



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
(Accredited by NBA-AICTE, New Delhi, Accredited by NAAC with "A" Grade)
Madagadipet, Puducherry - 605 107



DEPARTMENT OF CIVIL ENGINEERING

*INDIAN CONCRETE INSTITUTE
ANNUAL REPORT*

(Academic Year: 2023 to 2024)



Submitted by
Department of Civil Engineering



Preface

The Indian Concrete Institute (ICI) is a premier professional organization in India committed to the advancement of concrete technology and its effective application in the field of civil engineering. Since its inception, the Institute has been actively engaged in promoting excellence in concrete construction through the dissemination of technical knowledge, encouragement of research and innovation, and facilitation of interaction among professionals from academia, industry, and government organizations.

Concrete, being one of the most widely used construction materials, plays a crucial role in the development of infrastructure. Recognizing this significance, the Indian Concrete Institute has consistently worked towards improving the quality, durability, and sustainability of concrete structures. It provides a common platform for engineers, architects, researchers, and students to exchange ideas, share experiences, and discuss emerging trends and challenges in the construction sector.

The Institute organizes a wide range of technical activities, including national and international conferences, seminars, workshops, training programs, and guest lectures. These initiatives aim to enhance the technical competence of professionals and keep them updated with the latest advancements in materials, design methodologies, and construction practices. In addition, ICI publishes technical journals, manuals, and guidelines that serve as valuable resources for practitioners and researchers.



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ABOUT THE INSTITUTE

Sri Manakula Vinayaga Educational Trust was founded to provide quality and affordable education to the weaker sections of society. The trust established Sri Manakula Vinayagar Engineering College (SMVEC) in 1999. SMVEC is an autonomous institution affiliated to Pondicherry University. It offers 13 undergraduate, 8 postgraduate and 11 Research programs in engineering. SMVEC has been accredited by NAAC with “A” grade and NBA. The institution is also accredited by TATA consultancy services. The college has a good placement record with students getting job offers from top companies in India and abroad. SMVEC students have won many awards and accolades for their academic achievements. To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society.

Vision

- To nurture the cornerstone of excellence in engineering education and drive innovation by seamlessly integrating the fundamentals of Science and Humanities

Mission

M1: Quality Education : To provide comprehensive academic system that amalgamates the cutting edge technologies with best practices.

M2: Research and Innovation : To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

M3: Employability and Entrepreneurship : To inculcate the employability and entrepreneurial skills through value and skill based training.

M4: Ethical Values : To instill deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.



ABOUT THE DEPARTMENT

The Department of Civil Engineering is a premier department that offers high-quality UG, and Ph.D. programs. The UG program B.Tech – Civil Engineering is accredited by the National Accreditation Board, AICTE–New Delhi, and has a strong placement record with graduates widely recognized by leading construction, infrastructure, and consultancy firms. The department’s alumni are highly sought-after by employers in the civil engineering and infrastructure sector. Our department contributes significantly to achieving national development goals through a strong commitment to sustainable infrastructure, innovative construction practices, and responsible engineering solutions, meeting the demands of a rapidly developing and urbanizing world.

Vision

We envision a world where the civil engineering department will be a home to an intellectual community with good quality education embedded with practical knowledge by inculcating research, strong social commitment and ethical values from its students, staffs and alumni.

Mission

Quality Education: To fulfill the requirements of construction industry, Civil Engineering profession and rural community through dissemination of technical services.

Practical Knowledge: To impart quality and real-time education to the students with the knowledge & skills needed for Civil Engineering practice

Work Efficiency: To encourage research, development and consultancy through sustained interaction with industry & research organization.

Societal issues: To develop graduates to compete at the global level to deal with modern issues.

Moral & Ethical: To insist ethical values and professionalism among the students.

Programmes offered

- B.Tech - Civil Engineering
- Ph.D - Civil Engineering



“Shaping a stronger world through structures, sustainability, and smart infrastructure.”

ABOUT ICI

The Indian Concrete Institute (ICI) is a premier professional body in India dedicated to the growth and development of concrete technology and its applications in the construction industry. Established with the vision of promoting excellence in concrete construction, ICI serves as a bridge between academia, industry, and research organizations. ICI aims to advance knowledge in the field of concrete by encouraging research, innovation, and the adoption of modern construction practices. It provides a platform for engineers, architects, academicians, and students to share technical expertise and stay updated with the latest developments in materials, design, and construction techniques. The Institute conducts various technical activities such as seminars, workshops, conferences, training programs, and guest lectures at both national and regional levels. These programs are designed to enhance professional skills and promote best practices in concrete technology.

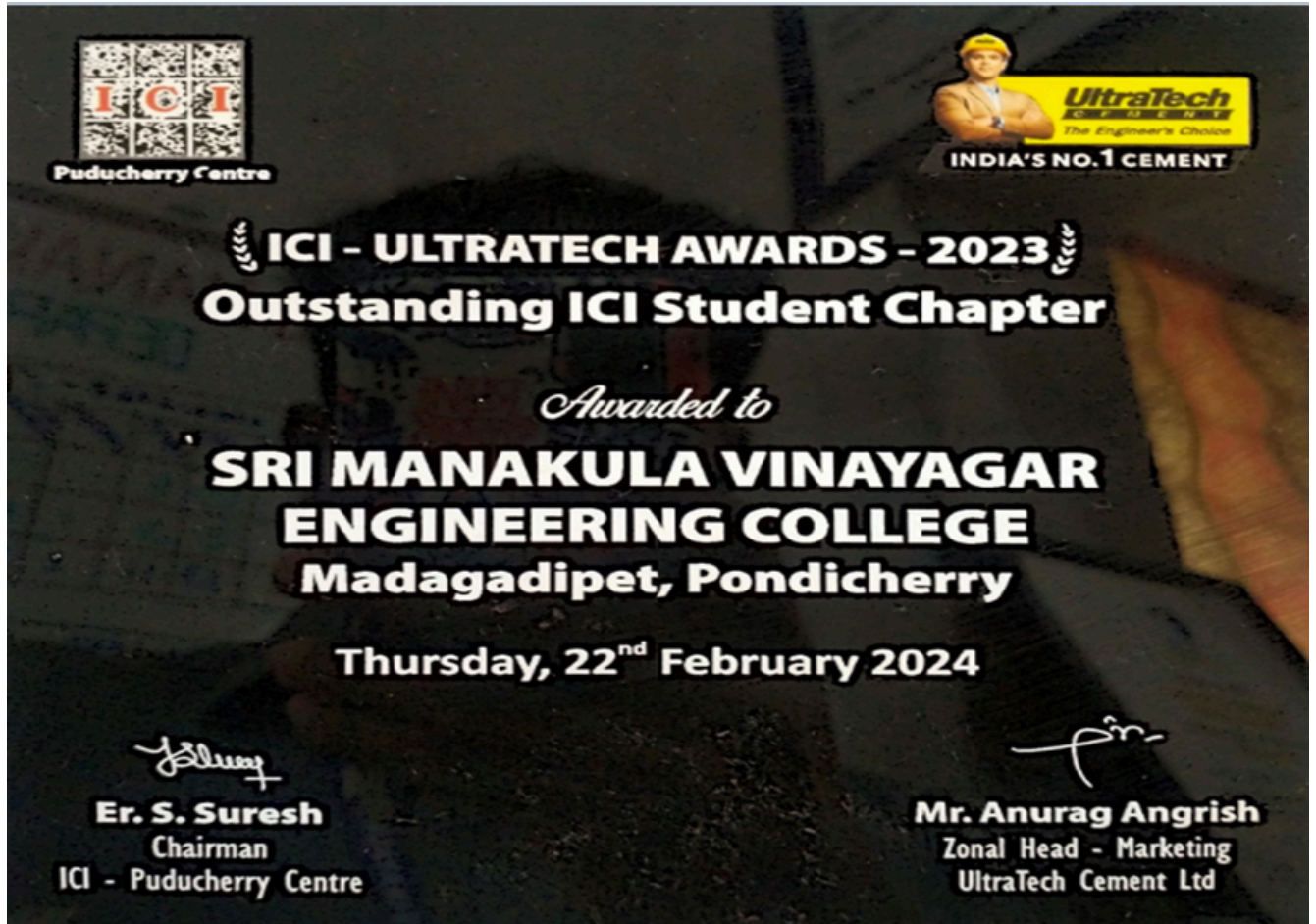
Objectives of ICI

The primary goal of ICI are as follows:

- To promote and advance the science and technology of concrete and its applications in the construction industry.
- To encourage research, innovation, and development in the field of concrete materials, design, and construction practices.
- To disseminate technical knowledge through seminars, workshops, conferences, training programs, and publications.
- To provide a platform for interaction among engineers, architects, academicians, researchers, and industry professionals.
- To improve the quality, durability, and safety of concrete structures through best practices and modern techniques.



INDIAN CONCRETE INSTITUTE AWARD



The image shows a certificate for the ICI - Ultratech Awards - 2023. The certificate is dark with white and yellow text. At the top left is the ICI Puducherry Centre logo. At the top right is the Ultratech Cement logo with the tagline 'The Engineer's Choice' and 'INDIA'S NO.1 CEMENT'. The main text reads: 'ICI - ULTRATECH AWARDS - 2023 Outstanding ICI Student Chapter'. Below this, it says 'Awarded to SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE Madagadipet, Pondicherry'. The date is 'Thursday, 22nd February 2024'. At the bottom left is the signature of Er. S. Suresh, Chairman of ICI - Puducherry Centre. At the bottom right is the signature of Mr. Anurag Angrish, Zonal Head - Marketing of UltraTech Cement Ltd.

ICI
Puducherry Centre

UltraTech
CEMENT
The Engineer's Choice
INDIA'S NO.1 CEMENT

ICI - ULTRATECH AWARDS - 2023
Outstanding ICI Student Chapter

Awarded to
**SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
Madagadipet, Pondicherry**

Thursday, 22nd February 2024

S. Suresh
Er. S. Suresh
Chairman
ICI - Puducherry Centre

Anurag Angrish
Mr. Anurag Angrish
Zonal Head - Marketing
UltraTech Cement Ltd

LIST OF EVENTS

S. No	Title of the Events
01	Seminar on “Structural Health Monitoring”
02	Seminar on “Sustainable Infrastructure Development”
03	Guest Lecture on “Latest Trends & Technologies in Concrete and Admixtures”
04	Guest Lecture on “Carrier Guidance for Civil Engineers”

Seminar on “Structural Health Monitoring”

The seminar was delivered by Mr. J. Jagan, who explained the importance of monitoring the health of structures to prevent failures. He discussed various types of sensors used in SHM such as strain gauges, accelerometers, and displacement sensors.

The session also covered data acquisition systems and how collected data is analyzed to assess structural conditions.

Real-world examples of bridges and buildings were presented to show how SHM systems are implemented. The speaker also emphasized the role of modern technologies like IoT and artificial intelligence in improving monitoring efficiency.

- Total Number of Participants : 60
- Resource Person: Mr.J.Jagan, Chairman, Vector Solution, Puducherry.
- Date : 07.10.2023

Objective of the Activity

- To introduce the concept and importance of Structural Health Monitoring.
- To understand different types of sensors and monitoring techniques used in SHM.
- To explore real-world applications of SHM in infrastructure projects.
- To highlight the role of SHM in improving safety and reducing maintenance costs.

Outcome of the Activity

- Participants will gain a clear understanding of SHM principles and techniques.
- They will be able to identify various tools and technologies used in monitoring structures.
- Attendees will develop awareness of the importance of preventive maintenance.
- Students will enhance their knowledge in emerging engineering fields and research areas.

PHOTO GALLERY



Mr.J.Jagan Chairman, Vector Solution, Puducherry addressing the session

Guest Lecture on “Sustainable Infrastructure Development”

A guest lecture on “Sustainable Infrastructure Development” was organized to create awareness among students about environmentally responsible and resource-efficient infrastructure practices. The session focused on the principles of sustainability in planning, design, and construction, highlighting the importance of reducing environmental impact and ensuring long-term benefits.

The speaker discussed the use of eco-friendly materials, energy-efficient systems, and sustainable construction techniques. Key aspects such as water conservation, waste management, and reduction of carbon footprint were also addressed. Real-world examples were presented to demonstrate the implementation of sustainable practices in modern infrastructure projects.

The lecture enhanced students’ understanding of sustainable development and encouraged them to adopt innovative and environmentally conscious approaches in their future engineering practices.

- Total Number of Participants : 60
- Resource Person:Ar.Hemalatha, Architect, Puducherry.
- Date : 04.11.2023

Objective of the Activity

To create awareness about sustainable infrastructure practices.

To understand the importance of environmental protection in construction.

To promote the use of eco-friendly materials and resource-efficient technologies.

To encourage students to adopt sustainable engineering solutions.

Outcome of the Activity

- Students gained knowledge about sustainable infrastructure concepts.
- Developed awareness of eco-friendly and energy-efficient construction practices.
- Understood the importance of reducing environmental impact in projects.
- Motivated to apply sustainable techniques in academic and practical work.

PHOTO GALLERY



Ar. Hemalatha.G, Architect addressing the session

Guest Lecture on “Latest Trends & Technologies in Concrete and Admixtures”

A guest lecture on “Latest Trends & Technologies in Concrete and Admixtures” was conducted to familiarize students with recent developments in concrete technology. The session covered advanced types of concrete such as high-performance concrete, self-compacting concrete, and green concrete.

The speaker explained the role of various admixtures, including plasticizers, superplasticizers, accelerators, and retarders, in enhancing the properties of concrete. Emphasis was given to improving strength, durability, and workability while reducing environmental impact.

Real-world applications and case studies were discussed to demonstrate the practical use of modern concrete technologies in construction projects. The lecture provided valuable insights into innovative materials and techniques used in the construction industry.

- Total Number of Participants: 60
- Resource Person: Er. Vamadev G B, General Manager – Technical, Fosroc Chemicals (India) Pvt. Ltd.
- Date: 03.02.2024

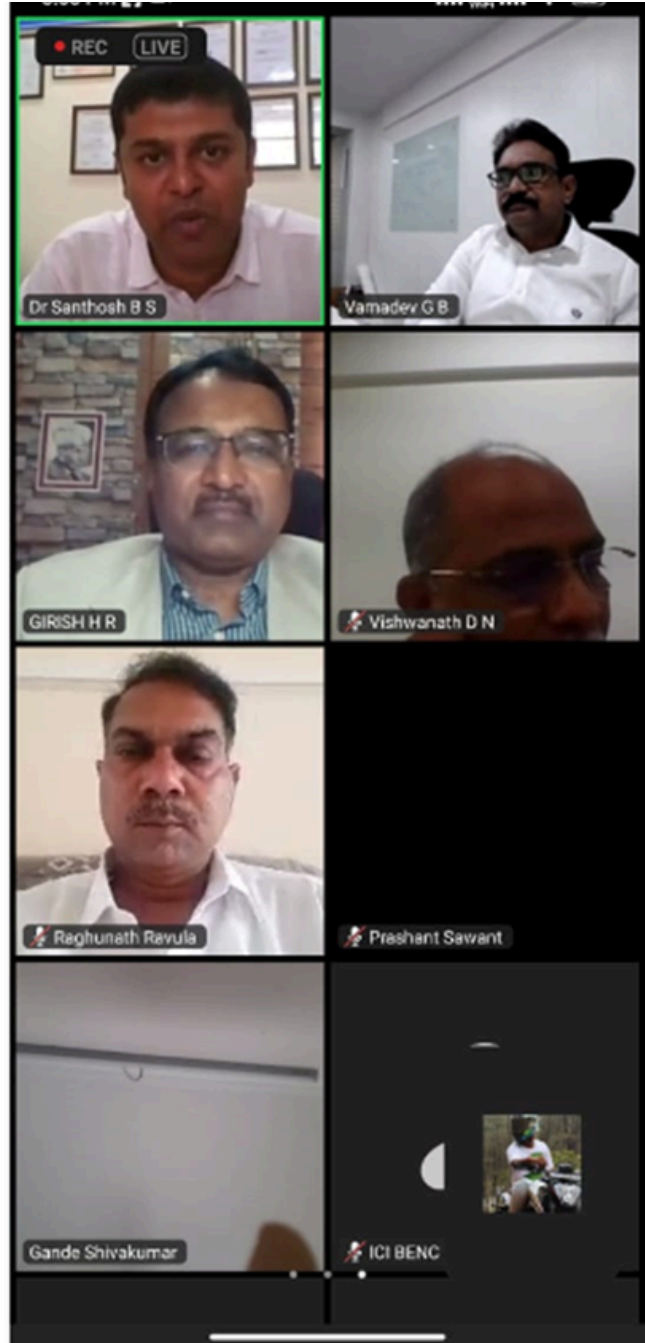
Objective of the Activity

- To provide knowledge on recent advancements in concrete technology.
- To understand the role and types of admixtures in modern construction.
- To create awareness about innovative materials and techniques in concrete.
- To enhance students’ understanding of high-performance and durable concrete.

Outcome of the Activity

- Students gained knowledge about modern trends in concrete and admixtures.
- Developed understanding of the application of admixtures in construction.
- Learned about advanced materials used for improving concrete performance.
- Motivated to adopt innovative techniques in civil engineering practices.

PHOTO GALLERY



Er. Vamadev G B, General Manager – Technical, Fosroc Chemicals (India) Pvt. Ltd addressing to students.

Guest Lecture on “Carrier Guidance for Civil Engineers”

A guest lecture on “Career Guidance for Civil Engineers” was organized to help students understand the diverse career opportunities available in the field of civil engineering. The session covered various paths such as higher education, government services, private sector jobs, and entrepreneurship.

The speaker provided insights into competitive exams, skill development, and industry requirements. Guidance on resume building, interview preparation, and emerging fields in civil engineering was also discussed. The lecture aimed to equip students with the necessary knowledge to make informed career decisions.

- Total Number of Participants : 60
- Resource Person: Er.S. Ganeshkumar, Savitha Engineering College, Chennai
- Date : 09.03.2024

Objective of the Activity

- To provide awareness about various career opportunities in civil engineering.
- To guide students in choosing suitable career paths in core and allied fields.
- To enhance knowledge about higher studies, government jobs, and private sector opportunities.
- To motivate students to plan their professional development effectively.

Outcome of the Activity

- Students gained awareness of different career options in civil engineering.
- Understood the importance of skill development and higher education.
- Learned about job opportunities in both public and private sectors.
- Motivated to plan their careers effectively and set professional goals.

PHOTO GALLERY



**Er.S. Ganeshkumar, Savitha Engineering College, Chennai
addressing to students**

OVERALL SUMMARY OF AY 2023-24

During the Academic year 2023–2024, the department actively organized various seminars and guest lectures to enhance the technical knowledge and professional skills of students. These events covered a wide range of topics including Structural Health Monitoring, Sustainable Infrastructure Development, latest trends in concrete and admixtures, and career guidance for civil engineers.

The sessions were delivered by experienced industry experts and professionals, providing students with practical insights and exposure to real-world applications. Key areas such as modern construction techniques, innovation protection, sustainable practices, and career opportunities were emphasized throughout the programs.

These events significantly contributed to bridging the gap between academic learning and industry requirements. Students gained awareness of emerging technologies, legal aspects of engineering innovations, and the importance of sustainable development. Additionally, the career guidance session helped students understand various professional pathways and the skills required to succeed in the field of civil engineering.

Overall, the events conducted during the academic year were highly informative and beneficial, fostering technical competence, innovation, and professional readiness among students.

