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SEC STUDENT BRANCH CHAPTER



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# THIRD INTERNATIONAL CONFERENCE ON POWER, ENERGY, CONTROL AND TRANSMISSION SYSTEMS

[Harnessing Power and Energy for an affordable Electrification of India]

08.12.2022 & 09.12.2022



Sri

## SAIRAM ENGINEERING COLLEGE

An Autonomous Institution

West Tambaram, Chennai - 44

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## • THE INSTITUTION •

A great visionary by birth and philanthropist of excellence, our revered Founder Chairman, MJF.Ln. Leo Muthu ventured into the realm of providing quality education affordable to all. Sri Sairam Engineering College Chennai, established in the year 1995 by MJF.Ln.LeoMuthu, Chairman of Sapthagiri Educational Trust, is non-profitable, and non-minority institution. The College is an AUTONOMOUS institution affiliated to Anna University and is also approved by the All India Council for Technical Education, New Delhi. Sri Sairam Engineering College has developed into a reputed Engineering Institution with ISO: 9001:2015 certifications, NAAC(A+), NBA Accreditation and NIRF ranking to all disciplines of engineering. For offering top quality technical education and inspire the younger generation to the society, institution has spared numerous efforts to induct dedicated faculty and provide adequate infrastructure facilities.

## • THE DEPARTMENT •

The Department of EEE, established in 1995 with the approval of AICTE, is set in an open, student-friendly atmosphere. We have a fine blend of dynamic and experienced faculty who provide quality education at both UG and PG levels. With Anna University's curriculum, the Department places equal emphasis on theoretical and practical domains of Electrical and Electronics Engineering. The laboratories are highly modernized to reflect the rapidly changing trends in technology. The Department has well-qualified faculty and excellent facilities for research. The faculty and students have publications in reputed National and International Journals. The department of EEE had bagged the Best Industry institute award in AICTE-CII Survey of Industry-linked technical institutions 2018. The award is based on a survey done across AICTE approved technical institutions of the country with the objective to showcase the best practices. We have been organizing many Symposiums, Workshops, Guest Lectures and Skill Development Programmes to encourage the students hone their personality and extracurricular skills. Our students have brought home several laurels from National and International conferences.

## • THE CONFERENCE •

International Conference on Power, Energy, Control and Transmission System (ICPECTS) is a prestigious event

which provides an excellent international platform for the academicians, researchers, engineers, industrial participants and aspiring students around the world to share their researches with global experts. We hope that the conference contributes significantly to scientific field and the society. The organizing committee of the conference is pleased to invite prospective authors to submit their original manuscripts to ICPECTS 2022. The presented papers in conference will be submitted for inclusion into IEEE Xplore. IEEE publishing makes the exchange of technical knowledge possible with the highest quality and the greatest impact.

## • PAPER SUBMISSION PROCESS •

Authors are invited to submit their paper on or before **30th September, 2022** to the Microsoft CMT link

<https://cmt3.research.microsoft.com/ICPECTS2022>

## • GUIDELINES FOR PAPER SUBMISSION •

All papers must follow submission guidelines and will be peer reviewed and evaluated based on originality, technical and research depth, correctness, relevance to conference contributions and readability. Acceptance of papers will be communicated to authors by email. The authors of the accepted papers will be allowed to make correction in accordance with the suggestions of the reviewers. The IEEE anti-plagiarism policy is applicable to all submissions. Only the author(s) is responsible for any plagiarized submission.

[https://www.ieee.org/publications\\_standards/publications/rights/plagiarism.html](https://www.ieee.org/publications_standards/publications/rights/plagiarism.html)

## • PAPER FORMAT •

Papers submitted to ICPECTS 2022 should follow the standard IEEE manuscript template for conferences and it can be a **minimum of three pages and a maximum of six pages**. The Microsoft Word template in A4 page size, LaTeX template (as a zip file) can be downloaded from the weblink:

<http://www.ieee.org/conferenceevents/conferences/publishing/templates.html>

### IMPORTANT DATES

Full paper submission	30th September, 2022
Acceptance notification	20th October, 2022
Final Paper Submission	16th November, 2022



## TOPICS: BUT NOT LIMITED TO

### I. Power, Energy, Generation and Transmission

- ▶ PMU and wide area management applications in transmission system
- ▶ Grid Security, Privacy and Resilience
- ▶ Smart initiative in large renewable generation and operation
- ▶ Renewable energy forecasting and scheduling
- ▶ Smart initiative in the planning, operation, control and protection of large interconnected systems.
- ▶ Solar metamaterials
- ▶ Power electronics applications in intelligent grid
- ▶ Power Line communication and wireless transmission systems
- ▶ High-Power Wireless Transfer
- ▶ Smart Energy systems to enable smart cities
- ▶ Distribution Automation
- ▶ Smart grid
- ▶ Wireless Broadband Opportunities in the Smart Home
- ▶ Wireless/WiMAX opportunities for Utilities
- ▶ Energy Storage
- ▶ Smart metering
- ▶ Technologies trends in distribution infrastructure
- ▶ Home energy management
- ▶ Efficient lighting.

### II. Power Electronics and Drives

- ▶ Applications of power electronics in power system
- ▶ Power electronic emerging technologies
- ▶ Power convertors and controls for wind, solarPV, CHP, wave & tidal
- ▶ High efficiency power conversion for sustainable sources
- ▶ Power electronics for battery storage systems
- ▶ Power electronics for charging and operation of electric, hybrid electric and plug-in hybrid electric vehicles
- ▶ Bio medical power electronics
- ▶ Fault management and reliability of power converters
- ▶ Education in power electronics
- ▶ Design and optimization of electrical machines
- ▶ Adjustable speed drives
- ▶ Special electrical machines and drives
- ▶ Condition monitoring and diagnosis of electrical machines
- ▶ Sensors and observers for electrical drives
- ▶ Drivers for traction/propulsion systems
- ▶ Marine and sub-marine drives
- ▶ Mechatronics, motion control and robotics

### III. High Voltage Engineering

- ▶ Electromagnetic Fields :Computation, Measurement
- ▶ Transients and EMC : Lightning, Switching, Repetitive Transients
- ▶ High Voltage Measurement Techniques and Instrumentation
- ▶ High Voltage Insulation System
- ▶ Outdoor Insulation : Insulator, Environmental Effects
- ▶ Grounding systems
- ▶ UHV AC and DC system
- ▶ Aging, Space Charge, and Industrial Applications
- ▶ High Voltage Apparatus : Reliability and Maintenance
- ▶ Online Condition Monitoring and Fault Diagnosis
- ▶ New Features and Special Interests in High Voltage Engineering
- ▶ High Voltage Applications in Smart Grid
- ▶ High Voltage Engineering Education.

### IV. Control of Electrical System

- ▶ Control of offshore wind power generation with grid connectivity.
- ▶ Integrating, Controlling, and monitoring multiple micro-grids.
- ▶ Effects of electrification: Environmental, Economic, and Social for Buildings Sustainable Systems for Customers and Sectors.
- ▶ Grid Automation and control
- ▶ Soft computing techniques in power system control.

### V. Transportation Engineering

- ▶ Electric and Hybrid vehicles
- ▶ Electric Rail and Light Rail Systems
- ▶ Off-road Vehicles Systems
- ▶ Personal Transport
- ▶ Batteries, Battery Charging and Management
- ▶ Networked vehicles
- ▶ Vehicle to Grid (V2G) and Grid Interaction Issues
- ▶ IEEE Standards in Transportation and Vehicles

### VI. GENERAL TOPICS

- ▶ Artificial intelligence and Robotics
- ▶ Big data analytics
- ▶ Bioinformatics
- ▶ Cyber security
- ▶ IoT
- ▶ Aerodynamics and Fluid mechanics
- ▶ Acoustics and fluid structure interaction

## REGISTRATION DETAILS

Category	Indian Delegates (INR ₹)	Foreign Delegates (USD \$)
<b>IEEE Members</b>		
<b>Industrial Experts</b>	₹. 6000	\$ . 200
<b>Academicians</b>	₹. 5000	\$ . 175
<b>PG Students &amp; Research Scholars</b>	₹. 4500	\$ . 150
<b>UG students</b>	₹. 4500	\$ . 150
<b>Attendee and extra certificate</b>	₹. 1000	\$ . 35
<b>Non-IEEE Members</b>		
<b>Industrial Experts</b>	₹. 8000	\$ . 250
<b>Academicians</b>	₹. 6500	\$ . 200
<b>PG Students &amp; Research Scholars</b>	₹. 6000	\$ . 175
<b>UG students</b>	₹. 6000	\$ . 175
<b>Attendee</b>	₹. 1500	\$ . 40

### Accommodation and Transport

Limited hostel accommodation is available for outstation participants and provided on payment basis following norms. The participant has to intimate in advance for availing the accommodation. Bus routes and timings are available in the college website

<https://sairam.edu.in/transport/>



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