



The Institution of Engineers (India)

TAMILNADU STATE CENTRE

BULLETIN



Dr. V. KARTHIKEYAN, FIE.
Chairman

Er.D.GOKUL,MIE
Honorary Secretary

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From the Chairman's Desk.....



Dear Fellow Engineers,

It gives me immense delight to reconnect you all once again through this news desk.

I am delighted to share that the Institution of Engineers (India) Tamilnadu State Centre organised All India Seminar on Artificial Methods for Retrofitting and Rehabilitation of Buildings under the aegis of Civil Engineering Division in association with SRM Valliammai Engineering College on 24th & 25th July 2025 at Seminar Hall Admin Block, SRM Valliammai Engineering College. Er. E. Emmanuel Jaikar, FIE., Executive Engineer, South Presidency Division, Public Works Department, Chennai, Govt. of Tamil Nadu was the Chief Guest. He shared his expert knowledge on innovative approaches for enhancing the durability and safety of aging infrastructure.

The Institution of Engineers (India) Tamilnadu State Centre organized All India Workshop on "AIoT Powered Smart Cities: Enhancing Connectivity and Sustainability" in association with Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology on 7th & 8th August 2025 at VelTech. Dr Priyanka Kokil, Associate Professor, Department of ECE, Indian Institute of Information Technology

Design and Manufacturing, Kanchepuram was the chief guest.

I am happy to share that the Institution of Engineers (India) Tamilnadu State Centre is organizing the 39th National Convention of Environmental Engineers and National Seminar on "Environment and Digital World for Sustainable Development" on 22-23 August 2025 at ROSETTE Convention Centre, NCSCM, Anna University, Chennai. We request your good selves to kindly provide your support for the successful conduct of the above convention and I invite all corporate members to participate in the convention.

I am happy to share that the Institution of Engineers (India) Tamilnadu State Centre is organizing more number of approved technical activities. I extend my heartfelt greetings to everyone for being part of this Institution and I am confident that our great Institution will continue to reach newer heights in the years ahead.

I request all current corporate members to complete the "Know Your Membership (KYM)" form to assist us in updating and maintaining an accurate database. Your cooperation in this matter is vital for ensuring seamless communication and access to member benefits. Once completed, please submit the form to the IE(I) Tamil Nadu State Centre office in person, or email it to ieitamilnadu@gmail.com or tnsc@ieindia.org.

Dr.V.Karthikeyan,FIE.,
Chairman, IE(I) TNSC
Chairman, ENDB IE(I)



Dear Corporate Members,

I extend my warmest greetings to all my esteemed members!

The Institution of Engineers (India) Tamil Nadu State Centre conducted Dr K C G Verghese Memorial Lecture on 19th July 2025 at 4.30 pm at IE(I) TNSC Auditorium, Chennai. Air Marshal M. Matheswaran AVSM VM PhD (V) Indian Air Force was the Chief Guest and delivered an inspiring address to the participants. Dr. S. Ganesan , Vice Chancellor of Hindustan Institute of Technology and Science was the Guest of Honour.

The Institution of Engineers (India) Tamil Nadu State Centre is organising All India Workshop on Energy Sphere :IoT-Powered Smart Grids for Sustainable Cities and Green Power in association with B.S. Abdur Rahman Crescent Institute of Science & Technology on 29th & 30th August 2025 at Seminar Hall, B.S. Abdur Rahman Crescent Institute of Science & Technology, Chennai. I invite all corporate members to participate in the workshop.

The NASA-ISRO Synthetic Aperture Radar (NISAR) mission is a joint project between NASA and ISRO to co-develop and launch a dual-frequency Synthetic Aperture Radar on an Earth observation satellite in 2025. It will be the first radar imaging satellite to use dual frequencies. It will be used for remote sensing, to observe and understand natural processes on Earth.

The historical NISAR satellite was launched on 30th July 2025 at 07:40 hrs from ISRO's Sriharikota. It was precisely placed into its designated orbit, marking a successful mission for ISRO.

I appeal all corporate members to introduce IEI to all non members of IEI to avail the membership and get the benefits of our centenary year institution.

All the meetings are available in our IEI TNSC You Tube Channel. I request all our corporate members to visit our IEI TNSC You Tube Channel and SUBSCRIBE for further notification of technical events and kindly visit our website (ieitnsc.org) for more information.

Thank you all for your continuous support and participation. I look forward to our continued journey of growth and success together

Er. D. Gokul, MIE
Honorary Secretary
IE(I) TNSC

"Dr K C G Verghese Memorial Lecture" **19.07.2025**

The Institution of Engineers (India) Tamil Nadu State Centre has conducted the **Dr. K.C.G. Verghese Memorial Lecture** on 19th July 2025 at 4.30 pm at IEI TNSC Auditorium, Chennai. The event began with invocation and followed by welcome address by **Dr. V. Karthikeyan**, Chairman of IEI TNSC. **Air Marshal M. Matheswaran** AVSM VM PhD (V) Indian Air Force was the Chief Guest and **Dr. S. Ganesan** , Vice Chancellor of Hindustan

Institute of Technology and Science was the Guest of Honour.

Dr. S. Ganesan, Vice Chancellor of Hindustan Institute of Technology and Science delivered about the history of founder Dr K C G Verghese. Dignitaries were honoured by the chairman with shawl and memento. A citation of Dr. K.C.G. Verghese was presented to Air Marshal M. Matheswaran.



Prof. C.S. Karunakaran, Aerospace Committee Member of the IEI TNSC introduced the chief guest Air Marshal M. Matheswaran AVSM VM PhD (V) Indian Air Force.

Air Marshal M. Matheswaran started his speech that he was very proud to deliver the Dr. KCG Verghese Memorial Endowment Lecture. Dr. KCG Verghese was not just an academic visionary but a true nation-builder whose contribution to education continues to empower generations. He was humbled to be standing on a platform that bears his name and legacy.



He speaks about something that should no longer be just an aspiration—but a mission for all of us: India must strive for technology dominance. Not for pride alone, but for progress, for security, for sustainability, and for self-reliance. We have long relied on foreign technologies in critical sectors—from aerospace to defense, from computing

to manufacturing. While we've made significant strides, the time has come to leap forward with indigenous technologies that are designed, developed, and deployed by India, for India, and for the world.

A clear and recent example of the importance of technological dominance is Operation Sindoor. It was not just a military or diplomatic effort; it was powered by superior strategy, precision systems, and real-time decision-making—all enabled by technology. It underscored how the strength of a nation in today's world is directly tied to its control over its own tech stack.

Let me be clear: this is not just the responsibility of the government or the defense forces. This is the responsibility of every young Indian sitting in this room. You are the generation that can rewrite the blueprint of India's future. You can choose to be consumers of imported innovation—or creators of homegrown breakthroughs.

As students, researchers, and aspiring entrepreneurs, he urge you to channel your curiosity, your skills, and your passion toward building products, systems, and platforms that originate from Indian soil. Whether it's electric aircraft, AI-driven systems, green energy solutions, or space technologies—don't just dream, design. Don't just follow, lead.

Dr. KCG Verghese believed in the power of education to transform a nation. Let us extend that vision by turning knowledge into innovation, and innovation into impact.

In his memory, and on this stage, he call upon all of you to rise to this challenge. Together, let us work toward a technologically dominant India—respected, resilient, and self-reliant.

The event concluded with a vote of thanks by **Er. D. Gokul**, Honorary Secretary of IEI TNSC. Engineers, faculty members, and students from various institutions participated in the event.

**ALL INDIA SEMINAR ON
"ARTIFICIAL METHODS FOR RETROFITTING AND REHABILITATION OF BUILDINGS"
24 & 25 JULY 2025**

The Institution of Engineers (India) Tamilnadu State Centre organized the All India Seminar on "Artificial Methods for Retrofitting and Rehabilitation of Buildings" under the aegis of Civil Engineering

Division in association with SRM Valliammai Engineering College on 24th & 25th July 2025 . The event began with an auspicious touch with Tamizhthaai Vazhthu to mark the beginning of tenure

through a pious tradition. Dr. D. Elango, Committee Member, Civil Engineering Division, IE(I) TNSC extended a warm welcome to the chief guest, faculty,



Dr. M. Murugan, Principal, SRM Valliammai Engineering College delivered the Presidential address, welcoming the guests and outlining the significance of the occasion. In the address, the Principal highlighted the institution's achievements and motivated the students and participants to make use of the seminar.

Dignitaries were honoured with shawl and memento. Souvenir was released by the dignitaries during the seminar. During the inauguration, the toppers were felicitated by the esteemed guest, who presented them with books as tokens of appreciation for their academic excellence. Following the felicitation, **Mr. A. Sattatinathan Sharma**, Assistant Professor, Department of Civil Engineering, SRM VEC, took the opportunity to introduce the Chief Guest. He provided an overview of the guest's accomplishments and warmly welcomed them on behalf of the institution.

The Inaugural address was delivered by **Er. E. Emmanuel Jaikar, FIE., Executive Engineer, South Presidency Division, Public Works Department, Chennai, Govt. of Tamil Nadu**, who spoke on the topic "Artificial Methods for Retrofitting and Rehabilitation of Buildings." His talk provided valuable insights into modern techniques used to strengthen and restore existing structures using advanced technologies. He shared his expert knowledge on innovative approaches for enhancing the durability and safety of aging infrastructure.

The seminar concluded with a Vote of Thanks delivered by **Dr. A. Leema Rose**, Professor, Department of Civil Engineering, SRM VEC, who acknowledged the efforts of the organizing team and expressed appreciation to the chief guest, speakers, and attendees for making the event a success.

students and the participants hailing from various colleges. He provided the insight about the seminar in his address to the gathering.



First session was started with, **Dr. P. Gajalakshmi, Professor, B.S. Abdur Rahman Crescent Institute of Science and Technology**, who addressed the gathering on the topic of "Artificial Intelligence (AI)

and Machine Learning Techniques for Structural Health Monitoring". She began by introducing the fundamentals of AI and ML, and gradually talked into their practical applications in the field of civil engineering. Her session highlighted how these advanced technologies can be used to detect structural defects, predict potential failures, and optimize maintenance strategies in real time. With relevant case studies and examples, she effectively demonstrated the transformative potential of AI-driven tools in ensuring the safety and longevity of infrastructure. The session was both informative and thought-provoking, and it generated a keen interest among the participants.

The afternoon session featured an insightful lecture by **Dr. S. Elavenil, Professor And Dean, School Of Civil Engineering, VIT- Chennai** who addressed the gathering on the topic "Sustainable Retrofitting of Pre-Cracked Reinforced Concrete Beams Using Glass Fabric Reinforced Cementitious Matrix." Dr. S Elavenil began by explaining the challenges faced in maintaining the structural integrity of aging and damaged concrete elements. She then introduced the concept of using Glass Fabric Reinforced Cementitious Matrix (GFRCM) as an innovative and sustainable solution for retrofitting. Her session shed light on the importance of adopting sustainable materials and modern methods in structural rehabilitation, making it highly relevant for both students and professionals in the field of civil engineering.

On day 2 , 25th July 2025 the first session was delivered by **Dr. C. Pavithra, Assistant Professor, Department of Civil Engineering SRMIST**, who spoke on the topic “Application of Advanced Computational Methods in Structural Rehabilitation.” Dr. C. Pavithra discussed the growing importance of computational tools in assessing, analyzing, and enhancing the performance of deteriorated structures. She addressed about the software which includes ANSYS, MATLAB etc. Her presentation included case studies demonstrating how computational techniques help in identifying critical damage zones and in designing effective strengthening strategies. The session provided participants with a deeper understanding of how technology is shaping the future of structural engineering and rehabilitation practices.

Mr. Mehaboob Subani SK, Team Leader – Civil, at Saint-Gobain India Pvt. Ltd., Chennai. He brought in valuable industry perspectives through his session, on the topic Integrating sustainability principles in structural retrofitting practices which focused on the practical challenges and solutions in the field of structural rehabilitation and construction materials. Drawing from his extensive professional experience, Mr. Subani shared real-time project insights, highlighting innovations in materials, sustainable building practices, and modern construction techniques adopted by the industry. His session bridged the gap between academic knowledge and field application, offering participants a broader view of current industry trends and expectations. The session was highly interactive and appreciated by the attendees for its practical relevance.

The afternoon session was conducted by **Er. V. P. Arun Kumar, Senior Principal Engineer and Area Leader – Steel at Saipem Indian Projects Ltd., Chennai.**

He delivered an informative presentation on the topic “Pre-Engineered Building and Trussless Roofing System.” Er.V P Arun Kumar elaborated on the design principles and advantages of pre-engineered buildings, emphasizing their cost-effectiveness, speed of construction, and structural efficiency. He also introduced the concept of truss less roofing systems, discussing their benefits in terms of aesthetics, durability, and ease of installation. Drawing from his vast experience in large-scale projects, he shared case studies and technical insights, highlighting how these innovative systems are transforming modern construction practices. The session was well-received and enriched the participants’ understanding of advanced steel construction technologies. More than 30 papers were presented during the seminar on both days.

The Valedictory session was held on 25th July 2025 and **Dr. D. Elango**, Committee Member, Civil Engineering Division, IE(I) TNSC presented the Summary Report of Seminar. The seminar on Artificial Methods for Retrofitting and Rehabilitation of Buildings provided a comprehensive understanding of modern techniques and technologies used to enhance the structural integrity and extend the service life of existing buildings. Participants gained insights into various artificial retrofitting materials and methods such as fiber-reinforced polymers (FRP), epoxy injection, and advanced strengthening techniques. The seminar emphasized the importance of adopting innovative approaches for sustainable building maintenance and disaster mitigation. Overall, attendees are now better equipped to apply these artificial methods in practical scenarios to improve building safety, durability, and performance. **Dr. A. Leema Rose**, Professor, Department of Civil Engineering, SRM VEC, delivered the vote of thanks.

Nomination for Sri Valliappa Eminent Engineer Award 2025

The 15th of September is a memorable day in the annals of the Engineering fraternity in the country in general and the Institution in particular. It marks the birth anniversary of Sir Mokshagundam Visvesvaraya, the towering personality in the history of Indian Engineering. In recognition of his monumental contributions to national development and his unwavering dedication to the field, the Institution of Engineers (India) observes this day as Engineers' Day.

The Institution of Engineers (India) Tamilnadu State Centre celebrating the 58th Engineers Day on the

theme “Deep Tech & Engineering Excellence: Driving India’s Techade”.

With a view to promote the pursuit of excellence in the field of engineering, IEI TNSC has instituted ‘SRI VALLIAPPA EMINENT ENGINEER AWARD FOR BEST PRACTISING ENGINEER IN TAMILNADU every year to honour his excellent services rendered to the technical education and industry for more than 67 years.

The nomination form for **SRI VALLIAPPA EMINENT ENGINEER AWARD 2025** is available in the **website www.ieitnsc.org** . The filled in nomination form with supporting documents should be submitted **on or before September 9, 2025 at 5.00 pm** through post to the following address

The Chairman
The Institution of Engineers (India)
Tamilnadu State Centre
No 19, Swami Sivananda Salai,
Chepauk, Chennai – 600005
Mobile: 9962950333

This award will be presented on 58th Engineers' Day celebrations at IEI TNSC Auditorium, Chennai.

Note: * Committee Members of IEI TNSC are not eligible for this award.

Er D Gokul, MIE
Honorary Secretary
IEITNSC

Forthcoming Technical Activities

Date	Title	Venue
22,23-08-2025	39 th National Convention of Environmental Engineers and National Seminar on "Environment and Digital World for Sustainable Development"	ROSETTE Convention Centre, NCSCM, Anna University , Chennai
29, 30-08-2025	All India Workshop on "Energy Sphere :IoT-Powered Smart Grids for Sustainable Cities and Green Power "	Crescent Engineering College , Chennai

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Bulletin

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