

The Institution of Engineers (India)

TAMILNADU STATE CENTRE



BULLETIN



Dr. V. KARTHIKEYAN, FIE.
Chairman

Er. D. GOKUL, MIE
Honorary Secretary

Vol. 21 : No.11

Nov 2023

From Chairman's Desk...



Dear Fellow Engineers,

I extend my warmest greetings to all my esteemed members !

I am indeed happy to take over as Chairman of the Institution of Engineers (India), Tamilnadu State Centre. It is my proud privilege to express my sincere thanks and gratitude to all the members and I graciously accept the responsibility of leading this esteemed institution.

I assure you and eagerly anticipate your continued support and cooperation to elevate the Institution of Engineers (India), Tamil Nadu State Centre, and all the local centers to even greater heights.

The IE(I) Tamilnadu State Centre will provide platform to the stakeholders, technocrats and others to share their expertise to benefit the engineering fraternity.

I appeal to all our council members, committee members and corporate members to motivate the faculty and young engineers in Universities, Engineering Colleges, Polytechnic Colleges, Technical Institutions and Industries to become members of IE(I), and thereby increase the membership strength of our IE(I), TNSC.

Our technical lecture programs will be conducted through hybrid mode and the details of these programs will be communicated to all the members through email and social media. I request all our members to actively participate in the meetings, seminars, workshops, conferences, etc.

I am very happy to welcome our new committee members of IEI TNSC for the sessions of 2023-2024 & 2024-2025 and I look forward to get support from all my fellow engineers in organising technical activities and promoting engineering awareness in the society.

Thank you once again to one and all.

Dr V Karthikeyan, FIE
Chairman

**36th National Convention of Textile Engineers and National Seminar
on the theme “Smart Textiles”
6 & 7 October 2023**



The Institution of Engineers (India), Tamilnadu State Centre organized the 36th National Convention of Textile Engineers on the theme “Smart Textiles” on 6th& 7th October 2023 at Hotel Savera, Mylapore, Chennai.



The convention started with an inauguration followed by Tamizhthai Vazhthu and lighting of lamp by the dignitaries.

Dr V Karthikeyan, Chairman - Elect, IEI Tamilnadu State Centre delivered the welcome address. **ProfDr P Mohanraj**, Committee Member (TX), IEI Tamilnadu State Centre delivered the thematic address. **Prof (Dr) Sadhan Chandra Ray**, Chairman, TXDB, IEI delivered the presidential address.



Thiru Dharmendra Pratap Yadav IAS., Principal Secretary to Government, Handlooms, Handicrafts, Textiles and Khadi Department, Government of Tamilnadu was the chief guest and inaugurated the program.

Er E R Eswaran, Hon'ble Member of the Legislative Assembly, Thiruchengode, Tamilnadu was the guest of honour.



On this occasion two eminent engineers namely, **Mr V Elangovan**, Managing Director, SNQS Internationals and **Mr R Naresh**, Managing Director, Shuttles & Needles P Ltd, Ergo G2 Engineers P Ltd was felicitated for their outstanding contribution to the profession of textile engineering by the Chief Guest.



Young Engineer Award was presented to Dr Mukesh Bajya, Assistant Professor, Department of Textile Technology, Dr. B R Ambedkar National Institute of Technology.



Souvenir was released on the occasion by the dignitaries. **Er K N Sivaraju**, Honorary Secretary proposed the vote of thanks.



Dr B K Chakrabarti Memorial Lecture was delivered by **Dr J V Rao**, Advisor and Former CEO, Textile Sector Skill Council, Government of India on the topic "Business Opportunities in Technical Textiles".



Keynote Lecture was delivered by **Dr Wyyuru Amarnath**, Managing Director, Sri Sankara Weaving P Ltd., on the topic “Significance of Innovations in Smart Textiles”.



The National Convention was laced with presentations by experts from textile sector as well as author presentations.



Dr T Saravana Kumar, Founder & Director, Dev Innotech LLP, Karur delivered on the topic “Smart Sport Textiles: the future of sportswear” and **Dr K M Pachiyappan**, Associate Professor, Dept of Costume Design and Fashion, PSG College of Arts & Science, Coimbatore delivered on the topic “Smart Textiles”. With respect to Technical Paper Presentations, 10 technical papers were presented on the first technical session.

On the 2nd day, **Mr V R Karthikeyarayan**, Associate Professor, Fashion communication, National Institute of Fashion Technology delivered on the topic “How to look Cool on Mars” and **Dr A Selvakumar**, Assistant Professor, Senior Grade, VIT Fashion Institute of Technology delivered on the topic “Smart Textiles”.



19 technical paper presentations were presented on the second technical session



The valedictory function was held on 7th October 2023 at 4.00 pm at Hotel Savera, Chennai. The program started with the welcome address by **Dr L Ramesh**, Chairman of IEI Tiruvallur Local Centre and the Chief Guest for the Valedictory function was **Mr Vijay Kapoor**, Founder, Derby Men. **Er Milind Lakshmikant Patil**, Member,

TXDB, IEI delivered the presidential address. Recommendation of the convention was presented by **Prof Dr P Mohanraj**, Convener and Committee Member (TX) IEI TNSC. **Er K N Sivaraju**, Honorary Secretary, IEI TNSC proposed the Vote of thanks. The program ended with National Anthem.

Opening Ceremony of Centenary Monument

28.10.2023



The Institution of Engineers (India) Tamilnadu State Centre in commemoration of Centenary Celebration a monument was unveiled on 28th October 2023 at IEI TNSC Premises. The centenary monument was unveiled by the chief guest Dr G Ranganath, President – Elect, IE(I). The function started with the invocation followed by lighting of lamp by the dignitaries. Er S Kannan, Chairman, IE(I) TNSC welcomed the gathering and briefed about the history of IEI TNSC. by Dr V Karthikeyan, Chairman- Elect, IE(I) TNSC delivered the

felicitation address. Dr G Ranganath, President – Elect, IE(I) delivered the inaugural address. In his address he briefed about the history of IEI, and growth of IEI Tamilnadu State Centre. He suggests to conduct more technical activities in Tamilnadu State Centre and Local Centres of Tamilnadu. Chairman honoured the chief guest and guest of honour with shawl and mementos. Er K N Sivaraju, Honorary Secretary proposed the vote of thanks. The event ended with the National Anthem.

Annual Session 05.11.2023



The Institution of Engineers (India) Tamil Nadu State Centre Annual Session was held on 5th November 2023 at 11.45 am at IEI TNSC auditorium, Chennai. The program started with invocation and Er S Kannan, Chairman, IE(I) TNSC delivered the welcome address. Er S Kannan, installed the new chairman Dr V Karthikeyan. After the installation of a



new Chairman, members honoured Dr V Karthikeyan, Chairman, IE(I) TNSC, Er D Gokul, Honorary Secretary, IE(I) TNSC, Er S Kannan, Immediate Past Chairman and Er K N Sivaraju, Immediate Past Honorary Secretary. Dr V Karthikeyan, Chairman IE(I) TNSC delivered the Chairman's Speech.



Ms. Rajalakshmi Srinivasan, Director - Product Management, Zoho Corporation, Chennai was the Chief Guest and inaugurated the Annual Session. Chief Guest was honoured by Dr V Karthikeyan,

Chairman IE(I) TNSC with shawl and memento. Er D Gokul, Honorary Secretary of IEI TNSC proposed the Vote of thanks. The program ended with the National Anthem.

**ALL INDIA SEMINAR ON
“SMART MATERIALS FOR FUTURE APPLICATIONS”
28 & 29 August 2023**



The Institution of Engineers (India) Tamilnadu State Centre and Madurai Local Centre jointly organized the All India Seminar on Smart Materials for Future Application under the aegis of Metallurgy and Materials Science Engineering Division in association with K.L.N. Memorial Polytechnic College on 28 & 29 August 2023 at Madurai.

The inaugural function started with the invocation, followed by lighting of lamp by the dignitaries. Dr P Udhayakumar, Honorary Secretary, Madurai Local Centre delivered the welcome address. In his welcome address, he explained about the importance of All India Seminar and detailed about the invited speakers and special lectures. Er S Natarajan, Convener, Committee Member, IE(I) TNSC delivered the thematic address.



Presidential address was delivered by Dr K B Radhakrishnan, Secretary cum Correspondent, K L N Memorial Polytechnic College. Er P V Anandhan, Principal, K L N Memorial Polytechnic College delivered the special address.

Dr B Radjaram, Chairman, IE(I) Puducherry State Centre was the chief guest and delivered the inaugural address. Dr N Sivasubramanian, Chairman, IE(I) Madurai Local Centre addressed the gathering. He explained the role of smart materials in Chandrayaan - III. Dignitaries were honoured with shawl and memento. Souvenir was released by the dignitaries during the seminar. Er K N Sivaraju, Honorary Secretary, IE(I) TNSC proposed the vote of thanks.

Committee members, faculties, industrialists and students from various institutions actively participated in the seminar.

The invited speakers for the seminar were Dr. N. Sivasubramanian, Chairman, IE(I) Madurai Local Centre delivered on the topic “Smart materials for aerospace applications”. Er. K. Adalarasu, delivered on the topic “Usage of smart materials in industry”. Dr. V. Ganesh, delivered on the topic “Smart materials for futuristic healthcare diagnostics”. Prof (Dr) A Hemalatha MIE., delivered on the topic “Smart materials for medical applications”. Er. P. Karthikeyan, delivered on the topic “Smart materials and artificial intelligence: the winning combination for future”. Er. J. Sarathkumar Sebastin, AMIE, delivered on the topic “Applications of smart materials in daily life” .

Dr. N.D. Premkumar, Co Ordinator summed up the gist of all the sessions proceedings.

The final conclusion and summary are as below:

□Materials by alloying with different elements attain varied properties. By varying their conditioning and processing, some materials obtain intelligent behavior which is highly required for many recent innovative applications. These materials are known as intelligent materials or smart materials.

□Smart materials either by application of external forces like temperature, mechanical stress, magnetic forces change their characteristics.

□Shape Memory alloy; attain their shape by applying thermal energy either by un direction or bi direction ways. Change of chemical composition in a typical Ferrous alloy with Nickel, Manganese etc., change its shape to the designed form.

□Magnetostriction Alloy changes its property like strain by the application of magnetic field. Typical use is being solenoid valve, plunger movement of an Actuator.

□Piezo electric materials obtain their electrical energy by the application of strain. Many sensors and Micro Electro Mechanical Systems have found use of this type of materials. Nowadays, these materials are extensively used in industrial purposes.

□Smart materials can be used by proper selection and designing of its chemical composition and material conditioning techniques. In some of the Aerospace and medical application for bio compatible needs, smart materials are being considered and used for the last two decades. Further refining and advance material processing can be pursued to reach more optimum results

□In sum up, in coming years innovative method of using Smart materials and advance material processing methods shall yield effective, and efficient and cost-effective systems in all the fields.



The valedictory session was held on 29th August 2023 at 3.30 pm at KLN Polytechnic College Auditorium.

Valedictory address was delivered by Er. P.V.N. Anandhan, Principal, KLNPC and Dr. N. Sivasubramanian, Chairman, IE(I)Madurai Local Centre, delivered the welcome address.

Summary report given by Er. K.N. Sivaraju, Honorary Secretary, IE(I) Tamilnadu State Centre and Prof (Dr). P. Udhayakumar Honorary Secretary, IE(I), Madurai Local Centre proposed the vote of thanks. The program ended with the National Anthem.

**All India Workshop on
Agricultural Entrepreneurship and Sustainable Natural Farming
31st August & 1st September 2023**



The Institution of Engineers (India) Tamilnadu State Centre organized the **“All India Workshop on Agricultural Entrepreneurship and Sustainable Natural Farming”** under the aegis of Agricultural Engineering Division in association with SRM Valliammai Engineering College on **31st August & 1st September 2023** .

The event began with an auspicious touch with Tamizhthaa Vazhthu to mark the beginning of tenure through a pious tradition.



Er S Kannan, Chairman, IE(I) TNSC delivered the welcome address. He narrated about the achievements of IE(I), TNSC and the significance of Entrepreneurship in agriculture and sustainability.

Dr M Murugan, Principal, SRM Valliammai Engineering College delivered the special address and presided the workshop by insisting the students on their skill development and technical knowledge enhancement related to Organic farming and Natural farming.

Dr B Chidambararajan, Director, SRM Valliammai Engineering College was the Chief Guest and delivered the inaugural address and emphasized the importance of agriculture and need for increasing cultivable land availability.

Dignitaries were honored with shawl and memento. Souvenir was released by the dignitaries during the workshop.

After the inauguration, Forenoon technical session was started by **Dr S Arumuga Perumal** Proprietor, Riyasaa labs with the theme 'IoT application in Agriculture' and the session was followed by **Mr Preethchand**, PPR, Regional Sales Manager, Promethean Power Systems Pvt Ltd., Pune in the topic Poultry & Livestock Production. Afternoon session was

preceded by **Dr N Murugan**, Assistant Professor, Department of Sericulture, SRM College of Agricultural Sciences SRMIST, Acharapakkam with the topic Sericulture Production & marketing and continued by **Dr N Vairam** Assistant Professor/Agriculture, SRMVEC, Kattankulathur about Hybrid Seed Production.

Second Day Session was started by **Mr M Jayasheelan**, Managing Director, CRYSOPS BIOCONTROL Pvt. Ltd Tuticorin about producing Natural Bio Control Agents & Bio-fertilizers and continued by **Er P Dhivya**, Assistant Professor /Agricultural Engineering, SRMVEC, Kattankulathur who explained the process to get Government Schemes & Subsidy related to agriculture. Afternoon, the session was continued by **Dr P William James**, Chief Executive Officer EFGC Biological Farm Office, Chennai who enhanced the wide knowledge on Apiary (honey bee production) and Mushroom Production with the practical session. Later, the feedback was collected from the participants and the workshop was ended with Valedictory function.

Dr A Leema Rose, the Head of Agricultural Engineering Department, SRMVEC delivered the Vote of thanks. **Er P Dhivya & Mr R Dinesh** were the coordinators' of the event. Totally 96 students from various colleges participated actively in the Workshop.

OUTCOMES:

- Students understand the importance of entrepreneurial planning, and they learn that entrepreneurs in agriculture can integrate the principles of sustainable organic farming into their business models. In the future, they can create environmentally responsible and economically viable agricultural enterprises

- And this could include starting organic farms, promoting sustainable food production, developing environmentally friendly agricultural technologies or establishing supply chains that prioritize sustainability.
- Students opined that the workshop helps them to understand the concepts easily to develop themselves as agri-entrepreneurs.
- The students noted that the workshop provided a great opportunity to learn about the open topic to engage themselves in start farming units with more confidence using various innovative technologies to help our society and create our better sustainable future.
- The workshop helped the Staff members from various specializations to gain better insights to understand the concepts in Organic Farming.



Committee Members for the session 2023 - 2025

TECHNICAL ACTIVITIES

4.00 pm : 16th December 2023 Energy Conservation Day

Licensed to post without pre-payment

Posted on 25th November 2023

Posted at :Egmore RMS (Patrika)

Bulletin

IF UNDELIVERED RETURN TO :

The Institution of Engineers (India) Tamilnadu State Centre
19, Swami Sivananda Salai, Chepauk, Chennai - 600 005.

Phone : 044-2536 0614 / 9962950333

Email : ieitamilnadu@gmail.com / tnscc@ieindia.org, Website : www.ieitnsc.org