

The Institution of Engineers (India)

TAMIL NADU STATE CENTRE



BULLETIN



Prof.Dr.D.ELANGO,FIE
Chairman

Dr.J.BALAMURUGAN,FIE
Honorary Secretary

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From the Chairman's Desk.....



Dear Fellow Engineers,

I am happy to reconnect with all of you through this latest news bulletin.

I am delighted to share that the Institution of Engineers (India), Tamil Nadu State Centre, successfully organised an All India Seminar on “Nanomaterials: From Research to Industry (NRI)” on 27th and 28th February 2026, under the aegis of the Chemical Engineering Division, in association with Sathyabama Institute of Science and Technology. The seminar was graced by Ms. Sridevi Vimalkumar, Senior Engineering Manager (Process), Larsen & Toubro Limited, as the Chief Guest.

During the month, the Tamil Nadu State Centre also conducted two insightful technical lectures. The first lecture on “Integration of Chemical Engineering and Biotechnology in Sustainable Product Development” was held on 7th February 2026, delivered by Dr. Ashok Kumar Annadurai, Professor, Department of Biotechnology and Director, Veeramani Mohana Centre for Quality Life Engineering Research, Periyar

Maniammai Institute of Science & Technology, Thanjavur.

The second lecture on “5G Technology: Architecture, Applications and Future Scope” was organised on 23rd February 2026 in online mode, with Dr. G. Sundari, Director–Administration, Sathyabama Institute of Science and Technology, Chennai, as the Guest Speaker.

I am pleased to note the active participation of our members and students in these initiatives, which continue to foster innovation, research, and skill development among young engineers.

I also request all current Corporate Members to complete the “Know Your Membership (KYM)” form to help us update and maintain an accurate membership database. Your cooperation is vital for ensuring seamless communication and effective delivery of member benefits. The completed form may be submitted in person at the IE(I) Tamil Nadu State Centre office or sent via email to ieitamilnadu@gmail.com or tjsc@ieindia.org.

Let us work together to further strengthen our professional community and contribute meaningfully to the nation's progress.

With warm regards,

Prof.Dr.D.ELANGO, FIE.,
Chairman, IE(I) TNSC



Dear Engineers and Esteemed Colleagues,

Call for Strategic Collaboration – IEI Engineering Innovation & Startup Ecosystem Initiative

The Tamil Nadu State Centre (TNSC) of IEI is embarking on a transformative initiative to position itself as a world-class hub for engineering excellence, innovation, and startup development, aligned with national missions such as Atmanirbhar Bharat and Startup India.

With the visionary guidance of **Padmabhushan Dr. A. Sivathanu Pillai** and in collaboration with leading academic institutions including Anna University, University of Madras, VIT, SRM, SSN, and others, we are establishing an integrated ecosystem that bridges engineering education, industry, and entrepreneurship.

At the core of this initiative is the formation of a dedicated Section 8 entity:

IEI Engineering Innovation & Startup Foundation (IEI-EISF) to ensure focused execution, transparent governance, and long-term sustainability.

KEY FOCUS AREAS

- Engineering Skill Development: Large-scale upskilling in AI/ML, Clean Energy, EV, Semiconductors, and Data Centre Infrastructure
- Startup Ecosystem: Structured pipeline from ideation to incubation and acceleration (Target: 1000+ startups)
- Centres of Excellence: Institution-led innovation and applied research hubs
- Industry & Alumni Integration: Mentorship, funding, and market linkage

IMPACT TARGETS (5 YEARS)

- 1,00,000 Engineers Skilled
- 1000+ Startups Enabled
- 10,000+ Employment Opportunities Generated

CALL FOR COLLABORATION

We invite active participation from all stakeholders in the engineering ecosystem:

Academic Institutions / Faculty

- Contribute through mentoring, guest lectures, and knowledge sharing (2 hours/week)
- Gain academic relevance, recognition, and industry linkage

Industry Partners

- Support through mentorship, internships, and funding
- Access a skilled talent pipeline and innovation opportunities

Government & CSR Organizations

- Partner through funding and program support
- Achieve measurable social impact aligned with national priorities

Alumni & Professionals

- Engage as mentors, investors, and ecosystem enablers
- Contribute to nation-building and professional legacy

WAY FORWARD

This is not a general appeal, but a targeted collaborative mission. Each stakeholder group will be approached with specific engagement opportunities and defined value propositions.

We request your time, expertise, and partnership in realizing this large-scale initiative. Our team will connect with you shortly for further engagement. You may also reach out directly to express your interest.

CONCLUSION

This initiative is a significant step towards building a sustainable, innovation-driven engineering ecosystem for Tamil Nadu and India. With your support, IEI-TNSC aims to create a scalable model of excellence with long-term national impact.

Let us collaborate to build the future of engineering.

Visit our website : ieitnsc.org

Join our WhatsApp Channel for more information
<https://whatsapp.com/channel/0029VbC45KHJpe8iyqJ2Ap0C>

Dr.J.Balamurugan,FIE
Honorary Secretary, IE(I) TNSC

Guest Lecture on Integration of Chemical Engineering and Biotechnology in Sustainable Product Development
7th February 2026

The Institution of Engineers (India), TamilNadu State Centre organized an online guest lecture on the topic “Integration of Chemical Engineering and Biotechnology in Sustainable Product Development” under the aegis of Chemical Engineering Division on 7th February 2026 at 6.00 PM through Zoom platform.

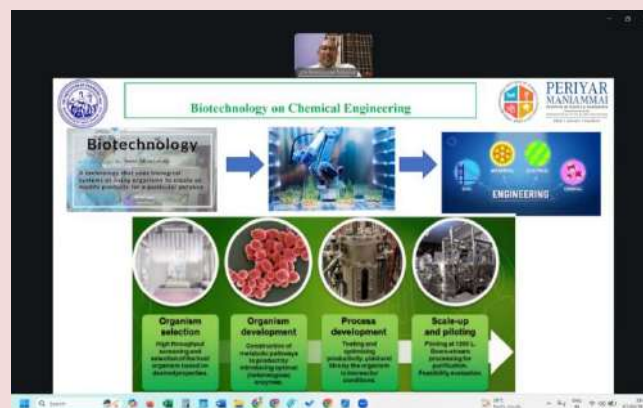
The lecture highlighted the importance of Government and Industry collaboration, with special reference to StartupTN (DIC), Government of Tamil Nadu, in promoting innovation and entrepreneurship in biotechnology and sustainable product development.

The session commenced with a welcome address by Dr. J. Balamurugan, Honorary Secretary, IE(I) TNSC. This was followed by a special address by Er. D. Gokul, Immediate Past Honorary Secretary, IE(I) TNSC.

Er. R. Praveen Kumar, Committee Member, Chemical Engineering Division, IE(I) TNSC, introduced the Guest Speaker, Dr. Ashok Kumar Annadurai, Professor, Department of Biotechnology and Director, Veeramani Mohana Centre for Quality Life Engineering Research, Periyar Maniammai Institute of Science & Technology, Thanjavur.

In his address, Dr. Ashok Kumar Annadurai emphasized that the integration of Chemical Engineering and Biotechnology plays a pivotal role in developing sustainable products that are environmentally friendly, economically viable, and socially responsible. He explained that this interdisciplinary approach combines engineering principles with biological systems to create innovative and eco-efficient solutions.

He elaborated on the complementary roles of both disciplines. Chemical Engineering primarily focuses on the design, operation, and scale-up of industrial processes, while Biotechnology utilizes living organisms such as microorganisms, enzymes, and cells to produce valuable products. When biotechnology is applied using chemical engineering principles, it enables efficient, large-scale, and sustainable production systems.



The speaker effectively demonstrated how laboratory-scale biological research can be translated into commercially viable industrial products through process optimization, scale-up strategies, and environmental considerations. The session underscored that sustainable product development depends on strong synergy between biological sciences and chemical engineering, supported by policy frameworks and industry partnerships.

The lecture also discussed India’s competitive advantages in the global bioeconomy, referring to the Department of Biotechnology Strategy 2021–2025, which outlines key focus areas such as bio-manufacturing, biopharma, bio-agriculture, and clean technologies. The strategy positions India as an emerging global leader in the bioeconomy sector.

Overall, the session provided a comprehensive perspective on how scientific innovation, engineering expertise, and policy support collectively drive sustainable industrial growth.

The event concluded with a vote of thanks by Dr. V. S. Sriraja Balaguru, Joint Honorary Secretary, IE(I) TNSC. Engineers, faculty members, and students from various institutions actively participated in the event.

The recorded session is available on the IE(I) TNSC YouTube Channel:
<https://youtu.be/FABOrJSCLyU?si=gFRWZgXmDVohgf u>

Guest Lecture on
“5G Technology: Architecture, Applications and Future Scope”
23rd February 2026

The Institution of Engineers (India), Tamil Nadu State Centre organized an online guest lecture on the topic “5G Technology: Architecture, Applications and Future Scope” under the aegis of Electronics & Telecommunication Engineering Division on 23rd February 2026 at 6.00 PM through Zoom platform.

The session commenced with a welcome address delivered by Prof. Dr. D. Elango, Chairman of IE(I) TNSC, who warmly welcomed the dignitaries, speakers, and participants and emphasized the importance of the session.



Dr. G. Sundari, Director–Administration at Sathyabama Institute of Science and Technology, Chennai was the Guest Speaker. She is an experienced academic and administrator with expertise in communication technologies and emerging wireless systems.

The session provided a comprehensive overview of 5G Technology, covering its advanced architecture and key enabling technologies such as Massive MIMO, Network Slicing, and Millimeter Wave communication. Dr.G.Sundari also highlighted the

transformative applications of 5G across various sectors, including healthcare, smart cities, Industry 4.0, autonomous systems, and satellite communications. In addition, she discussed the evolution toward 5G-Advanced and outlined the roadmap leading to future 6G networks.

The talk witnessed enthusiastic participation from engineering professionals, researchers, and students. The interactive session that followed enabled meaningful discussions on real-world deployment challenges, spectrum management, security concerns, and emerging research opportunities in next-generation wireless communication.

The event served as a valuable platform for knowledge exchange, strengthening collaboration between academia and industry, and inspiring participants to explore innovations in emerging communication technologies.

The event concluded with a vote of thanks delivered by Dr. J. Balamurugan, Honorary Secretary of IE(I) TNSC. He expressed his sincere gratitude to the distinguished speakers for sharing their valuable insights and to the organizing team for their dedicated efforts in successfully coordinating the program. He also thanked the participants for their enthusiastic presence and active involvement, which contributed greatly to the success of the event.

The recorded session is available on the IE(I) TNSC YouTube Channel:
https://youtu.be/S3qGOFLuk_s?si=7K3zi-LA1Rfu1_on

All India Seminar on Nanomaterial from Research to Industry (NRI)

27 & 28 February 2026

The Institution of Engineers (India), Tamil Nadu State Centre, organized the All India Seminar on “Nanomaterials: From Research to Industry” in association with Sathyabama Institute of Science and Technology under the aegis of Chemical Engineering Division on 27th and 28th February 2026. The seminar aimed to provide a platform for academicians, researchers, industry professionals, and students to explore recent advancements and industrial applications of nanomaterials.

The seminar commenced with Tamil Thai Vazhthu, followed by the traditional lighting of the ceremonial lamp by the dignitaries. The ceremony marked the formal beginning of the academic proceedings and created a positive and inspiring atmosphere for the participants.

Prof. Dr. D. Elango, Chairman, IE(I) Tamil Nadu State Centre, delivered the Welcome Address, warmly welcoming the Chief Guest, invited speakers, faculty members, and participants. In his address, he emphasized the importance of bridging the gap between laboratory research and industrial implementation of nanomaterials. He highlighted challenges such as process optimization, cost-effectiveness, and safety considerations in scaling up nanomaterial production.

Prof. Annam Renita A., IE(I) Chemical Engineering Student Chapter, Sathyabama Institute of Science and Technology, introduced the theme of the seminar. Dr. S. Karthikeyan, Chairman, IE(I) Kancheepuram Local Centre and Head of the IE(I) Student Chapter, delivered the felicitation address.

The seminar souvenir was released during the inaugural session, showcasing the theme along with research abstracts contributed by participants.

The inaugural address was delivered by Ms. Sridevi Vimalkumar, Senior Engineering Manager (Process), Larsen & Toubro Limited. She discussed the wide-ranging applications of nanomaterials in water treatment, advanced coatings, and environmental remediation. She emphasized sustainable synthesis and encouraged participants to develop industry-ready nanomaterial technologies.



The session concluded with a Vote of Thanks delivered by Dr. S. Sathish, Head of the Department of Chemical Engineering.

Following the inaugural session the first technical talk was delivered by Dr. R. Aswini from the Centre for Ocean Research, Sathyabama Institute of Science and Technology. Her lecture focused on the role of nanomaterials in addressing environmental and marine challenges.

She discussed water pollution and marine contamination caused by industrial and urban activities, noting that conventional treatment methods often fail to remove complex pollutants effectively. She highlighted the advantages of nanomaterials, including high surface area and enhanced reactivity.

She elaborated on advanced water purification systems and emphasized sustainable and eco-friendly nanomaterial development to avoid secondary environmental risks.



Following the invited talk, technical paper presentations were conducted with enthusiastic participation from students of various institutions including SVCE, Sriperumbudur; St. Joseph's Engineering College; NIT Trichy; and Sathyabama Institute of Science and Technology.

On day 2 (28th Feb 2026) the first technical talk was delivered by Mr. K. R. Navaneethakrishnan, Deputy Director, MDR Laboratories Pvt. Ltd. His lecture focused on the application of nanomaterials in the medical and healthcare sectors.

He explained how nanotechnology is revolutionizing modern medicine through advanced drug delivery systems, in which drugs can be targeted to specific cells, thereby improving treatment efficiency and reducing side effects. He also discussed the use of nanomaterials in diagnostic tools, biomedical devices, and antimicrobial coatings.

He emphasized the importance of quality control, safety standards, and regulatory compliance in the large-scale production of medical nanomaterials. His session provided valuable insights into the challenges and opportunities involved in translating nanotechnology from research into industrial applications. The talk was followed by paper presentations.

The second technical talk of Day 2 was delivered by Dr. Dawn S. S., Professor and Head of the Centre for Waste Management, Sathyabama Institute of Science and Technology. Her lecture focused on sustainable material development and environmental management.



She discussed the increasing challenges of waste generation and environmental pollution, emphasizing the need for innovative and sustainable solutions.

She explained how nanomaterials can be integrated into waste treatment processes to enhance efficiency in separation, filtration, and catalytic reactions. She also highlighted the concept of the circular economy, where waste materials are converted into valuable products such as energy and reusable resources. Her session emphasized the importance of eco-friendly synthesis and interdisciplinary approaches in achieving sustainable development.

Following the invited talk by Dr. Dawn S. S., an introductory address was delivered by Mr. Magesh N., who also served as the judge for Session 4 of the seminar. In his speech, he spoke on the theme of the All India Seminar, "Nanomaterials: From Research to Industry."

He highlighted the importance of translating laboratory-scale research into real-time industrial applications and emphasized the challenges associated with scalability, cost-effectiveness, and sustainability. He encouraged participants to focus on innovative and practical approaches in nanomaterial development that address current industrial and environmental needs. His address provided a clear perspective on the relevance of nanotechnology in modern engineering and motivated participants to align their research with industry requirements.

Following the invited talk, both days technical paper presentations were conducted with enthusiastic participation from students of various institutions including SVCE, Sriperumbudur; St. Joseph's Engineering College; NIT Trichy; and Sathyabama Institute of Science and Technology.

The valedictory session marked the successful conclusion of the two-day seminar. Prof. Annam Renita A., IE(I) Staff Coordinator, presented the seminar summary, highlighting the key discussions and technical sessions conducted during the event.

She emphasized that the seminar successfully achieved its objective of creating a platform for interaction between academia and industry. The sessions covered important topics such as nanomaterial synthesis, environmental applications, medical advancements, and industrial scalability.

The Valedictory Address was delivered by Er. Praveenkumar R., Head – Biotechnology, Arunai Engineering College, Tiruvannamalai, and Committee Member, Chemical Engineering Division, IE(I) TNSC.

He emphasized the importance of continuous learning and interdisciplinary collaboration in engineering.



Certificates and awards were distributed to participants in recognition of their research

presentations and contributions. Special recognition was given to outstanding paper presentations based on originality and technical quality.

Dr. J. Balamurugan, Honorary Secretary, IE(I) Tamil Nadu State Centre, proposed the Vote of Thanks. He appreciated the efforts of the organizing committee and highlighted the importance of seminars in connecting academic research with industrial needs. He also encouraged students to engage in innovative and sustainable research. He expressed his sincere gratitude to all dignitaries, speakers, participants, and organizers for their contributions. The event concluded with the National Anthem, marking the successful completion of the seminar.

IEI Institutional Membership Inaugurated at Stella Mary's College of Engineering, Kanyakumari 23rd March 2026

The IEI Institutional Membership was formally inaugurated at Stella Mary's College of Engineering on 23rd March 2026, in conjunction with the observance of World Water Day 2026. The event marked a significant milestone in strengthening the association between the institution and The Institution of Engineers (India).

The programme was graced by the Chief Guest, Dr. S. Dharmalingam, Zonal head, South Zone IEI. In his inaugural address, he emphasized the importance of professional bodies in enhancing technical competence and industry readiness among engineering graduates. He highlighted the privileges of institutional members. He congratulated Stella Mary's College of Engineering for becoming the first Institutional member in Kanyakumari local centre zone.



The Guest of Honour, Dr. Salom Gnana Thanga Vincent, Professor and Head, Department of Environmental Science, University of Kerala, delivered a special address on "When Water Flows, Equity Grows," highlighting the critical role of water conservation in achieving social and environmental sustainability.

The function was also graced by Dr. M. Marsaline Beno, Chairman, IEI Kanyakumari Local Centre; Mr. Bright Selvin, Former Chairman, IEI KKLC and Retired Superintending Engineer, TWAD Board; Mr. E. Natarajan, Former Secretary, IEI KKLC; and Dr. Megalingam, Joint Secretary, IEI KKLC.

All Deans and Heads of Departments of the institution actively participated in the event, demonstrating the institution's collective commitment towards professional development and academic excellence.

A key highlight of the programme was the release of the Pre-Conference FDP brochure of SUSTAIN-TECH 2026, which marks the beginning of a series of technical and research-oriented activities under the aegis of IEI Kanyakumari Local Centre.

The programme successfully promoted awareness on sustainable practices, professional engagement, and

institutional collaboration, aligning with the spirit of World Water Day.

Know Your Member (KYM)

Dear Corporate Members,

We request all Corporate Members to kindly complete the **Know Your Membership (KYM)** form to enable us to update and maintain an accurate and comprehensive membership database.

The KYM form is available on the IE(I) website: www.ieindia.org.

Your cooperation in this matter is essential to ensure seamless communication and uninterrupted access to member services and benefits.

After duly completing the form, you are requested to submit it by email to datamemb@ieindia.org / ieitamilnadu@gmail.com or tncs@ieindia.org

We look forward to your prompt support and cooperation.



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Posted on 15th April 2026 : Posted at Egmore RMS (Patrika)

Bulletin

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