reduction in the quantity of CH crystals causes the pH of the VPC to decrease. Consequently, the plant's root length growth and LRWC improved by 7.91% and 4.95%, respectively. The inclusion of FA decreased the compressive strength due to the lower activity of the FA with the cement matrix; however, the accelerated pozzolanic reaction between Ca(OH)_2 and SiO_2 in the SF enhanced VPC strength. Despite an increase in CASR improves the aggregate interlocking property and the strength, it also reduces the void content of the VPC. The reduction in VPC pores hampered root mobility through the concrete, delaying root development and reducing the availability of water and nutrients.



Mr.A.Arjunan, A.P.
Department of Civil Engineering
E.G.S. Pillay engineering college

Analysis Of Strength Properties Of Concrete Containing Sea Sand And Micro Silica As Partial Replacement Of Fine Aggregate

Sand is often utilized as a fine aggregate in concrete, contributing 22 to 62% of the total mass. The quantity and features of sand in concrete have an impact on its workability, mechanical characteristics, and durability. Effective replacements are needed as natural silica sand becomes scarcer. By incorporating these by-products into concrete, landfill discharge and pollution may be considerably reduced. The primary environmental problems connected to cement production are the enormous energy usage, which is one of a key component of concrete, and the emissions of CO₂ into the atmosphere. Due to its widespread use as a construction material, concrete is given a lot of consideration when it comes to economic issues and reduces CO₂ emissions to the extent that it is a component of cement. As industrialization expands, the quantity of waste material/byproducts generated grows as well, creating an ecological challenge that must be addressed. In this study, aggregate combinations including sea sand and micro silica are employed to combat global warming and lower CO₂ emissions associated to the manufacture of cement. The concrete mix is made by aggregating the sea sand and the micro silica at appropriate proportions. For the productivity enhancement of the concrete mix made using sea sand and micro silica, the Multi-Taguchi Optimization Algorithm in the civil environment is employed. The proposed method is implemented in the MATLAB environment and the performance metrics are evaluated. At all ages and water-to-cement proportions, the findings reveal that concrete constructed with partial substitution of cement and fine aggregate has greater compressive and split tensile strength is more than control concrete.



Optimization Of Strength Properties Of Reactive Powder Concrete By Response Surface Methodology

Dr.N.SAKTHESWARAN. Professor
Department of Civil Engineering
E.G.S. Pillay engineering college

Utilization Of Slag Powder And Recycled Concrete Wastes In Reactive Powder Concrete

Using recycled wastes and industrial by-products in construction materials has become mandatory to conserve the natural resources and manage waste-disposal environmental problems. This experimental work investigates the workability and strength properties of reactive powder concrete (RPC), utilizing slag powder and finely ground recycled concrete waste as the partial substitutes for cement and quartz sand, respectively. The results for the slump flow, flexural strength, compressive strength, split-tensile strength were analysed for varying contents of the recycled concrete waste in RPC, i.e., (0, 5, 10, 15, 20, 25 and 30) % and a constant slag-powder addition of 20 %. Furthermore, water absorption of the hardened specimens of 28 d of curing was also examined. The results indicated a rise in the water absorption and reduced workability with the increase in the content of recycled concrete in RPC. This was due to porous inter-particle voids in recycled concrete wastes. The strength properties of RPC exhibited superior performance for the substitution of 15 % of quartz sand with recycled concrete waste. A low water-cement ratio and a steel-fibre addition to RPC play an important role in the strength development and durability properties of RPC.

Utilisation of sea sand as partial replacement of fines in resin bonded cement concrete.

The usage of aggregates has caused serious ecological problems leading to the requirement of an alternative material to meet the demand. The alternative construction material for the upcoming graduates thus chosen for replacing cement and aggregates should not only meet the design and strength requirements but also the ecological criteria. The present research work tries to improve the service life of sea sand concrete by using them in combination with epoxy resin. The scope of the work revolves around the extended to earlier assessment of the properties of concrete manufactured using sea sand as replacement for natural river sand upto 50% and 12% epoxy resin as partial substitute for cement.



Dr.R.SIVAKUMAR. Professor

Department of Civil Engineering

E.G.S. Pillay engineering college

Microstructure And Mechanical Behaviour Of Ti-6-Al-4V Matrix Reinforced With WcB Developed By Squeeze Casting

The aim of this study is to evaluate the wear and micro hardness of a Ti-6Al-4V matrix reinforced with 10% and 15% tungsten carbide particle (WCp) composite manufactured using the squeeze casting process. Optical microscopy is used to determine the microstructures of the composite. A pin-on-disc wear test equipment and Vickers hardness at atmospheric temperature were used to examine the wear behaviour wear rate, CoF, and micro hardness qualities of primed samples. Loads of 10 N to 80 N, velocities of 4 m/s, and distances of 1000 m to 2000 m are considered for analyzing the wear behaviour of Ti-6Al-4V composites. The wear rate values are 25.683 for 10% WCp, 30.957 for 15% WCp, and 37.683 and 30.957 for 20% WCp. A scanning electron microscope (SEM) is utilized to examine the worn surface of the composites. For 10% WCp, the CoF values are 0.82 and 0.87, and for 15% WC, 0.88 and 0.956. The micro hardness values are 692 VHN for 10% WCp and 835 VHN for 15% WCp. The wear rate, microstructure, SEM images, coefficient of friction, and hardness of TMCs for totaling reinforcing tungsten carbide particle (WCp) possessions were discovered to be improved.



Dr.ASHWINI.B .,Assistant Professor

Department of Civil Engineering

E.G.S. Pillay Engineering College, Nagapattinam.

ashwini@egspec.org

Mechanical Properties Of Reinforced Concrete Deep Beam With Multiple Web Openings

The Deep beam is defined that members with clear spans to depth ratio equal or less than four times the overall member depth. Reinforced concrete (RC) deep beams are used as load distributing structural elements such as transfer girders, pile caps, foundation walls, and offshore structures. To overcome this load transfer difficulties deep beams are applied in construction. The provision of the web openings in the concrete beams are provided for the pipelines and cable laying in the high rise commercial buildings. The present study is to determine the shear carrying capacity of deep beams with multiple circular web openings. The deep beams were casted of size 1100x150x450 mm. The reinforcements were provided as 0.49% on bottom and 0.83% on top side. The total of six beams was casted three for each reinforcement ratios. The significant results were arrived are provided in this research article.

Study On FRP Laminates And Failures In Concrete Columns

Dr.ASHWINI.B.,Assistant Professor

Department of Civil Engineering

E.G.S. Pillay Engineering College, Nagapattinam.

ashwini@egspec.org

Retrofitting is one of the most important processes in construction industry. The necessity of retrofitting of existing structures is most desired during the mid life of a structure. In this paper the importance of concrete members retrofitting is analyzed. Retrofitting enhances the strength, serviceability and durability of the structures. The overall life span of the structures can be significantly increased. Retrofitting reduces the vulnerability of damage in an existing structure. In some cases the existing concrete structures undergone failure due to various reasons. Hence, the retrofitting is the primary and effective method to increase the serviceability of the structure. The common retrofitting materials are carbon fibre sheet, basalt fibre, steel fibre and glass fibre sheet. In this study the carbon FRP laminated concrete structure is analyzed. Generally the existing concrete structures strength can be enhanced by wrapping the carbon FRP laminates on it in prescribed method.



Congestion Aware Low Power On Chip Protocols With Network On Chip With Cloud Security

**Dr.N.SAKTHESWARAN. Professor
Department of Civil Engineering
E.G.S. Pillay engineering college**

This article is to analyze the bottleneck problems of NoC in many more applications like multi-processor communication, computer architectures, and network interface processors. This paper aims to research the advantages and disadvantages of low congestion protocols on highway environments like multiple master multiple slave interconnections. A long-term evolution and effective on-chip connectivity solution for secured, congestion aware and low power architecture is emerged for Network-on-Chip (NoC) for MCSoC. Applications running simultaneously on a different chip are often exchanged dynamically on the chip network. Of-course, in general on chip communication, resources mean that applications may interact with shared resources to influence each other's time characteristics

BOOKS PUBLICATIONS

S.no	Name of the teacher	Title of the book/chapters published	Name of the publisher
1.	A.Arjunan	Maintenance Repair & Rehabilitation of Structures	Lambert Academic Publishing



K. Senthamil Maran
A. Arjunan
P.T Tharmaraj

Maintenance Repair & Rehabilitation Of Structures

Concrete Structures



FOOD FOR THOUGHT

Kanwar Sain, also spelt as Rai Bahadur Kanwar Sain Gupta OBE (1899–1979) was a civil engineer from Haryana state in India. He was the chief engineer in the Bikaner state who came up with idea of Rajasthan Canal. He also successfully implemented Ganga canal project. He was considered a dynamite of irrigation engineering of his time. He was born in 1899 in Tohana district Fatehabad (Haryana). He was educated at D.A.V. College, Lahore. He graduated as a civil engineer from Thomason College of Civil Engineering, Roorkee (now, IIT Roorkee) in the year 1927 with honours. He was awarded Padma Bhushan in 1956. He has written a book called -Reminiscences of an engineer. He was chairman of Central Water and Power Commission, Ministry of Irrigation and Power, Government of India. Kanwar Sain and Karpov (1967) presented enveloping curves for Indian rivers.



Konark Sun temple was built in Orissa by Eastern Ganga Dynasty ruler in the 13th century, Narasimhadeva I. The chief architect behind this temple is Bisu Maharana. This temple is in the form of a gigantic chariot. According to legend, it is said that the Konark sundial was used to calculate the precise time of day based on the position of the sun. The wheel was

crafted with incredible precision, and its intricate design allowed sunlight to pass through it and cast shadows that could be used to determine the exact time.

PROFFESIONAL SOCIETIES EVENTS ORGANIZED



Session 1(a) - Inauguration photos



STUDENTS
ATTENDED THE
"EXPLORE THE
WORLD WITH
STRUCTURAL
DESIGN
ALONG WITH
ISTE

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DEPARTMENT OF CIVIL ENGINEERING
Organizes
ONE DAY WORKSHOP ON
"Exploring the World of Structural Design"

DATE : 06.04.2023
TIME : 10.30 AM to 4.30 PM
VENUE : Main Auditorium & CADD Laboratory

CONSUMERS: B.E CIVIL STUDENTS
In the Presence of
SHRI.S.SENTHIL KUMAR CHAIRMAN
SMT.JOTHIMANI ANNA
SHRI.S.SANKAR GANESH
SECRETARY



Indian society for Technical Education

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Near Katarwala Sarai, Opp. Sanskrit Vidyaapeeth, New Delhi - 110 016/011-43523545



Sponsored

DEPARTMENT OF CIVIL ENGINEERING PRESENTS

ONE DAY WORKSHOP ON "Entrepreneurship & Innovation Promotional activities
Programme 09.03.2023"



SUBMITTED BY

Dr.ASHWINLB M.E., Ph.D

Assistant Professor

Dr.ANAND KUMAR VARMA M.E., Ph.D

Professor

DEPARTMENT OF CIVIL ENGINEERING
E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM-611002

EDC AWARENESS WITH ISTE



Session 2(a) Chief Guest lecture about EDC



STUDENT ACHIEVEMENTS

In our Civil Department more than 120 students are participated in the various events and also more than 30 students are won the prizes by showing their talents and made a proud moment to our department. We are effectively encouraging our students to expose their knowledge and integrate their ideas to various engineering College.

Moreover ,we motivating the students to applying NPTEL exams for getting more knowledge in various domain.



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
HARSHIDHA V
for successfully completing the course

Retrofitting and Rehabilitation of Civil Infrastructure

with a consolidated score of **54** %

Online Assignments	23.97/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **294**


Jan-Apr 2023
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur




Indian Institute of Technology Kharagpur

Roll No: NPTEL23CE36S34030239 To validate the certificate  No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
SOWRI SB
for successfully completing the course

Retrofitting and Rehabilitation of Civil Infrastructure


with a consolidated score of **53** %

Online Assignments	22.75/25	Proctored Exam	30/75
--------------------	----------	----------------	-------


Total number of candidates certified in this course: **294**


Jan-Apr 2023
(12 week course)


Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur


Roll No: NPTEL23CE36S34030239 To validate the certificate  No. of credits recommended: 3 or 4

Open with 



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
SENTHAMIZH SELVAN
for successfully completing the course

Remote Sensing Essentials


with a consolidated score of **52** %

Online Assignments	20.31/25	Proctored Exam	31.5/75
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Total number of candidates certified in this course: **428**

Jan-Apr 2023
(12 week course)

Prof. Prithi Maheshwari
NPTEL Coordinator
IIT Roorkee




Indian Institute of Technology Kharagpur

Roll No: NPTEL23CE36S34030239 To validate the certificate  No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
RAMPRASATH R
for successfully completing the course

Retrofitting and Rehabilitation of Civil Infrastructure


with a consolidated score of **55** %

Online Assignments	23/25	Proctored Exam	32.12/75
--------------------	-------	----------------	----------


Total number of candidates certified in this course: **294**

Jan-Apr 2023
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur

Roll No: NPTEL23CE36S34030239 To validate the certificate  No. of credits recommended: 3 or 4




CERTIFICATE OF EXCELLENCE

This is to certify that **V. NIRMAL** of **EGS PILLAY ENGINEERING BRICK IT** participated in the event **BRICK IT** and secured First / Second / Third position in "Gyanith 2023" held on March 1st & 2nd, 2023 Organized by National Institute of Technology Puducherry


Dr. Sundhil Kumar
Chairperson


Dr. J. Ronald Asser
Convener


Prof. K. Sankaranarayanan
Director, NIT Puducherry

Elite



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
RASIK FARID S
for successfully completing the course

Retrofitting and Rehabilitation of Civil Infrastructure

with a consolidated score of **60** %

Online Assignments	23.66/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **294**

Jan-Apr 2023
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur

Roll No: NPTEL23CE36S34030239 To validate the certificate  No. of credits recommended: 3 or 4



**UNIVERSITY COLLEGE OF ENGINEERING
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(APPROVED BY AICTE) TIRUKKUALAI-610204,NAGAPATTINAM.



OF ACHIEVEMENT
THIS CERTIFICATE IS PRESENTED TO :
RAMANANATHAN

secured the 1st Place Paper Presentation in Workshop held on 28.03.2023at
University College of Engineering, Thirukkuvalai,representing EGS Pillay
Engineering College, Nagapattinam.

P. G. Muruganathan

Sports Coordinator

G. Jayaraman

Dean



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CERTIFICATE
OF APPRECIATION
Proudly Presented To
PRAVEEN.A

For her achievement in Drawing competition and secured **Second place** in
workshop held on 16.06.2023 at SIR ISSAC NEWTON COLLEGE OF
ENGINEERING AND TECHNOLOGY.

[Signature]

Coordinator

[Signature]

HOD

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CERTIFICATE OF APPRECIATION

FOR

Pavithra.A

For Securing Second Place in Solo Dance Competition on Women's Day Celebration on 08.03.2024 at Akshaya College of Engineering and Technology.

Program Coordinator

Principal



NATIONAL INSTITUTE OF TECHNOLOGY PUDHUCHERRY, KARAİKAL CERTIFICATE

OF PARTICIPATION

This certificate is presented to
PRAVEEN KUMAR S

For participating in Brick it, Shake It Workshop and Securing Winner Title on February 23, 2024.

Coordinator

Dean



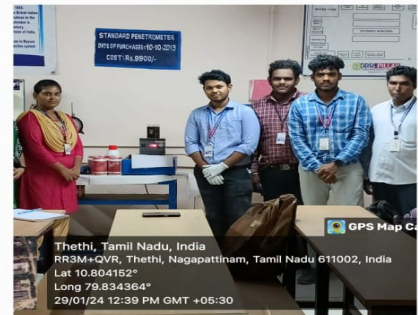
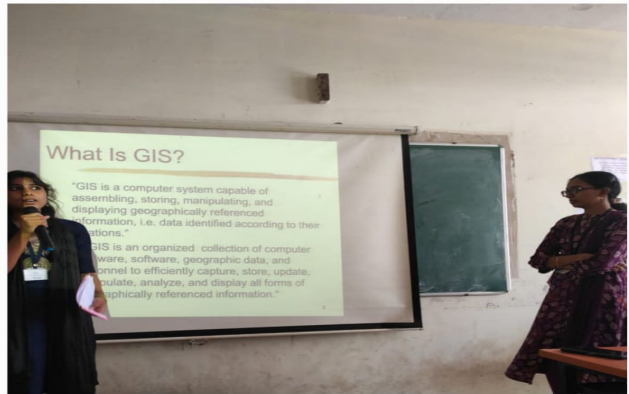
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Lat 10.803279°



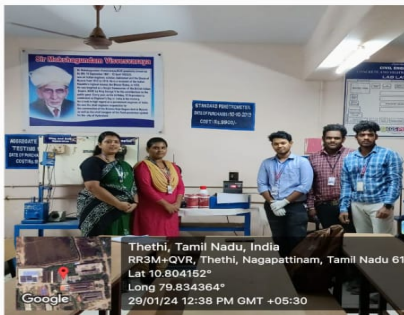
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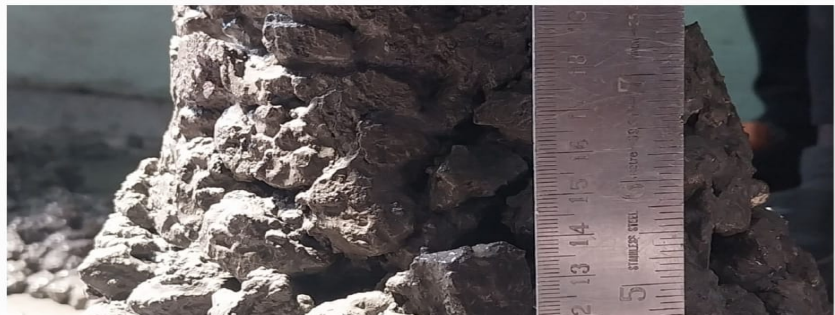
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