

## PROGRAMME

- 8.30 a.m. - 9.15 a.m. - Registration
- 9.15 a.m. - 10.15 a.m. - Inaugural function
- 10.30 a.m. - 1.00 p.m. - Paper & Poster Presentations / Teaser Making
- 11.30 a.m. - 12.15 p.m. - Quiz (Prelims)
- 12.15 p.m. - 1.45 p.m. - Lunch
- 1.45 p.m. - 2.45 p.m. - Quiz (Final)
- 2.45 p.m. - 3.45 p.m. - Valedictory Function

## IMPORTANT DATES

### Paper Submission Details

- Online Registration for all the events - **05.04.2025**
- Submission of Full Manuscript for paper presentation & Abstract for Poster/Project Expo by e-mail - **06.04.2025**
- Intimation of selection through e-mail - **07.04.2025**
- Confirmation of participation by the selected candidates (through mail or WhatsApp) - **07.04.2025**

### Contact Details

**Dr. A. Geetha**

Convenor-Convergence 2025

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### Online Registration



<https://tinyurl.com/Convergence-2025>

## ADVISORY COMMITTEE



**Dr. Sai Prakash LeoMuthu**  
Chairman & CEO, Sairam Institutions

**Dr. J. Raja**  
Principal, Sri Sai Ram Engineering College

**Prof. Dr. K. C. Sivakumar**  
Indian Institute of Technology (M)

**Prof. Dr. L. Jones Tarcus Doss**  
Anna University

**Prof. Dr. N.M.I. Alhaji**  
Bharathidasan University

**Prof. Dr. R. Mohan Kumar**  
Presidency College, Chennai

**Prof. Dr. R. Bharathi**  
Annamalai University (FEAT)

**Prof. Dr. G. Muthuraman**  
Presidency College

## ORGANISING COMMITTEE

**Dr. S. RAMAKRISHNAN**  
Head of the Department  
and

**Faculty Members**  
Department of Science and Humanities



SEC202504DHS02

**Sairam**  
INSTITUTIONS



DEPARTMENT OF  
SCIENCE AND  
HUMANITIES

24<sup>th</sup> State Level Symposium  
**Convergence**  
09.04.2025 ← → 2025



Sri  
**SAIRAM**  
ENGINEERING COLLEGE  
An Autonomous Institution  
West Tambaram, Chennai - 44  
[www.sairam.edu.in](http://www.sairam.edu.in)



Sri Sairam Engineering College, Chennai was established in the year 1995 by Philanthropist, Educationist and Industrialist, Shri. M. Jothi Prakasam alias MJF. Ln. LEO MUTHU, Chairman and Managing Director of Sai Leo group of companies and Educational Institutions. The college is situated among sylvan surroundings in an area of more than 100 acres at Sai Leo Nagar and well within the metropolitan city limits. The location of our institution with its lush greenery is calm and conducive for excellent academic pursuits.

Our college offers Fourteen B.E./B.TECH. Undergraduate degree, one M.TECH. - 5 year Integrated degree and eight postgraduate degree programs and our institute is recognised as a Research Centre by Anna University. Most of the Programmes are accredited by NBA. More than three hundred well-qualified, experienced and dedicated faculty members are contributing towards the growth and development of this institution.

Our college is certified with IS/ISO 21001:2018(EOMS) by the Bureau of Indian Standards, holds a NAAC A+ accreditation and earned a DIAMOND rating by QS I- GUAGE. The institution has well established infrastructure facilities. Fully air-conditioned central library named as Dr. Kalam Digital Library has more than eighty five thousand books and journals in the various fields of Engineering Technology, Science and Humanities. The laboratories are well – equipped and managed by skilled technicians.

The department of Humanities and Sciences has dedicated, well qualified and research oriented faculty members. Forty nine of them possess doctoral degrees and others are pursuing their Ph.D. Students are pursuing Ph.D. through part time and full time streams with Exemplary research in diversified areas in physics and chemistry. Many of our faculty have been attending various Workshops, Seminars, Conferences, Faculty Development Programmes, Short Term Training Programmes etc., as part of our faculty improvement programme.

Sai Humsa, the Association of Science and Humanities is functioning effectively in many ways to emphasize the importance of basic sciences in the technical curriculum. It has been organising several special lectures by eminent scholars and exposing the students to industrial environment. A state-of-the art language lab has been set up to enhance the communication skills of the students and to train them for GRE, GMAT and TOEFL.

In order to instill and nurture scientific ideas in the young minds, the Department of Science and Humanities has been organising a State level symposium "CONVERGENCE" for the past 23 years. For every edition, students in large numbers from various engineering colleges have been presenting their innovative ideas on this common platform.

Continuing this expedition, The Department of Science and Humanities has once again come forward to organize the 24th one day State Level Symposium on Wednesday, the 9th April, 2025.

## Paper, Poster Presentation, Teaser Making and Science Project Expo (Max. 2 Participants per Team)

Only one member should register for a team event

A student can participate in maximum of 2 events

(any one individual event and any one team event)

5 questions in Quiz (Prelims) & 1 round in Quiz (Finals)

will include மொழியாக்கம் : தமிழில் கலைச்சொல் பயன்பாடு

Quiz (Max. 2 Participants per Team)

## TOPICS FOR PAPER / POSTER

### PHYSICS

#### Paper Presentation

1. Material Physics
2. Nano Devices
3. Quantum Computing
4. Biosensors/Biomaterials
5. Sustainable energy storage devices

#### Science Project Expo (Working model to be presented)

1. Waste to Energy
2. Renewable energy
3. Advanced climate monitoring system
4. Advances in Laser Technology
5. Smart Agriculture system

### CHEMISTRY

#### Paper Presentation

1. Environmental applications of Chemical sensors
2. Innovative Technologies for Solid Waste Management: IoT, AI and Robotics
3. Biodegradable Plastics: From Innovation to Implementation

#### Working Model / Poster Presentation

1. Smart Water Quality Monitoring System using IoT and Machine Learning
2. Sustainable Agriculture Management System using Drone Technology and AI

3. Innovative Biodegradable material using Nanotechnology

### MATHS

#### Paper Presentation

1. Introduction to Linear Algebra and Its Use in Engineering
2. The Importance of Calculus in Engineering Design
3. Matrices and Determinants: Key Concepts for Engineers
4. Differential Equations and Their Engineering Applications
5. Real-life Applications of Trigonometry in Engineering

#### Poster Presentation

1. Applications of Mathematics in Engineering
2. Fractals in Engineering: Understanding Complex Patterns in Nature and Design
3. Mathematics Behind Cryptography: Securing Data in the Digital Age
4. The Fibonacci Sequence in Nature and Engineering
5. Understanding the Golden ratio in Architecture and design

### ENGLISH

#### Paper Presentation

1. **English Empowers:** Fostering responsible online citizenship and digital literacy.
2. **English Excels:** The language of global communication, unparalleled in its reach and impact.
3. **English Inspires:** Multilingualism enriched by English, fostering creativity and expression.

#### Teaser Making (2 mins video)

1. **English Unites:** Breaking cultural barriers and bridging communities worldwide.
2. **English Elevates:** Good English is the rhythm of poetry, the music of motion.
3. **English Dominates:** The language of visual media, reigning supreme in film, television, and digital platforms.

### TAMIL

பேச்சுப் போட்டி: "உள்ளூர்தெல்லம் உயர்வுல்லம்"  
கட்டுரைப் போட்டி: "தமிழரும் தொழில்நுட்ப அறிவும்"