SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!

DEPARTMENT OF CIVIL ENGINEERING

SONA CREA

Twenth Issue | April 2024

Indian Concrete Institute

ICI STUDENT CHAPTER

I am gratified to know that the Department of Civil Engineering is bringing out the Twenth issue of their technical magazine "SONA CREA" of this academic year (2023 - 2024). This is a productive technical material and subsidiary skill-developing tool for the students. I wish the Civil Engineering Department a very big success in all their ventures. I also applaud the coordination and efforts behind the team to bring out this issue. I wish them all success.

Dr. S.R.R. SENTHIL KUMAR,
Principal

Dr. R. MALATHY, HoD / Civil, Convenor/ ICI Student Chapter

I am glad in publishing the twenth issue of the magazine "SONA CREA" of our Civil Engineering Department, which is a reference of the most recent trends and activities in the field of AEC. This should serve as a source of guidance for the entire fraternity for building themselves with the beautiful colors. I acknowledge the efforts of the Editorial team who did a mind-blowing job in compiling activities for a year and disseminate them through this Magazine as well as on the website.I am feeling cherished in welcoming students with more innovation in bringing the article with more bright concepts and ideas in the next issue. I wish them success in to be colorful in their future.

A. MEENACHI
AP/ CIVIL | ICI Students Chapter Coordinator

This issue marks the twneth issue of our Newsletter SONA CREA, that aims to keep our students past and present updated about the trending one in our Civil Fraternity. This newsletter will feature about the programs, articles, achievements of our students and faculties. We have particularly designed this newsletter also as a platform for the students to update their talents and get exposed to the current technologies. So, I request everyone to use this in an efficient manner. In future expecting more contributions from the entire team to make it more useful and a vibrant one.

VISION & MISSION OF THE DEPARTMENT

To become a school of excellence that brings out civil engineers with high technical competencies and promotes high-end research to meet the current and future challenges in Civil Engineering.

MDI : To become a school of excellence that brings out civil engineers with high technical competencies and promotes high-end research to meet the current and future challenges in Civil Engineering.

MD2: To provide quality education through Centre of Excellence in Research and Consulting with emerging technologies to industry and societal problems.

MD3: To impart knowledge and activities to students with emphasis in developing the leadership qualities and teamwork.

MD4: To impart knowledge and activities to students with emphasis in developing the leadership qualities and teamwork.

MD5: To encourage students to pursue higher education, take competitive exams and industry career with required training.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

To encourage students to pursue higher education, take competitive exams and industry career with required training.

PEO I: To encourage students to pursue higher education, take competitive exams and industry career with required training.

PEO 2: To analyze data and technical concepts pertaining to the development of infrastructure, design, sustainability, construction management and any other related field of civil engineering.

PEO 3: To analyze data and technical concepts pertaining to the development of infrastructure, design, sustainability, construction management and any other related field of civil engineering.

PROGRAMME OUTCOMES

Students in the Civil Engineering programme should, at the time of their graduation be able to:

a)Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to offer a solution to complex engineering problems..

b)Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using the first principles of mathematics, natural sciences, and engineering sciences

c)Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental property.

d)Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

e)Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations

f) The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

g)Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.

h)Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

i) Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

j) Communication: 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.

k)Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.

l) Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

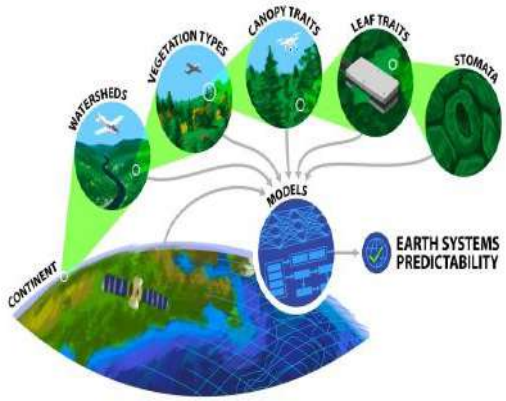
PROGRAMME SPECIFIC OUTCOMES

On completion of the B.E (Civil Engineering) degree, the graduates will be able to:

- Plan, analyze, design, prepare cost estimates and execute all kinds of Civil Engineering Projects.
- Apply modern construction techniques, equipment and management tools so as to complete the project within specified time and funds.

Student Articles

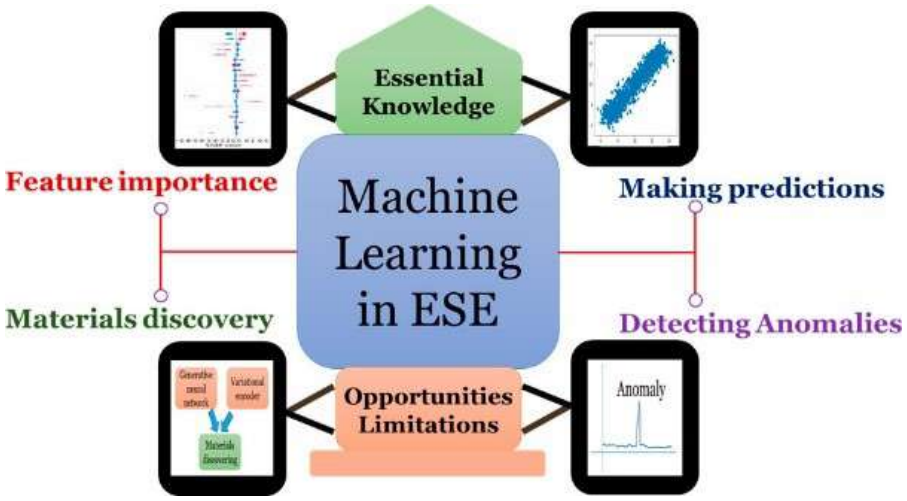
TAKING ARTIFICIAL INTELLIGENCE TO HEART: ADVANCING ENVIRONMENTAL ENGINEERING



With the advent of deep learning algorithms, artificial intelligence (AI) is causing a paradigm shift in the ever-evolving field of environmental research and engineering. Artificial Intelligence (AI) has become increasingly popular over the last ten years, and this has made AI a shining example of how environmental jobs can be revolutionised. Recent research indicates a discernible movement in Environmental Engineering towards AI-driven solutions, where its unmatched ability to analyse large datasets effectively holds the promise of revealing elusive insights and tackling complex problems. Come along on a journey through the ever-changing field of artificial intelligence (AI) in environmental engineering as we explore the technology's numerous uses and transformational promise for the planet's future.

For experts, the intricacy of environmental data presents a difficult barrier to overcome. Thankfully, cutting-edge computer programmes give us a way to accomplish accurate forecasts, ongoing observation, risk assessments, and other beneficial outcomes. AI methods are capable of reasoning, decision-making, and data-driven learning. Through organised pathways of optimisation and solution finding, they are able to convert real-world data into machine-understandable and useful knowledge and make judgements. Machines are capable of problem-solving, information extraction, behaviour prediction, change adaptation, and data mining. Machine Learning (ML) and Computer Vision is one branch of AI that focuses on perception and learning. When it comes to handling complex data, such as environmental data, both approaches are useful.

AI techniques are also capable of analysing even more complicated environmental data, including water quality evaluation and forecasting or spatiotemporal environmental data prediction. Machine learning's (ML) subfield of deep learning (DL) is a useful tool for handling and interpreting complex data. To extract more detailed information at each layer, it makes use of neural networks with specialised layers. Many geophysical factors, such as the physical, chemical, and biological characteristics of surface waters, the atmosphere, and the land surface, must be processed in order to comprehend and interpret environmental data. Numerous characteristics, including vegetation coverage, moisture content, species concentration, aerosol concentration, and more, can be assessed.

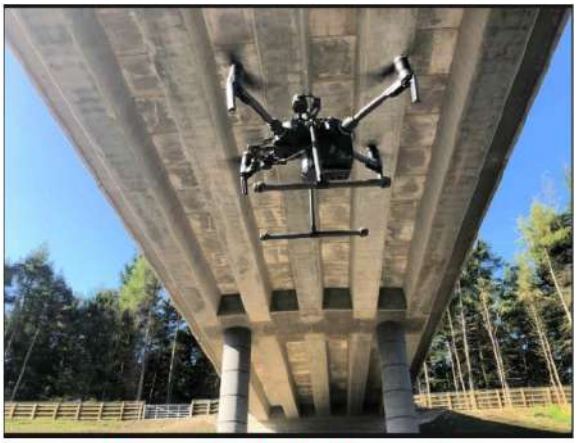


Kaavya R
Final year- "B"
Civil Engineering

ADVANCING STRUCTURAL HEALTH MONITORING OF BRIDGES USING DRONE TECHNOLOGY

Introduction:

Bridges are critical components of infrastructure, facilitating transportation and connectivity. Ensuring their structural integrity is paramount for public safety and efficient transportation networks. Traditional methods of structural health monitoring (SHM) have often been laborintensive, time-consuming, and sometimes insufficient in providing real-time data. However, the integration of drone technology has revolutionized the field of bridge inspection and monitoring, offering unprecedented advantages in terms of efficiency, accuracy, and safety.



Drones for Bridge Inspection

Utilizing Drones for Bridge Inspection:

Drones, also known as unmanned aerial vehicles (UAVs), equipped with high-resolution cameras, LiDAR (Light Detection and Ranging) sensors, and other specialized equipment, have emerged as invaluable tools for bridge inspection. Unlike traditional methods that require manual inspection or cumbersome equipment such as scaffolding or cranes, drones offer a nonintrusive and versatile solution. They can access hard-to-reach areas, such as the underside of bridges or areas near water bodies, with minimal disruption to traffic or the surrounding environment.

Real-time Data Collection and Analysis:

One of the most significant advantages of drone-based SHM is the ability to collect real-time data. Drones equipped with advanced sensors can capture high-resolution images, videos, and 3D models of bridge structures swiftly and efficiently. This data can then be analyzed using sophisticated algorithms and artificial intelligence (AI) techniques to detect structural defects,

Real time bridge monitoring – Kondalampatti ,Butterfly bridge

such as cracks, corrosion, or deformation, with exceptional accuracy. By providing real-time insights, drone-based SHM enables proactive maintenance and timely intervention, thereby enhancing bridge safety and longevity.

Cost-effectiveness and Efficiency:

Compared to traditional inspection methods, drone-based SHM offers considerable cost savings and efficiency gains. The deployment of drones significantly reduces labor costs and inspection time, as well as the need for specialized equipment and infrastructure. Moreover, by identifying potential structural issues early on, drone-based SHM helps prevent costly repairs and mitigates the risk of catastrophic failures, ultimately saving resources and safeguarding public infrastructure.

Enhanced Safety:

Safety is a primary concern in bridge inspection and maintenance activities. Traditional methods often involve working at heights or in hazardous environments, exposing inspection personnel to various risks. By replacing manual inspection with drone technology, safety hazards associated with human intervention are greatly minimized. Drones can perform inspections autonomously or under remote supervision, keeping personnel out of harm's way while ensuring thorough and accurate assessments of bridge structures.

Future Directions:

As drone technology continues to evolve, the potential applications in bridge inspection and SHM are vast. Future developments may include the integration of advanced sensors, such as infrared thermography or ultrasonic testing, for detecting hidden defects and monitoring structural health in real-time. Additionally, advancements in AI and machine learning algorithms will further enhance the capabilities of drone-based SHM, enabling predictive maintenance and optimizing bridge performance over their lifespan.

Conclusion:

Drone technology has revolutionized the field of structural health monitoring, offering unprecedented capabilities in inspecting and maintaining bridge infrastructure. By providing real-time data collection, cost-effective solutions, enhanced safety, and proactive maintenance strategies, drones are poised to play a central role in ensuring the integrity and longevity of bridges worldwide. As technology continues to advance, the integration of drones into SHM practices will become increasingly commonplace, ushering in a new era of efficiency, reliability, and safety in bridge engineering.

Amirtha SS
Final year- "B"
Civil Engineering

Mohanraj D
Final year- "A"
Civil Engineering

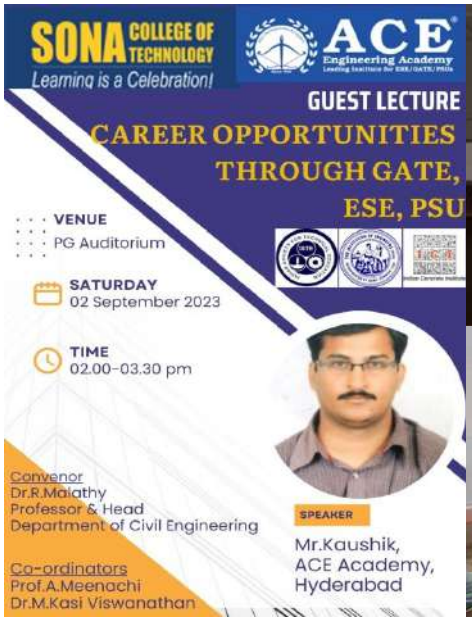
GEOTECHNICAL INVESTIGATION FOR STRUCTURAL ENGINEERING – NEED IN PRESENT CONSTRUCTION SCENARIO.

Geotechnical Engineers are performing the Investigation for to explore the soil and rock properties below the surface of earth. It is one of the important task for every type of construction. To ensure the safety of the structure and cost optimization, soil investigation is very important. Nowadays, structural engineers need some basic geotechnical knowledge for the Fastrack projects happening wherever, most of the structural failures are happened due to geotechnical issues. Most of cases no proper interface between the structural engineer and geotechnical engineer in the design as well as in the field also. It will affect the source of engineering. Inappropriate geotechnical investigation or lack of interface between structural and geotechnical engineer leads the project gets delayed and turn into worse. To resolve these types of issues in the projects, structural engineer must do a visit on the time of geotechnical work and able to know the property and behaviour of field with sharing the importance of structural design expectations to the investigation team and the geotechnical engineer. It helps optimize design parameters for various structural elements. The detailed information obtained enables engineers to design the foundation, retaining structures and slope stabilizations to the specific conditions of the site. This optimization not only enhances structural performance but also contributes to cost-effective and resource-efficient designs also. structural investigation of foundation also focuses on understanding the unique demands placed on structures within a given environment by the geotechnical engineer is very important. geotechnical data into this analysis, engineers can accurately dimension structural elements to withstand both static and dynamic forces. structural design with geotechnical findings, ensuring a harmonious collaboration to create a robust and resilient final product without wasting the money, time, and workman power. Soil – structure interaction and the same interaction between the structural and geotechnical engineer provides a better project to fulfil the global needs.

EVENTS ORGANIZED

Department of Civil Engineering, Sona College of Technology, Salem in association with Salem City Police organizes A Mega Event "ROAD-A-THON 2023" on 5.3.2024. This event was initiated on July 14, 2023 with 70 teams from colleges located in and around salem city. It was our pleasure to have had the Chief Guest of Road-A-Thon 2023 Mrs. B. Vijayakumari, IPS, Commissioner of police, Salem city to grace the occasion.

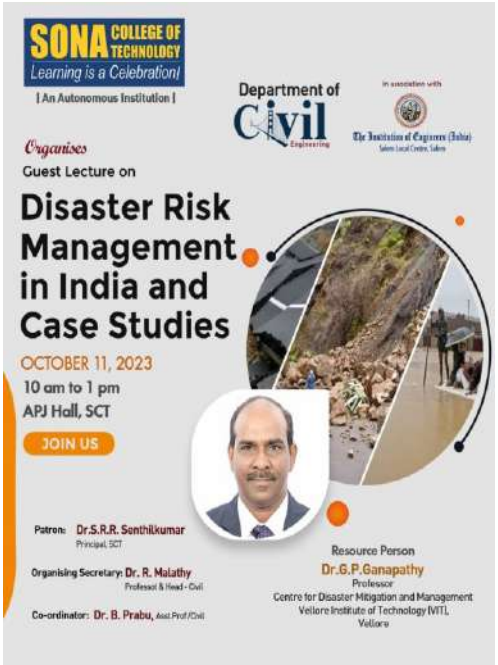

SONA COLLEGE OF TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING ORGANISES
INDUSTRY LECTURE
for IV year Civil Engineering students
ON
BASIC TECHNICAL KNOWLEDGE FOR SITE ENGINEER
RESOURCE PERSON
ER VIGNESHWARAN M.E.,
APN BUILDERS
DATE: 2.9.2023
ONLINE PLATFORM:
GOOGLE MEET
CONVENOR:
Dr.R.MALATHY, HOD/CIVIL
CO-ORDINATOR:
Dr.GULSHAN TAJ M.N.A, PROF/CIVIL


SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
ACE Engineering Academy
GUEST LECTURE
CAREER OPPORTUNITIES THROUGH GATE, ESE, PSU
VENUE
PG Auditorium
SATURDAY
02 September 2023
TIME
02.00-03.30 pm
Convenor
Dr.R.Malathy
Professor & Head
Department of Civil Engineering
Co-ordinators
Prof.A.Meenachi
Dr.M.Kasi Viswanathan
SPEAKER
Mr.Kaushik,
ACE Academy,
Hyderabad


GPS Map Camera Lite
M4HG+722, Suramangalam, Salem, Tamil Nadu 636005, India
Latitude
11.6787476°
Longitude
78.1253183°
Local 02:21:29 PM
GMT 08:51:29 AM
Altitude 294 meters
Saturday, 02.09.2023
GPS Map Camera
Salem, Tamil Nadu, India
Google


SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
| An Autonomous Institution |
Department of Civil Engineering
Organises
Workshop on
Prefabricated Structures and IoT in Civil Engineering
OCTOBER 20, 2023
10 am to 4 pm
Civil Seminar Hall, SCT
JOIN US
Patron: Dr.S.R.R. Senthilkumar
Principal, SCT
Organising Secretary: Dr. R. Malathy
Professor & Head - Civil
Co-ordinators: Dr. M.N. Gulshan Taj, Professor /Civil
Dr.S.Shalini, AP/Civil
Prof.Monicka Nandini, AP/Civil
Student coordinators
Mr.Bowshik | Mr.Nitish
Final yr


SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
Civil Engineering
WEBINAR ON
INTERNET OF THINGS IN CIVIL ENGINEERING
20.10.2023 | 2.00 p.m to 4.00 p.m
Participants will be receiving E certificates
Registration fee- Rs.150
Venue- PG Auditorium
QR CODE FOR REGISTRATION
On spot registration
Last date for registration
18.10.2023
IOT
CONVENER
DR.R.MALATHY
HOD
CIVIL/DEPARTMENT
ORGANISING SECRETARY
DR.M.N.A.GULSHAN TAJ
PROFESSOR/CIVIL
DEPARTMENT
STUDENT COORDINATOR
G.K.GOWSHIK- IV YEAR-962969274
J.NITHISH KUMAR-IV YEAR- 6382916005


SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
| An Autonomous Institution |
Department of Civil Engineering
The Institution of Engineers (India)
Organises
Guest Lecture on
Disaster Risk Management in India and Case Studies
OCTOBER 11, 2023
10 am to 1 pm
APJ Hall, SCT
JOIN US
Patron: Dr.S.R.R. Senthilkumar
Principal, SCT
Organising Secretary: Dr. R. Malathy
Professor & Head - Civil
Co-ordinator: Dr. B. Prabu, Asst.Prof /Civil
Resource Person
Dr.G.P.Ganapathy
Professor
Centre for Disaster Mitigation and Management
Vellore Institute of Technology (VIT),
Vellore


SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
Civil Engineering
WORKSHOP ON
PREFABRICATED STRUCTURES
20.10.2023 | 10:00AM - 12:00 PM
Participants will be receiving E-Certificates
Registartion fee - Rs.150
Venue - PG Auditorium Sona college
QR CODE FOR REGISTRATION
ONSPOT REGISTRATION
LAST DATE FOR REGISTRATION
18.10.2023
CONVENER
Dr.R.MALATHY
HOD/CIVIL DEPARTMENT
ORGANISING SECRETARY
Dr.M.N.A.GULSHAN TAJ
PROFESSOR/CIVIL
DEPARTMENT
STUDENT COORDINATORS
G.K.GOWSHIK - IV YEAR- 9629692714
J.NITHISH KUMAR - IV YEAR - 6382916005


SONA COLLEGE OF TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING ORGANISES
INDUSTRY LECTURE - 05
for IV year Civil Engineering students
ON
3D PRINTING: THE FUTURE OF CONSTRUCTION
RESOURCE PERSON
AMARNATH BALAJI T
TVASTA MANUFACTURING SOLUTIONS
BUSINESS DEVELOPMENT ASSOCIATE
DATE: 4.10.2023
ONLINE PLATFORM:
GOOGLE MEET
CONVENOR:
Dr.R.MALATHY, HOD/CIVIL
CO-ORDINATOR:
Dr.GULSHAN TAJ M.N.A, PROF/CIVIL

NPTEL ACHIEVEMENTS

Name	Course name	Certificate type
Dr.R.Malathy	Introduction to Machine learning	Elite + Gold (Topper 1%)
Dr.R.Malathy	Python for data science	Elite
Dr.D.Jegatheeswaran	Teaching and learning in general programs:TALG	Elite
Dr.M.N.A.Gulshan Taj	Python for Data Science	Successfully Completed
Dr.M.Logesh kumar	Teaching and learning in general programs:TALG	Elite
Dr.M.Kasiviswanathan	Structural Analysis I	Elite + Silver
Dr.M.Kasiviswanathan	Matrix method of Structural Analysis	Elite + Silver
Dr.B.Prabu	Teaching and learning in general programs:TALG	Elite
Mr.P.Ashok kumar	Teaching and learning in general programs:TALG	Elite + Silver
Mrs.S.Kalaiselvi	Availability an management of Groundwater resources	Elite+Silver (Topper 2%)
Mrs.S.Saranya	Teaching and learning in general programs:TALG	Elite+Silver
Dr.A.Shalini	Teaching and learning in general programs:TALG	Elite+Silver
Dr.S.Jagan	Design of Connections in Steel structures	Elite+Silver
Mr.K.Prakash	Bridge Engineering	Successfully Completed
Ms.G.K.Monica Nandhini	Integrated Waste Management for a Smart City	Elite+Silver (Topper 5%)
Mr.V.Barath kumar	Admixtures and Special Concrete	Elite
Mrs.A.Meenachi	Python for Data science	Successfully Completed
Mrs. M.Poornima	Python for Data science	Elite
Mrs.Deepalakshmi	Admixtures and Special Concrete	Successfully Completed

Participation in Seminar/ conference/ Workshop/ Training/ Webinar etc. by Department Faculty

Name of the Faculty with Designation	Title / Topic	Place of program
Dr.R.Malathy Professor & Head	Guest Lecture- Invited Speaker	Nandha Engineering College, Erode
Dr.R.Malathy Professor & Head	Resource Person "WORLD INTELLECTUAL PROPERTY DAY"	Entrepreneurship Development Cell Organized By Sona College Of College
Dr.R.Malathy Professor & Head	Resource Person "WORKSHOP ON INTELLECTURAL PROPERTY RIGHTS (IPRs) AND IP MANAGEMENT FOR START UP"	Entrepreneurship Development Cell Organized By Sona College Of College
Dr.M.N.A.GulshanTaj Professor & Ms.G.K.MonicaNandini Assistant Professor	Conducted Seminar on "Mission Life-Sustainable Practices"	SONA COLLEGE OF TECHNOLOGY
Mrs.S.Saranya Assistant Professor & Mrs.S.Kalaiselvi Assistant Professor	"HANDS ON TRANING USING MATLAB SOFTWARE"	SONA COLLEGE OF TECHNOLOGY
Dr.R.Malathy Professor/Head/Dean (R&D) & Dr.A.Shalini Assistant Professor	"E3 – Excite Engage Educate"	SONA COLLEGE OF TECHNOLOGY
Dr.B.Prabu Assistant Professor & Ms.G.K.MonicaNandini Assistant Professor	Discharge of Treated Sewage and recycling options	SONA COLLEGE OF TECHNOLOGY

Dr.R.MALATHY Professor/ Head/Dean (R&D) has participated in the online webinar on "Remaining Life Analysis for An Uninterrupted Structural Performance" Organized by Ultra Tech Webinar held on 20.05.2023


CERTIFICATE

PROUDLY PRESENTED TO

MALATHY RAMESH

Remaining Life Analysis for An Uninterrupted Structural Performance

May 20, 2023 — UltraTech Cement Ltd.


ALLIANCE UNIVERSITY

Alliance College of Engineering and Design

INSTITUTION'S INNOVATION COUNCIL

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./ Ms./ Mrs./ Dr.

Gulshan Taj M N A

Sona college of Technology

has actively participated in the Six Days Online Faculty Workshop on Design Thinking and Entrepreneurship (DTE 2023) from 19th to 24th June 2023 organized by Department of Mechanical Engineering, Alliance College of Engineering and Design (ACED), Alliance University, Bengaluru in association with the Institution's Innovation Council (Ministry of Education Initiative, Government of India).

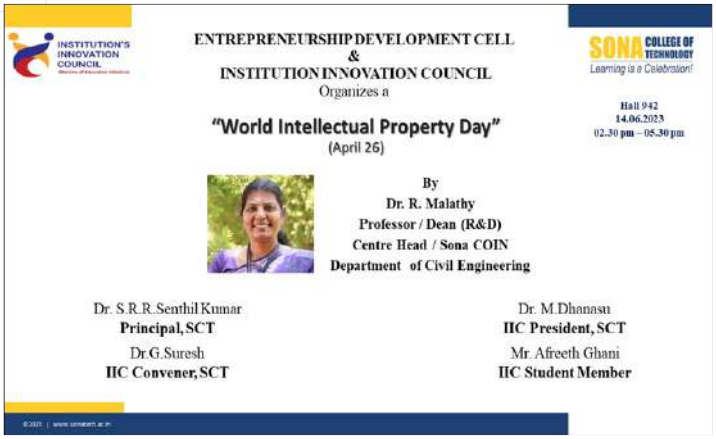
Dr. B. M. Girish, HOD, ME Department, ACED

Dr. Reeba Korah, Interim Dean, ACED

Dr. Nivedita Mishra, Registrar, Alliance University

Dr.M.N.A.GULSHAN TAJ HAS PARTICIPATED IN THE "SIX DAYS ONLINE FACULTY WORKSHOP ON DESIGN THINKING AND ENTREPRENEURSHIP (DTE 2023)"HELD ON 19.06.2023 – 24.06.2023

Dr.R.MALATHY/ PROFESSOR & HEAD & DEAN (R&D) HAS AN RESOURCE PERSON AND DELIVERED AND INFORMATIVE AND USEFUL PRESENTATION ON "WORLD INTELLECTUAL PROPERTY DAY" ON 14.06.2023 AT ENTREPRENEURSHIP DEVELOPMENT CELL ORGANIZED BY SONA COLLEGE OF COLLEGE.


INSTITUTION'S INNOVATION COUNCIL

ENTREPRENEURSHIP DEVELOPMENT CELL & INSTITUTION INNOVATION COUNCIL

Organizes a

"World Intellectual Property Day"

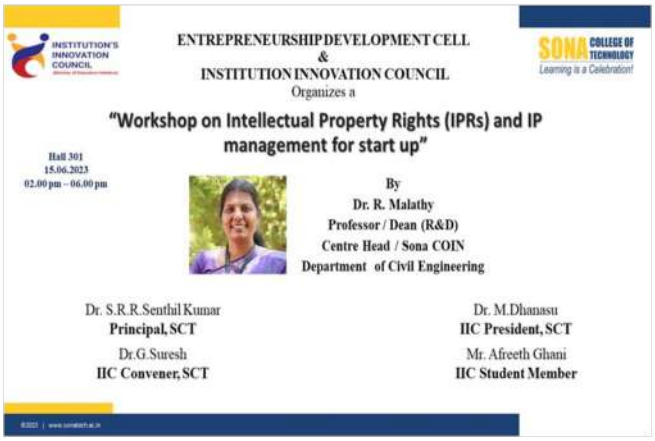
(April 26)

SONA COLLEGE OF TECHNOLOGY — Learning is a Celebration!

Hall 942
14.06.2023
02.30 pm – 05.30 pm

By
Dr. R. Malathy
Professor / Dean (R&D)
Centre Head / Sona COIN
Department of Civil Engineering

Dr. S.R.R.Senthil Kumar, Principal, SCT
Dr.G.Suresh, IIC Convener, SCT
Dr. M.Dhanasu, IIC President, SCT
Mr. Afreeth Ghani, IIC Student Member


INSTITUTION'S INNOVATION COUNCIL

ENTREPRENEURSHIP DEVELOPMENT CELL & INSTITUTION INNOVATION COUNCIL

Organizes a

"Workshop on Intellectual Property Rights (IPRs) and IP management for start up"

SONA COLLEGE OF TECHNOLOGY — Learning is a Celebration!

Hall 301
15.06.2023
02.00 pm – 06.00 pm

By
Dr. R. Malathy
Professor / Dean (R&D)
Centre Head / Sona COIN
Department of Civil Engineering

Dr. S.R.R.Senthil Kumar, Principal, SCT
Dr.G.Suresh, IIC Convener, SCT
Dr. M.Dhanasu, IIC President, SCT
Mr. Afreeth Ghani, IIC Student Member

R.MALATHY/ PROFESSOR & HEAD & DEAN (R&D) HAS AN RESOURCE PERSON AND DELIVERED AND INFORMATIVE AND USEFUL PRESENTATION ON "WORKSHOP ON INTELLECTURAL PROPERTY RIGHTS (IPRs) AND IP MANAGEMENT FOR START UP" ON 15.06.2023 AT ENTREPRENEURSHIP DEVELOPMENT CELL ORGANIZED BY SONA COLLEGE OF TECHNOLOGY.

PATENTS GRANTED

पेटेंट कार्यालय,भारत सरकार
The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
(पेटेंट नियमावली का नियम 74) | (Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No. : 520054
आवेदन सं. / Application No. : 202141042390
फाइल करने की तारीख / Date of Filing : 20/09/2021
पेटेंटी / Patentee : SONA COLLEGE OF TECHNOLOGY
आविष्कारकों का नाम /Name of Inventor(s) : 1.Dr. Malathy Ramalingam 2.Dr. Senthilkumar Sellamuthu Ramchandran Rajagopal 3.Mr. Aravinda Kumar Vasu 4.Mr. Karuppasamy Narayanan 5.Dr. Gulshan Taj Mohamad Nabi Anwar

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित *METHOD OF MANUFACTURING AN ECO-FRIENDLY CEMENT LESS DRY INTERLOCKING BLOCKS FROM POLYETHYLENE WASTE* नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख सितम्बर 2021 के तीसवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled *METHOD OF MANUFACTURING AN ECO-FRIENDLY CEMENT LESS DRY INTERLOCKING BLOCKS FROM POLYETHYLENE WASTE* as disclosed in the above mentioned application for the term of 20 years from the 30th day of September 2021 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 05/03/2024
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 30th day of September 2023 and on the same day in every year thereafter.

पेटेंट कार्यालय,भारत सरकार
The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
(पेटेंट नियमावली का नियम 74) | (Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No. : 467036
आवेदन सं. / Application No. : 201841047829
फाइल करने की तारीख / Date of Filing : 18/12/2018
पेटेंटी / Patentee : SONA COLLEGE OF TECHNOLOGY
आविष्कारकों का नाम /Name of Inventor(s) : 1.Dr R.MALATHY 2.M.POORNIMA 3.M.ARIVOLI 4.DR. S.R.R. SENTHIL KUMAR

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित *A METHOD OF DEVELOPING ECO-FRIENDLY MULTIPURPOSE LOW COST GEOPOLYMER FERROCEMENT PANELS AND PRODUCTS THEREOF* नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख दिसम्बर 2018 के अठारहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled *A METHOD OF DEVELOPING ECO-FRIENDLY MULTIPURPOSE LOW COST GEOPOLYMER FERROCEMENT PANELS AND PRODUCTS THEREOF* as disclosed in the above mentioned application for the term of 20 years from the 18th day of December 2018 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 08/11/2023
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 18th day of December 2020 and on the same day in every year thereafter.

पेटेंट कार्यालय,भारत सरकार
The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
(पेटेंट नियमावली का नियम 74) | (Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No. : 492520
आवेदन सं. / Application No. : 202041001151
फाइल करने की तारीख / Date of Filing : 10/01/2020
पेटेंटी / Patentee : SONA COLLEGE OF TECHNOLOGY
आविष्कारकों का नाम /Name of Inventor(s) : 1.Dr. S.R.R. Senthilkumar 2.Dr. R. Malathy

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित *A METHOD TO MINIMIZE PLASTIC SHRINKAGE CRACKING OF CONCRETE CONSTRUCTIONS UNDER VARIABLE AMBIENT CONDITIONS* नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख जनवरी 2020 के दसवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled *A METHOD TO MINIMIZE PLASTIC SHRINKAGE CRACKING OF CONCRETE CONSTRUCTIONS UNDER VARIABLE AMBIENT CONDITIONS* as disclosed in the above mentioned application for the term of 20 years from the 10th day of January 2020 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 01/01/2024
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 10th day of January 2022 and on the same day in every year thereafter.

पेटेंट कार्यालय,भारत सरकार
The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
(पेटेंट नियमावली का नियम 74) | (Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No. : 523612
आवेदन सं. / Application No. : 202241019639
फाइल करने की तारीख / Date of Filing : 31/03/2022
पेटेंटी / Patentee : SONA COLLEGE OF TECHNOLOGY
आविष्कारकों का नाम /Name of Inventor(s) : 1.Mrs. S. Saranya 2.Mr. P. Ashokkumar 3.Dr. D. Jegatheeswaran 4.Dr. R. Malathy 5.Dr. S.R.R. Senthilkumar

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित *A PROCESS OF PRODUCING LIGHTWEIGHT FOAMED CONCRETE USING GREEN FOAMING AGENT* नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख मार्च 2022 के इकतीसवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled *A PROCESS OF PRODUCING LIGHTWEIGHT FOAMED CONCRETE USING GREEN FOAMING AGENT* as disclosed in the above mentioned application for the term of 20 years from the 31st day of March 2022 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 12/03/2024
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 31st day of March 2024 and on the same day in every year thereafter.

पेटेंट कार्यालय,भारत सरकार
The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
(पेटेंट नियमावली का नियम 74) | (Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No. : 529230
आवेदन सं. / Application No. : 202241070350
फाइल करने की तारीख / Date of Filing : 06/12/2022
पेटेंटी / Patentee : SONA COLLEGE OF TECHNOLOGY

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित *NIB (NEODYMIUM) CONCRETE SPRAYER FOR SMART CONSTRUCTION* नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख दिसम्बर 2022 के छठे दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled *NIB (NEODYMIUM) CONCRETE SPRAYER FOR SMART CONSTRUCTION* as disclosed in the above mentioned application for the term of 20 years from the 6th day of December 2022 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 20/03/2024
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 6th day of December 2024 and on the same day in every year thereafter.

Sona CREA

STUDENT ACHIEVEMENT

OUR CIVIL DEPARTMENT STUDENTS HAS WON THE **FIRST PRIZE** FOR "**SMART INDIA HACKATHON 2023**" DURING THE MONTH OF DECEMBER 2023.

S. NO	NAME OF THE STUDENTS	YEAR	ORGANIZED BY	DATE & YEAR	EVENT NAME	PLACE
1.	HARSHINI.E.K	III Year	MINISTRY OF EDUCATION	March-Apr 2023	LIFE STYLE FOR ENVIRONMENT(ESSAY COMPETITION)	III
2.	SUJITH K	IV Year	L&T CONSTRUCTION	08-09-23	AQUA ASCEND	II
	RITHISH.K	IV Year	L&T CONSTRUCTION	08-09-23	AQUA ASCEND	II
	NITHISH KUMAR. J	IV Year	L&T CONSTRUCTION	08-09-23	AQUA ASCEND	II
	YOGARAJ K	IV Year	L&T CONSTRUCTION	08-09-23	AQUA ASCEND	II
	RAVI SHANKAR. D	IV Year	L&T CONSTRUCTION	08-09-23	AQUA ASCEND	II
3.	DARANIRAJ.U	IV Year	IEI SALEM LOCAL CENTRE	27.09.23	56TH ENGINEERS DAY(BEST ENGINEERING COLLEGE STUDENT AWARD)	DR.APJ ABDUL KALAM AWARD
4.	DHINESH KANNAN.M	II	SALEM WEST CIVIL ENGINEERS ASSOCIATION, QUIZ CONTEST	01.12.23	BUILD EXPO - 2023	THIRD PRIZE
5.	HARSHINI.E.K	III Year	MINISTRY OF EDUCATION	19.12.23 to 23.12.23	SMART INDIA HACKATHON	WINNER
6.	MADHURAGHAVAN.V					
7.	HARIPRASATH.M					
8.	MANO MARGA DHARSHINI.R					
9.	KIRUBANITHI.T	II	MINISTRY OF EDUCATION	19.12.23 to 23.12.23	SMART INDIA HACKATHON	WINNER
10.	DHINESH KANNAN.M					

STUDENT ACHIEVEMENT

R.KARNAN WON *THIRD PRIZE* IN SOFT TENNIS COMPETITION (INTERNATIONAL LEVEL 2023).

Om Prakash (III-Year) won third prize in Athletics (Anna university Sports Board)

Our Department final year student **U.DARANIRAJ** has got ***"DR.APJ.ABDUL KALAM"*** award ***BEST ENGINEERING***

J.RANJANI (III-year) student Winner AIU-south zone inter University

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AWARDS RECIEVED

Our Civil Department HOD Dr.R.Malathy Professor/ Dean (R&D) Has received the ISTE National Award For "Best Outstanding Teacher in Civil Engineering " Held at 12th Feb 2024

Our Department has got the ***"BEST STUDENT CHAPTER"*** **by IE(I) Salem local centre celebration of 56TH ENGINEERS DAY** .

Our Department Assistant Professor Dr.A.Shalini has got the ***"BEST YOUNG ENGINEER AWARD"*** **by IE(I) salem local centre celebration of 56th ENGINEERS DAY**

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Dr.D.JEGATHEESWARAN/ PROFESSOR Has Received the "NSF LEAD AUDITOR RECOGNITION" Organized by National Science Foundation

Dr.D.JEGATHEESWARAN /Professor has Received the "INTERNATIONAL BEST RESEARCHER OF THE YEAR" organized by Asia Research Awards

Bharathi, II year, Civil

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