

The Institution of Engineers (India)



T. N. STATE CENTRE

BULLETIN

Er. S. Kannan, FIE
Chairman

Er. K. N. Sivaraju, MIE
Honorary Secretary



Vol. 21 : No. 03

October 2022

From Chairman's Desk.....



Dear Fellow Engineers,

Greetings to all of you.

The IE(I) Tamilnadu State Centre organised the 37th National Convention of Chemical Engineers on the theme "Battery Energy Storage System" in association with CEST, Anna University held during 9 & 10 September 2022 at Raman Auditorium, Anna University, Chennai. The convention was graced with the dignitaries Thiru Siva. V. Meyyanathan, Hon'ble Minister for Environment - Climate Change and Youth Welfare and Sports Development, Government of Tamilnadu was the Chief Guest and Dr R Velraj, Vice Chancellor, Anna University and Dr T M Gunaraja, Past President, IEI were the Guest of Honour for the Award Ceremony. Dr G Ranganath, Chairman, CATE & Council Member, IEI TNSC & Syndicate Member, Anna University was the Chief Guest for the inaugural function and Dr R Jayavel, Dean – ACT Campus, Anna University, Chennai was the

Guest of Honour. Dr Shilpa Tripathi, Chairman, Chemical Engineering Division Board, IEI presided over the function.

It is an immense pleasure to share that the Institution of Engineers (India) Tamilnadu State Centre is proposed to celebrate the centenary year on 15th December 2022 and hosting the 37th Indian Engineering Congress from 16 – 18 December 2022 at Hotel Le Royal Meridien, Chennai.

In the eve of centenary celebration, we are hosting Asia Book of Record indexed **"100 Hours IEI TNSC TECHNO CARNIVAL"** with the support of all 16 Local Centres and 500Hr students pitch presentation video on topic "Sustainable Developments of the Nation - The Role of Engineers". I request all the corporate members to participate and support this prestigious event.

Er S Kannan
Chairman-TNSC

Wishing you all
"Happy Diwali"



37th National Convention of Chemical Engineers

on the theme **“Battery Energy Storage System”**
9 & 10 September 2022



Chief Guest: Dr G Ranganath, Chairman, CATE & Council Member, IEI TNSC & Syndicate Member, Anna University delivering the inaugural address



Chief Guest: Thiru Siva V. Meyyanathan, Hon'ble Minister for Environment - Climate Change and Youth Welfare and Sports Development, Government of Tamilnadu lighting the lamp during Award Ceremony.



Release of Souvenir

The Institution of Engineers (India), Tamilnadu State Centre organized the 37th National Convention of Chemical Engineers on the theme “Battery Energy Storage System” in association with Centre for Energy Storage Technologies (CEST), Anna University, Chennai during 09-10 September 2022 at Raman Auditorium, ACT Campus, Anna University.

The programme started with invocation and lighting of lamp by the dignitaries on 9th September 2022 at Anna University. Er. S Kannan, Chairman, IEI Tamilnadu State Centre delivered the welcome address. Dr. N Balasubramanian, Director, CEST, Anna University & Co- Chairman, 37th National Convention of Chemical Engineers delivered about the convention. Er. D Gokul, Joint Secretary, IEI TNSC and Convenor, 37th National Convention of Chemical Engineers delivered the thematic address.

Dr. G Ranganath, Chairman, CATE & Council Member, IEI TNSC & Syndicate Member, Anna University was the Chief Guest and inaugurated the



Acharya Prafulla Chandra Ray Memorial Lecture delivered by Padmabhushan Dr A Sivathanu Pillai, Founder CEO & MD of BrahMos Aerospace, Former Chief Controller (R&D), DRDO, Honorary President PMA–India

program. Dr. R Jayavel, Dean – ACT Campus, Anna University, Chennai was the Guest of Honour. Dr. Shilpa Tripathi, Chairman, Chemical Engineering Division Board, IEI presided over the function. All the dignitaries were honoured with shawl, fruit basket and memento.

On this occasion four young engineers namely, Gautham Madenoor Ramapriya, Mrs. Pallishree Prusti, Mr. Santosh Deb Barma, Dr. Somak Chatterjee were the recipients of the IEI Young Engineers Award in Chemical Engineering Division and presented papers in the National Convention. Chief Guest Dr. G Ranganath honoured the Young Engineer recipients with memento and certificate. Er. K N Sivaraju, Honorary Secretary proposed the vote of thanks.

The National Convention was laced with several keynote addresses and presentations by experts from battery energy storage sector as well as author presentations.

| Technical Session -I | |
|--|---|
| About Switching Battery operations | Mr. C Kannappan Chief Executive Officer, Switching Battery Inc |
| Development of Materials for Direct Methanol Fuel Cell (DMFC) | Dr. K Pandian Professor and Head Department of Chemistry Madras University |
| Panel Discussion: Theme: An Approach towards Sustainable Energy in India | Er. S Selvakumar, Moderator Dr. L Ramesh, Er. Kalpana, Dr. J Balamurugan, Dr. M Arivanandham and Er. S Senthilkumar |
| Lead Acid Battery Management Storage System and its Sustainable Manufacturing and Recycling | Dr. E Bhaskaran Joint Director (Engineering) / General Manager, District Industries Centre (DIC) Department of Industries and Commerce, Government of TN |
| Technical Paper Presentation 1 | <ol style="list-style-type: none"> 1. Dr. Chatterjee - Functional materials for water purification 2. Dr. Dhruvajyoti Neog & Amte Ayesha Siddiqua Rahman - Study on The Effect of Temperature on Reservoir Rock Wettability Alteration: A Review 3. Dr. Ajita Kumari - Enrichment of Low-Grade Graphite Utilizing Plastic Waste Derivatives for Battery Application 4. Mr. P Rajesh - Ca₂Fe₂O₅ based Composite Cathode for IT-SOFC Application |

37th National Convention of Chemical Engineers Award Ceremony – 10th September 2022

On day 2 (10th September 2022) the award ceremony started with invocation and lighting of lamp by the dignitaries. Welcome address was delivered by the Chairman, IEI Tamilnadu State Centre Er S Kannan and Er D Gokul, Convener delivered about the convention.

Thiru Siva. V. Meyyanathan, Hon'ble Minister for Environment - Climate Change and Youth Welfare and Sports Development, Government of Tamilnadu was the Chief Guest for the award ceremony. Dr. R Velraj, Vice Chancellor, Anna University and Dr. T M Gunaraja, Past President, IEI were the Guest of Honour. All the dignitaries were honoured with Shawl, Memento and Fruit Basket.

On this occasion three eminent engineers namely, Dr. C K Asnani, Chairman & Managing Director, Uranium Corporation of India Limited (Department of Atomic Energy, Govt. of India) Mumbai, Dr. G A Pathanjali ,

Managing Director, High Energy Batteries (India) Limited, Pudukottai, Tamilnadu and Dr. N Balasubramanian, Professor and Director, Centre for Energy Storage Technologies, Anna University were felicitated for their outstanding contribution to the profession of chemical engineering by the Chief Guest. The sponsor of the convention was also honoured by the Chief Guest. A Souvenir, containing the full text of papers presented and Chemical Technical Volume were released on the occasion by the dignitaries. 37th Indian Engineering Congress brochures were also released by the Chief Guest on this convention.

The award ceremony also included the prestigious Acharya Prafulla Chandra Ray Memorial Lecture delivered by Padmabhushan Dr. ASivathanu Pillai, Founder CEO & MD of BrahMos Aerospace, Former Chief Controller (R&D), DRDO, Honorary President PMA – India on the topic “Powering for a Clean Planet”.

Mr. Kaushik A Palicha, Managing Director / Promoter, Ram Charan Company Pvt. Ltd., Chennai delivered the keynote address on the topic “Innovation in Technology

& Competitive Advantage from India”. Paper Presentation and Poster Presentation by the authors were presented during the convention.

Technical Session -II

About High Energy Batteries (India) Ltd.,

Dr. G A Pathanjali, Managing Director , High Energy Batteries (India) Limited, Pudukottai, Tamilnadu

Technical Paper Presentation 2

1. Lucia Dominic - A Study of Bio-Carbon based Humic acid extracted from Waste Coal to replace Graphene Oxide as a Cathode Material in Li-S batteries.

5. J. Narendranath - Development of Cathode Materials for Lithium Sulphur Battery – EV Applications

2. Vijay Samuel G - Bioelectrochemical Cell for Clean Energy Generation and Treatment of Toxic Wastewater

6. S. Jason Thamizhakaran - Carbon Nanoarchitectonics in Fuel Cell Application and Energy Generation

3. Dr. S. Harinipriya - Super Chemical Technologies for making Membrane or electrode material for next generation Mg & Mg-Air batteries

7. T. Jeeva, D. Aravindhan - A Review on Onsite Hydrogen Production and Embrittlement

4. Aishwarya J - Effect of Substitution of Ru and RuO₂ in MnO₂ Electrode for Supercapacitor Applications

8. B. Raghavendra Babu - Fabrication of Lab based pouch type Supercapattery device using Nickel cobaltite/rGO Nanocomposites as an Electrode material for Energy Storage Applications



Honouring the Chief Guest Dr. S Gopukumar

The Valedictory function started with the welcome address by Er R Ramdoss, Immediate Past Chairman of IEI Tamilnadu State Centre and the Chief Guest for the Valedictory function was Dr S Gopukumar, CSIR Emeritus Scientist, Central Electro-Chemical Research Institute (CSIR- CECRI), Karaikudi. Recommendation of the convention were presented by Dr R



A view of audience

Saravanathamizan, Professor, CEST, Anna University & Co-Chairman, Technical Committee of the convention. Dr M Arivanandham, Professor, CEST, Anna University & Joint Organising Secretary of the convention announced the winner of the two days Paper Presentation and Poster Presentation. Er D Gokul, Convener of the convention proposed the Vote of thanks.

MINUTES OF THE 99th ANNUAL GENERAL MEETING 2022

The Institution of Engineers(India) Tamilnadu State Centre

MINUTES of the 99th Annual General Meeting of the Tamilnadu State Centre held on 30th October 2021 at 6.00 pm at the IEI, TNSC Auditorium, 19, Swami Sivananda Salai, Chepauk, Chennai 600005.

Before taking up the agenda, the general body observed one minute silence for the departed souls of the corporate members who expired during the year.

Er R Ramdoss, Chairman, IEI TNSC welcomed the gathering and then the agenda was taken up one by one.

1. To Confirm the Minutes of 98th Annual General Meeting held on 17th April 2021.

Chairman informed that the minutes of the 98th Annual General Meeting held on 17th April 2021 was circulated to the members through the Bulletin of October 2021 issue which may be taken as read.

As no comments were received, Er R Ravichandran, FIE proposed that the Minutes may be confirmed. Dr P Sakthivel, FIE seconded the same.

The Minutes of the 98th Annual General Meeting was confirmed.

2. To Approve the Audited Accounts and the Annual Report for the year ended 31st March 2021

Chairman informed that the Audited Accounts and the Annual Report for the year ended 31st March 2021 was circulated to the members vide Bulletin

October 2021 issue and may be taken as read.

As no comments were received from the members on the audited accounts and the annual report, Dr G Ranganath, FIE proposed that the Audited Accounts and the Annual Report for the year ended on 31st March 2021 may be confirmed. Er D Kumar, FIE seconded the same.

The Audited Accounts and the Annual Report for the year ended 31st March 2021 was approved.

3. To Report on the composition of the Committee for the sessions 2021-2022

Chairman informed that the existing committee would take charge for the session 2020-2021 and the members are.

- **Er S Kannan FIE**, Chairman, Consulting Engineer, Chennai
- **Er K N Sivaraju MIE**, Honorary Secretary, Consulting Engineer, Salem

The Following Members will serve in the Committee (Representing the Engineering Divisions given in the parenthesis)

- 1. Dr K Vijaya Raja**, Professor & HOD (Aeronautical Department), KCG College of Technology, Chennai (Aerospace Engineering Division)
- 2. Er S Priya**, Assistant Engineer (AED), o/o Chief Engineer(AED), Nandanam, Chennai(Agriculture Engineering Division)

3. **Ar T M G Aparna**, Consulting Engineer, Chennai (Architectural Engineering Division)
 4. **Er D Gokul, Scientist-SE**, Sathish Dhawan Space Centre, ISRO (Chemical Engineering Division)
 5. **Dr P Sakthivel**, Professor, (ECE Department) Anna University and Dean, University College of Engineering Kanchepuram(Computer Engineering Division)
 6. **Dr Col. P Nallathambi**, Principal Structural Consultant & Managing Director, Sakthi Consultancy Pvt. Ltd., Chennai (Civil Engineering Division)
 7. **Er S Loganathan**, HOD (Civil Engg Department), Thiagarajar Polytechnic College, Salem (Civil Engineering Division)
 8. **Er P K Natesan**, Consulting Engineer, Salem (Civil Engineering Division)
 9. **Er S Senthilkumar**, Assistant Executive Engineer /ATC, O/o.SE/LD&GO, TANTRANSOCO, Chennai (Electrical Engineering Division)
 10. **Dr N I Maheshwari**, Lecturer, (EEE Department) Thiagarajar Polytechnic College, Salem(Electrical Engineering Division)
 11. **Dr C Venkatesh**, Principal, Sengunthar Engineering College, Tiruchengode(Electronics and Telecommunication Engineering Division)
 12. **Er D Arulselvan**, Former HOD, Electronics and Telecommunication Engineering, Thiagarajar Polytechnic College, Salem (Electronics and Telecommunication Engineering Division)
 13. **Dr V Karthikeyan**, Principal, Thiagarajar Polytechnic College, Salem (Environmental Engineering Division)
 14. **Dr S Karuppasamy**, Former Addl General Manager, BHEL, Trichy (Mechanical Engineering Division)
 15. **Dr K Palani Kumar**, Principal, Sri Sairam, Institute of Technology, Chennai (Mechanical Engineering Division)
 16. **Dr K Pandian**, Past Chairman, IEI Salem Local Centre, Salem (Mechanical Engineering Division)
 17. **Er S Rengaraju**, Sr. Visiting Faculty, GKM College of Engineering & Technology / IMST, Chennai (Marine Engineering Division)
 18. **Er S Natarajan**, Retired Deputy General Manager, SAIL, Salem Steel Plant, Salem (Metallurgy and Material Science Engineering Division)
 19. **Dr C Sendil Kumar**, Additional Chief Manager R&D, NLC India Ltd., Neyveli (Production Engineering Division)
 20. **Dr P Mohanraj**, Professor, National Institute of Fashion Technology (NIFT), Chennai (Textile Engineering Division)
- EX-OFFICIO MEMBERS:**
- Dr G Ranganath**, Council Member, IEI TNSC and Principal, Adhiyamaan College of Engineering, Hosur
- Dr T M Gunaraja**, Imm. Past President, IE(I)
- Er R Ramdoss**, Consulting Engineer, Chennai and Immediate Past Chairman, IEI TNSC
- Dr P Rajamani**, Council Member, Electrical Engineering Division, IE(I)
- Dr M Velan**, Council Member, Environmental Engineering Division, IE(I)
- Prof (Dr) Ms G Thilagavathi**, Council Member,

Textile Engineering Division, IE(I)

Dr L Karunamoorthy, Council Member, Production Engineering Division, IE(I)

Er Shaji John, Director (Power), NLC India Ltd., Neyveli (Chairman, Neyveli Local Centre)

Dr S Shanmugam, Dean – Student Affairs, Coimbatore Institute of Technology, Coimbatore (Chairman, Coimbatore Local Centre)

Er N Rajasekaran, Former Deputy General Manager, BHEL, Trichy (Chairman, Tiruchirappalli Local Centre)

Dr N Sivasubramanian, Senior Scientist, Chief General Manager (Retd.) ISRO –Thiruvananthapuram Madurai (Chairman, Madurai Local Centre)

Er M Shanmugasundaram, Scientific Officer / G, Reactor Design & Technology Group, IGCAR, Kaplakkam (Chairman, Kalpakkam Local Centre)

Er S R Saravanan, Manager (CEM), SAIL, Salem Steel Plant, Salem (Chairman, Salem Local Centre)

Er M Salai Manalan, Dy. General Manager (WEG & Water Systems), BHEL Ranipet (Chairman, Ranipet Local Centre)

Er T Retnavel, General Manager, L & T Ltd., Tuticorin (Chairman, Tuticorin Local Centre)

Dr T Menaka Devi, Professor, Dept. of Electronics & Communication, Adhiyamaan College of Engineering, Hosur (Chairperson, Hosur Local Centre)

Dr R Nallusamy, Professor, Excel College of Engineering & Technology, Erode (Chairman, Erode Local Centre)

Er E Jayakumar, Trade Link, Thanjavur (Chairman,

Thanjavur Local Centre)

Dr R Velayutham, Principal, Einstein College of Engineering, Tirunelveli (Chairman, Tirunelveli Local Centre)

Dr S Arumuga Perumal, HOD, Computer Department, S.T. Hindu College, Nagercoil (Chairman, Kanyakumari Local Centre)

Dr D Elango, Professor & Head (Civil Engg. Department) SRM Valliammai Engineering College, Kanchepuram (Chairman, Kanchepuram Local Centre)

Dr L Ramesh, Joint Register (Events & Publications), Dr M G R Educational and Research Institute, Chennai (Chairman, Tiruvallur Local Centre)

Dr P T Ravichandran, Professor, Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur (Chairman, Kattankulathur Local Centre)

4. To Appoint the Auditors for the year 2021-2022 and to fix their remuneration

Chairman informed that confirmation was received from M/s S Shankar & Associates, Chartered Accountants & Associates, Flat No: 1, M N R Apartment, No : 7A/1, Nadar Street, Velachery , Chennai – 600 042 to continue as Auditors for the year 2021 - 2022 at the remuneration of **Rs.17500/= + GST 18%**.

Dr T M Gunaraja, FIE proposed that the services of the existing Auditors may be continued for the year 2021 - 2022 at the remuneration of **Rs.17500/= + GST 18%**. Er KN Sivaraju, MIE seconded the same.

Er S Kannan, Honorary Secretary, IEI TNSC proposed the Vote of thanks.

Er S Kannan, FIE
Honorary Secretary

Annual Report for the Year 2020-2021

The Chairman and Members of the Committee of the Tamilnadu State Centre have great pleasure in presenting the Annual Report for the year 2021– 2022 (Ended on 31st March 2022) to its members, giving in brief, a resume of activities of the State Centre during this period.

OFFICE BEARERS:

2.1 Er S Kannan FIE, Chairman, Consulting Engineer, Chennai

2.2 Er K N Sivaraju MIE, Honorary Secretary, Past Honorary Secretary, IE(I), Salem Local Centre, Salem

The Following Members will serve in the Committee (Representing the Engineering Divisions given in the parenthesis)

1. Er S Priya, Assistant Engineer (AED), O/o Chief Engineer(AED), Nandanam, Chennai (Agriculture Engineering Division)

2. Dr K Vijaya Raja, Professor & HOD (Aeronautical Department), KCG College of Technology, Chennai (Aerospace Engineering Division)

3. Ar T M G Aparna, Consulting Engineer, Chennai (Architectural Engineering Division)

4. Er D Gokul, Scientist-SE, Sathish Dhawan Space Centre, ISRO (Chemical Engineering Division)

5. Dr P Sakthivel, Professor, (ECE Department) Anna University and Dean, University College of Engineering Kanchepuram(Computer Engineering Division)

6. Dr Col. P Nallathambi, Principal Structural Consultant & Managing Director, Sakthi Consultancy Pvt. Ltd., Chennai (Civil Engineering Division)

7. Er S Loganathan, HOD (Civil Engg

Department), Thiagarajar Polytechnic College, Salem (Civil Engineering Division)

8. Er P K Natesan, Consulting Engineer, Salem (Civil Engineering Division)

9. Er S Senthilkumar, Assistant Executive Engineer /ATC, O/o.SE/LD&GO, TANTRANSOCO, Chennai (Electrical Engineering Division)

10. Dr N I Maheshwari, Lecturer, (EEE Department) Thiagarajar Polytechnic College, Salem(Electrical Engineering Division)

11. Dr C Venkatesh, Principal, Sengunthar Engineering College, Tiruchengode (Electronics and Telecommunication Engineering Division)

12. Er D Arulselvan, Former HOD, Electronics and Telecommunication Engineering, Thiagarajar Polytechnic College, Salem (Electronics and Telecommunication Engineering Division)

13. Dr V Karthikeyan, Principal, Thiagarajar Polytechnic College, Salem (Environmental Engineering Division)

14. Dr S Karuppasamy, Former Addl General Manager, BHEL, Trichy (Mechanical Engineering Division)

15. Dr K Palani Kumar, Principal, Sri Sairam, Institute of Technology, Chennai (Mechanical Engineering Division)

16. Dr K Pandian, Past Chairman, IEI Salem Local Centre, Salem (Mechanical Engineering Division)

17. Er S Rengaraju, Sr. Visiting Faculty, GKM College of Engineering & Technology / IMST, Chennai (Marine Engineering Division)

18. Er S Natarajan, Retired Deputy General Manager, SAIL, Salem Steel Plant, Salem (Metallurgy and Material Science Engineering Division)

19. Dr C Sendil Kumar, Additional Chief Manager R&D, NLC India Ltd., Neyveli (Production Engineering Division)

20. Dr P Mohanraj, Professor, National Institute of Fashion Technology (NIFT), Chennai (Textile Engineering Division)

EX-OFFICIO MEMBERS:

Dr T M Gunaraja, Imm. Past President, IE(I)

Dr G Ranganath, Council Member, IEI TNSC and Principal, Adhiyamaan College of Engineering, Hosur

Er R Ramdoss, Consulting Engineer, Chennai and Immediate Past Chairman, IEI TNSC

Er A Sekar, Council Member, IEI (EL)

Dr S Dharmalingam, Council Member, IEI (EL)

Dr R Venkatesan, Council Member, IEI (MC)

Dr R Velraj, Council Member, IEI and Vice Chancellor, Anna University, Chennai

Er Shaji John, Director (Power), NLC India Ltd., Neyveli (Chairman, Neyveli Local Centre)

Dr S Shanmugam, Dean – Student Affairs, Coimbatore Institute of Technology, Coimbatore (Chairman, Coimbatore Local Centre)

Er B Balasubramanian, General Manager & Head, BHEL, Noida, Delhi (Chairman, Tiruchirappalli Local Centre)

Dr N Sivasubramanian, Senior Scientist, Chief General Manager (Retd.) ISRO –Thiruvananthapuram Madurai (Chairman, Madurai Local Centre)

Er M Shanmugasundaram, Scientific Officer / G, Reactor Design & Technology Group, IGCAR, Kalpakkam (Chairman, Kalpakkam Local Centre)

Er S R Saravanan, Manager (CEM), SAIL, Salem Steel Plant, Salem (Chairman, Salem Local Centre)

Er M Salai Manalan, Dy. General Manager (WEG & Water Systems), BHEL Ranipet (Chairman, Ranipet Local Centre)

Er T Retnavel, General Manager, L & T Ltd., Tuticorin (Chairman, Tuticorin Local Centre)

Dr T Menaka Devi, Professor, Dept. of Electronics & Communication, Adhiyamaan College of Engineering, Hosur (Chairperson, Hosur Local Centre)

Dr R Nallusamy, Professor, Excel College of Engineering & Technology, Erode (Chairman, Erode Local Centre)

Er E Jayakumar, Proprietor, Agro Trade Link, Thanjavur (Chairman, Thanjavur Local Centre)

Dr R Velayutham, Principal, Einstein College of Engineering, Tirunelveli (Chairman, Tirunelveli Local Centre)

Dr S Arumuga Perumal, HOD, Computer Department, S.T. Hindu College, Nagercoil (Chairman, Kanyakumari Local Centre)

Dr D Elango, Professor & Head (Civil Engg. Department) SRM Valliammai Engineering College, Kanchepuram (Chairman, Kanchepuram Local Centre)

Dr L Ramesh, Joint Register (Events & Publications), Dr M G R Educational and Research Institute, Chennai (Chairman, Tiruvallur Local Centre)

Dr P T Ravichandran, Professor, Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur (Chairman, Kattankulathur Local Centre)

OUTSTANDING ENGINEERS:

Dr A Elaya Perumal, Director, Centre for Affiliation of

Institutions, Anna University, Chennai

Dr Ashok Verghese, Director, Hindustan Institute of Technology and Science, Chennai

3. ANNUAL GENERAL MEETING

The 98th Annual General Meeting of the Tamilnadu State Centre was held on 17th April 2021 at 6.00 PM at the Institution premises, 19, Swami Sivananda Salai, Chepauk, Chennai - 600 005

3.2 MEMBERSHIP:

The Comparative Statement shows the Strength of Membership of the State Centre for the Past five years

| Strength As on | AG | AR | AS | CH | CP | CV | EL | EN | ET | MC | MM | MN | MR | PR | TX | Total | Non –Corp Members |
|----------------|----|----|-----|-----|------|------|------|-----|------|------|-----|-----|-----|-----|-----|-------|-------------------|
| 31.03.2018 | 72 | 32 | 89 | 516 | 1167 | 7277 | 4836 | 120 | 2932 | 7331 | 136 | 151 | 144 | 445 | 305 | 25553 | 96500 |
| 31.03.2019 | 80 | 31 | 101 | 560 | 1266 | 7627 | 5032 | 128 | 3049 | 7616 | 139 | 152 | 146 | 466 | 311 | 26704 | 72245 |
| 31.03.2020 | 84 | 41 | 118 | 606 | 1394 | 8097 | 5290 | 139 | 3190 | 7900 | 149 | 158 | 149 | 476 | 317 | 28108 | 73000 |
| 31.03.2021 | 88 | 42 | 125 | 637 | 1429 | 8470 | 5436 | 150 | 3232 | 8106 | 154 | 160 | 151 | 498 | 324 | 29002 | 73000 |
| 31.03.2022 | 92 | 44 | 131 | 664 | 1495 | 8818 | 5649 | 154 | 3323 | 8315 | 159 | 161 | 153 | 507 | 331 | 29996 | 73000 |

4. ACTIVITIES:

The following comparative statement shows the activities under various Divisions organized by the State Centre for the past five years.

| Strength As on | AG | AR | AS | CH | CP | CV | EL | EN | ET | MC | MM | MN | MR | PR | TX | ID | Total |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 31.03.2018 | - | - | - | - | - | - | 3 | - | - | 2 | - | - | - | - | - | - | 5 |
| 31.03.2019 | 1 | - | - | 1 | 1 | - | 2 | - | - | 3 | - | - | 1 | - | 1 | 3 | 13 |
| 31.03.2020 | - | - | - | 1 | - | 1 | 2 | - | - | - | 1 | - | 2 | - | - | 4 | 11 |
| 31.03.2021 | - | - | 1 | 3 | 9 | - | 1 | - | - | 2 | - | - | 1 | 1 | - | 11 | 29 |
| 31.03.2022 | - | - | 2 | 1 | - | - | - | - | - | - | - | - | 1 | - | - | 3 | 07 |

5. SEMINARS:

The following comparative statement gives the number of Seminars/Convention organized under various Divisions for the past five years by the State Centre.

| Strength As on | AG | AR | AS | CH | CP | CV | EL | EN | ET | MC | MM | MN | MR | PR | TX | ID | Total |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 31.03.2018 | 1 | - | 1 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 3 |
| 31.03.2019 | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | 3 |
| 31.03.2020 | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1 | - | - | 3 |
| 31.03.2021 | - | - | 1 | - | 2 | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 31.03.2022 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

NOTE: Abbreviations used in Tables: AG-Agriculture, AR-Architecture, AS- Aerospace, CH-Chemical, CP-Computer, CV-Civil, EL-Electrical, EN-Environment, ET-Electronics & Telecommunication MC-Mechanical, MM-Metallurgy & Materials Science, MN-Mining, MR-Marine, PR-Production, TX-Textiles, ID-Inter Disciplinary.

World Telecommunication & Information Society Day on the theme “Accelerating Digital Transformation in Challenging Times” - 17th May 2021

World Environment Day on the theme “Ecosystem Restoration”- 5th June 2021

Energy Conservation Day – “Green Hydrogen” – 14th December 2021

World Engineering Day for Sustainable Development – 5th March 2022

World Water Day on the theme “Ground Water: Making the invisible visible” – 22nd March 2022

6. COMMITTEE:

The Committee of Tamilnadu State Centre met 12 times during the period under report for transacting the business connected with the activities of the State Centre.

7. REPRESENTATION IN ADVISORY BODIES:

Anna University, Academic Council (Dr G Ranganath)

Public Works Department, Assessment Committee (Er S Kannan)

Chennai Metropolitan Development Authority, Design Advisory Committee (Er S Kannan)

Central Polytechnic College Academic Board (Er S Kannan)

Murugappa Chettiar Polytechnic, Academic Board (Er S Kannan)

Tamilnadu Polytechnic, Academic Council, Madurai (Dr P Rajamani)

PAC Ramaswamy Raja's Polytechnic, Rajapalayam, Academic Board (Dr P Rajamani)

8. TAMILNADU TECHNICIANS / STUDENTS CHAPTER:

The Tamilnadu Technicians'/ Students' Chapter was activated under the convenership of Dr S Karuppasamy.

9. EXAMINATIONS:

The number of candidates who appeared for the Section A (Diploma & Non-Diploma Streams) and Section B during Winter 2020 and Summer 2021 was 500 and it was conducted at IEI TNSC Premises, CHENNAI.

10. ACCOUNTS:

Statement of Income & Expenditure Accounts and Balance Sheet of the State Centre for the period ended 31st March 2022 duly audited by the Auditors and countersigned by the Chairman and Honorary Secretary

NOTICE OF 100th Annual General Meeting

Notice is hereby given that the 100th ANNUAL GENERAL MEETING, Tamilnadu State Centre on 29th October 2022 at 6.00 PM at the Institution premises, 19, Swami Sivananda Salai, Chepauk, Chennai - 600 005 to transact the following:

1. To confirm the Minutes of 99th Annual General Meeting held on 30th October 2021.
2. To approve the Audited Accounts and Annual Report for the year ended 31st March 2022.
3. To report about the composition of the Committee for the session 2022-2023.
4. To appoint Auditors for the year 2022-2023 and to fix their Remuneration.

26th September 2022, Chennai

Note: The Minutes of the 98th Annual General Meeting is re-published elsewhere in this issue of the Bulletin. The Audited Statement of Accounts and the Annual Report for the year ended 31st March 2022 is also published in this issue for the information of all the members.

AUDITOR'S REPORT

We report that we have audited the annexed Balance Sheet of the **Institution of Engineers (India), Tamilnadu State Centre**, Chennai as at 31st March 2022, signed by us under reference to this report and the relative **Income & Expenditure Accounts** for the year ended on that date which are in agreement with the books of accounts maintained at Centre.

We have conducted our audit in accordance with auditing standards generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An Audit includes examining on a test basis, evidence supporting the amounts and disclosures in the financial statements. An Audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion and to the best of our information and according to the explanations given to us the Balance Sheet and the relative Income & Expenditure Account together with the notes thereon and subject to Comments Nil in **Annexure (1)** give a true and fair view of the state of affairs of The Institution of Engineers (India), Tamilnadu State Centre, Chennai as on **31.03.2022** and the **excess of its Income over Expenditure** for the year ended on that date.

Subject to the comments in **Annexure (2)** we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for our audit.

NOTES FOR COMMENT OF CENTRE'S AUDITORS FOR THE YEAR ENDED 31.03.2022

Centre's Auditors to see and comment under the following points and where applicable

| | | | |
|--|-----|--|-----|
| 1. (a) Title deeds of land – whether seen or not. | N.A | (c) Whether the Centre has procured goods/services from an unregistered person exceeding Rs 5000/- per day GSTN wise in its entirety and whether the relevant GST is being regularly deposited under reverse charge mechanism? | N.A |
| (b) Alternative documents in absence of lease or title deed so as to prove the legal possession and authorization for use by the Centre – to be seen. | YES | (d) Whether tax invoice/bill of supply is being regularly issued for all taxable /exempted services? | N.A |
| (c) Lease deeds whether still valid ? YES | YES | (e) Whether the outward register/inward register is being properly maintained? | YES |
| (d) Present position of building under construction – whether still incomplete or not, duly certified by Chartered Engineer. | N.A | (f) Whether the Centre has been regularly submitting the monthly/annual returns within due dates? If not details to be provided. | YES |
| (e) Actual cost of acquisition of land including development charges, if any, included under building construction should be shown separately. | N.A | (g) Whether special GST audit has been conducted by the State Centre in case of turnover of the State centre along with the local centre is more than Rs 2 crore during the financial year? If yes whether GST audit report and a reconciliation statement in Form GSTR 9C has been submitted. | N.A |
| (f) Lease deeds of land/building whether free from encumbrances. | YES | 3. (a) Progress/completion of construction work as on 31st March in respect of addition made during the year to the existing building to be checked. | N.A |
| (g) Confirm whether the entire requirements arising out of lease/grant deeds are met, the entire property is in the possession of the Institution and no sub-letting or otherwise use of the property by any other organization has been made. | YES | (b) Contingent liability in respect of suits filed against the Centre, if any, to be ascertained. | N.A |
| (h) Whether Fixed Assets Register maintained properly, i.e., total cost of assets as per Fixed Assets Register agreed with General Ledger Balance and all details, say location of assets, cost, nature of assets, rate of depreciation etc. are incorporated in the Register. | YES | (c) We have obtained external confirmation for all the year end balances with bank (including current account, savings account, cash credit, overdraft, loans, fixed deposit and accrued interest) directly from the banks/financial institutions concerned at our office. | YES |
| (i) Whether fixed assets of the Centre were physically verified by the Management during the year | YES | 4. Matters which do not really distort the truth and fairness of the accounts should not form part of the report and report separately : | N.A |
| (j) We have physically verified the cash balance and original fixed deposits certificates, bank confirmations and no exception have been noted. | YES | (a) Balance in advance schedule lying unadjusted for quite some time to be scrutinized and adjustments, if any, to be given effect to or amount if material to be reported upon. | N.A |
| (k) We have physically verified all investments and a copy of details of such investments attached herewith. | YES | (b) Utilization of fund transfer from headquarters for construction of building and acquiring of other assets to be checked and reported upon. | N.A |
| (l) Whether tax deducted at source from salary, contractors bill etc. are being deposited regularly as per Income Tax Rules. Also please ensure whether surcharge on Income Tax is also being deducted. | YES | (c) Statement of closing stock of stores/stationery to be certified by the management and to be attached along with audit report. | N.A |
| (m) Besides, the other matters, if any, cropped up in course of audit which might affect the truth and fairness of the state of affairs of the Centre and its results for the year 31 st March for relevant year. | N.A | 5. Whether the centre has adhered to the Royal Charter, Bye-Laws, Regulations and code of ethics and Financial Norms and Rules? If not details to be provided. | YES |
| 2. (a) Has the State Centre taken registration under GST Act and included the names of all local centres within their jurisdiction as an additional place of business? | YES | 6. If in addition the auditors want to comment on certain matters, they should write a management letter which must not be referred to in the above report. | NO |
| (b) Whether GST is being collected/deposited regularly as per GST Act and rules. The details of collection /deposit of GST attached herewith. | YES | | |

BALANCE SHEET AS ON 31st MARCH 2022

| 31st March 2021 Rs. | LIABILITIES | Schedules | 31st March 2022 Rs. | 31st March 2021 Rs. | ASSETS | Schedules | 31st March 2022 Rs. |
|------------------------|----------------------------------|-----------|------------------------|------------------------|---|--------------|------------------------|
| 1,13,46,007 | Reserve & Surplus | 7 | 1,15,02,269 | 1,00,80,076 | Fixed Assets | 1 | 1,01,39,076 |
| | | | | | Investment : Long Term | | |
| 35,00,869 | Capital Reserve | 8 | 35,00,869 | 38,69,136 | Fixed Deposits with Bank | 2 | 38,68,162 |
| | | | | | Current Assets | | |
| | | | | NIL | Stock | 3 | |
| 1,45,000 | Earmarked Funds | 9 | 1,45,000 | NIL | Sundry Receivables | 4 | |
| | | | | 10,63,816 | Cash & Bank Balances and Short Term Fixed Deposits with Banks | 5 | 11,33,902 |
| 2,09,838 | Current Liabilities & Provisions | 10 | 1,81,686 | 1,88,688 | Other Advances | 6 | 1,88,686 |
| | | | | NIL | Interest Outstanding and accrued On Investments | 2 | |
| 1,52,01,714 | TOTAL | | 1,53,29,826 | 1,52,01,714 | | TOTAL | 1,53,29,826 |

The Institution of Engineers (India)
Tamilnadu State Centre
Sd/-

Sd/-
S SHANKER & ASSOCIATES
Chartered Accountants

Place : Chennai
Date : 22.06.2022

Er S KANNAN **Er K N SIVARAJU**
Cairhman Honorary Secretary

R JAGANNATHAN
Partner
M. No. 2202227

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2022

| TOTAL 2020 - 2021 | I N C O M E | TOTAL 2021 - 2022 | TOTAL 2020 - 2021 | E X P E N D I T U R E | TOTAL 2021 - 2022 |
|----------------------|--|----------------------|----------------------|--|----------------------|
| | <u>Income Generated by Centre:</u> | | 384268 | Salaries and Allowances, etc. to Permanent staff | 410074 |
| 1145858 | For Manpower Grant | 730751 | 598000 | Salaries and Allowances, etc. to Temporary staff | 614300 |
| | For Staff Welfare Expenses | 51160 | 18000 | Bonus / Exgratia Reimbursement | 14500 |
| 70000 | For Examinations | 161607 | 17000 | Direct Expenses for conducting Examination | 113301 |
| 1094107 | For Annual Recurring Grant | 774256 | 8700 | Expenses for Seminars and Symposia | |
| | For Land and Building Grant | 500000 | | Centenary Day Celebrations | 218865 |
| 6000 | For Incentives | 6000 | 10030 | International Block chain expenses | |
| 83100 | For International Block Chain Grant | | | Annual General Meeting Expenses | 60067 |
| 7875 | For reimbursement of TA/DA | | 14270 | Engineers day Expenses | 29790 |
| 2406940 | Sub-Total | 2223774 | 57059 | World Engineers day Expenses | |
| | <u>Income Generated by Centre:</u> | | | Committee Meeting Expenses | 11658 |
| 59711.42 | Receipts from Seminars and Symposia | | 20096 | Printing and Stationery | 3891 |
| | Centenary Celebration Receipts | 135000 | 19274 | Postage expenses | 13242 |
| | Donations from Local centre | 225000 | 24300 | Telephone Expenses | 57240 |
| 238635 | Interest from Investments & Bank Fixed Deposit | 195651 | 68503 | Electricity Charges | 79257 |
| 25486 | Interest from Savings Bank Accounts | 23562 | | Election Expenses | 44769 |
| 26000 | Hall/Space rent (Collections) | 35500 | 985 | Bank Charges | 1764 |
| 14000 | Rent received from guest house accommodation | 52300 | 16113 | Charges General | |
| 104504 | Miscellaneous Expenses | 104504 | 94101 | Rent, Rates and Taxes | 98517 |
| | Other Receipt | 2 | 9340 | Refreshment Expenses | 4360 |
| | | | 20650 | Statutory Audit Fees | 26380 |
| | | | 8160 | Other Auditors' Fees | 9000 |
| | | | | Legal Expenses | 25000 |
| | | | 851438 | Repairs and Maintenance on Buildings | 246323 |
| | | | 143120 | Repairs and Maintenance on Others | 115069 |
| | | | 4000 | Traveling and Conveyance | 11000 |
| | | | | Staff welfare -PF/Mediclaim/Reimbursement | 59035 |
| | | | 826 | Donation to Local Centre | 475000 |
| | | | | Sub-Total | 2742402 |
| 468336 | Sub-Total | 667015 | 2388233 | Excess of Income Over Exp. | 148387 |
| | | | 487043 | | |
| 2875276 | GRAND TOTAL | 2890789 | 2875276 | GRAND TOTAL | 2890789 |

The Institution of Engineers (India)
Tamilnadu State Centre
Sd/-

Er S KANNAN **Er K N SIVARAJU**
Chairman Honorary Secretary

Sd/-
S SHANKER & ASSOCIATES
Chartered Accountants

R JAGANNATHAN
Partner
M. No. 2202227

Place : Chennai
Date : 24.06.2022

Registered with the Registrar of
Newspapers for India, No. TNENG/2001/05585

DATE OF PUBLICATION: 1st of every month
Regd. No. TN/CH(C)/344/2018-2020
Licence No. TN/PMG(CCR)/WPP 455/2018-2020



FORTHCOMING EVENT

37th

INDIAN ENGINEERING CONGRESS

on

Theme

Role of Engineers for Creating a Sustainable & Self Reliant India

December 16-18, 2022
Hotel Le Royal Meridian, Chennai

Licensed to post without pre-payment
Posted on: 15th October 2022
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 : 044-25360614 / 9962950333
E-mail : ieitamilnadu@gmail.com / tnscc@ieindia.org, Website: www. ieitnsc.org

Printed by Er. K. N. Sivaraju, Honorary Secretary and Published on behalf of The Institution of Engineers (India), Tamilnadu State Centre,
19, Swami Sivananda Salai, Chepauk, Chennai 600 005 and Printed at Sunitha Printers, 193, Peters Road, Chennai 600 014,
Editor: Er. K. N. Sivaraju, Honorary Secretary