



SRI RANGANATHAR INSTITUTE OF ENGINEERING AND TECHNOLOGY (An Autonomous Institution)



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
Athipalayam, Coimbatore - 641 110. website: sriet.ac.in, Ph: 0422 - 2697792

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ASSOCIATION

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Department of
Electrical & Electronics Engineering



NewsLetter

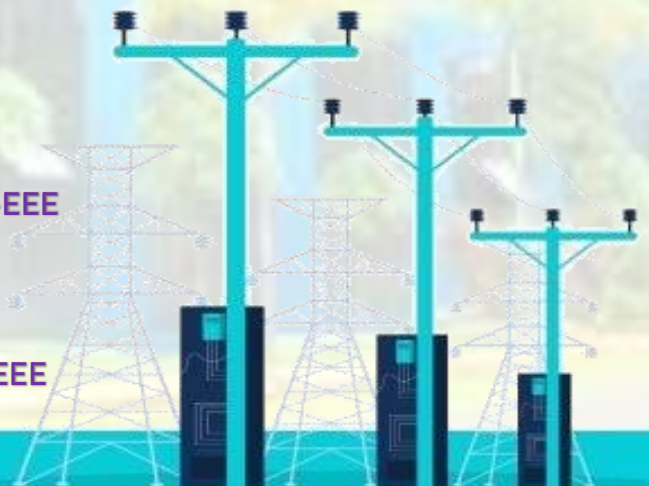
DECEMBER 2024 (ODD SEMESTER)

Editorial Board (Student):

- ✚ Chief Editor: Mr S Dhivahar IV-EEE
- ✚ Editor: Ms S Boomika III-EEE
- ✚ Designer: Mr V Ranjith II-EE

Staff Editorial Board:

- ✚ Dr J Maalmarugan Prof&HoD/EEE
- ✚ Mr K Muthuraj AP/EEE





SRIET Profile:

Sri Ranganathar Institute of Engineering and Technology (SRIET) came into existence in 2011, out of an ardent desire of Dr. V. Narayanasamy to contribute manifold to the society that nurtured him. SRIET is an Innovative Educational Institution where the curiosity, creativity and intellectual joy of students all drive to academic excellence. Our Institution provides complex problem-solving skill and imbibes service to the public good. SRIET is defined by strong association and working in ways that excel in traditional boundaries.

SRIET's academic excellence is rooted in a student-centered model of learning. The Curriculum is an accurate approach to education that pushes the students to be creative thinkers, intellectual risk-takers and entrepreneurial problem-solvers. SRIET leaves students prepared to thrive as independent and innovative leaders and equipped with the tools they need to become the next generation of leaders in their respective fields.

Sri.V. Narayanasamy
Chairman,
Sri Ranganathar Group of Companies



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

ABOUT THE DEPARTMENT:

Electrical engineers synthesize science, mathematics, technology, and application-oriented designs into world-class consumer products, timely microprocessors, state-of-the-art computers, advanced electronic components, and much more. From cutting-edge technology revolutions to real life applications, the innovations of electrical engineers continue to lead the future and elevate the standards in the marketplace. With a shortage of electrical engineering talent in the job market, the demand for graduates with an electrical engineering degree remains at an all-time high.



MISSION & VISION

VISION:

To enable our students to have a higher degree of competence in enhancing efficiency in energizing the world and maximizing green energy.

MISSION:

- To facilitate students to adept latest technology in addressing the challenges in transmission and distribution of electricity.
- To engage and collaborate with education and experience towards building unified technology.
- To kindle the students to innovate in designing and developing new products and process that add value to customers.
- To inculcate the need of green energy in the minds of students to sustain Mother nature.



HOD'S DESK

I believe my role as an educator is to guide and nurture the next generation to establish skills to achieve health, respect, prosperity and fulfilment.

The ability to be innovative and creative is important to me. I enjoy being challenged and inspired by the people around me. I am an avid supporter of effective and innovative professional development that encourages teachers to be reflective and to continuously examine our practice to provide quality teaching and learning for each student. My role as head of the department is to keep up with latest trends and research and be an active partner in the college's professional development.



Dr. J MAALMARUGAN M.E., Ph.D.,

Professor, HOD

Email: maalmarugan@sriet.ac.in

Mobile: 84899 29865

LABORATORY SPECIFICS:

Power Electronics and Drives Laboratory:

- ✦ It consists of different kinds of demo kits such as SCR characteristics, study kit for D.C motor control using chopper and necessary simulation software.
- ✦ The lab is equipped with all the power electronic converters, DSP and FPGA based DC and AC Drives, Digital Integrated kits, Power supplies.

Electrical Machines Laboratory:

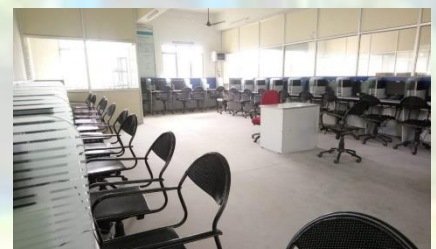
- ✦ Imparts the knowledge about characteristics and behaviour of the DC and AC Machines.
- ✦ Well established with all kinds of motors, generators and latest Drives.

Control System Laboratory:

- ✦ Lab is equipped with control system kits like DC servomotor and synchros.
- ✦ Well established with instrumentation kits like LVDT, strain Guage, thermistor and thermocouple kit
- ✦ Provides an opportunity for the students to implement the control system concepts

Power System Simulation Laboratory:

- ✦ Furnished with high-speed internet facilities in all the systems.
- ✦ Software like ETABS in this lab interface the mathematical computing visualization and a powerful language to provide a flexible environment for technical computing in the areas of power electronics, control system, power system and electronic circuits.





PROGRAM OUTCOMES (PO)

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|--|--|
| PO1: Engineering knowledge | Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems. |
| PO2: Problem analysis | Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. |
| PO3: Design/ development of solutions | Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. |
| PO4: Conduct investigations of complex problems | Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. |
| PO5: Modern tool usage | Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. |
| PO6: The engineer and society | Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |
| PO7: Environment and sustainability | Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. |
| PO8: Ethics | Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. |
| PO9: Individual and team work | Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |
| PO10: Communication | Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. |
| PO11: Project management and finance | Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. |
| PO12: Life-long learning | Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. |

PROGRAM SPECIFIC OUTCOMES (PSO)

| | |
|-------------|--|
| PSO1 | Capable to provide socially acceptable technical solutions to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development. |
| PSO2 | Comprehend, analyses and design products in core domains namely power, control and energy to meet the ever-changing demands of industry and society. |

Student's Achievements:

SRIEE VIDHYAHARINI K IV-EEE SANGEETHA K IV-EEE DHIVAHAR S IV-EEE SATHISH KUMAR G IV-EEE PREM KUMAR SRI HARINI N II-EEE M III-EEE participated and won third place in SMART INDIA HACKATHON 2024 idea on “CONVERTING THE NON-BIODEGRADABLE WASTE INTO BUILDING BRICK” on 20.09.2024.



Extension Activities:

- BOOMIKA S, CHANDRIKHA R, DEEPIKA K, KAVITHA K, MOHANA PRIYA M, MAMATHISARU G, THARUNKUMARREDDY P, SIVARANJANI B From III EEE Attended value added course on “Mechanic-Electric Vehicle” from 14.10.2024 to 18.10.2024 at ITI, Coimbatore.



Student's event participation details:

Implant Training/Internship:

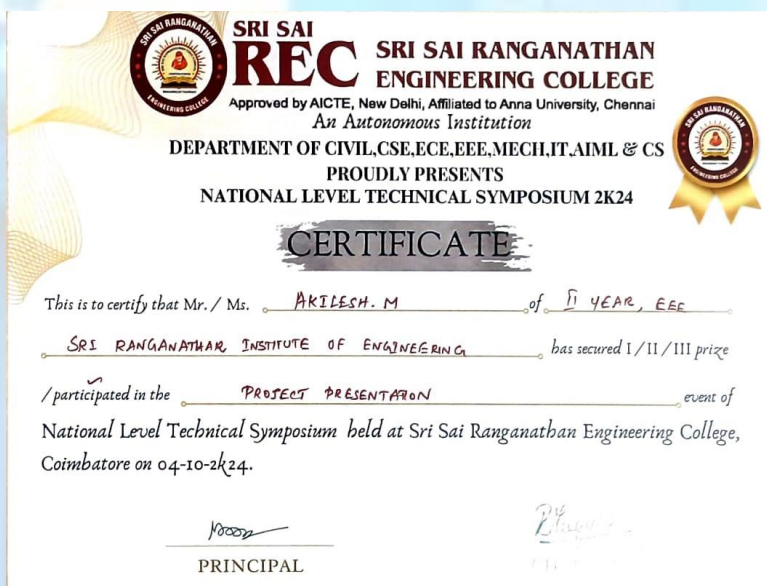
| Sl. No. | Student name | Event Name | Date | Venue |
|---------|--|---|--------------------------------|---|
| 1. | Gayathiri J IV-EEE Mersilin Geetha J IV-EEE Sangeetha K IV-EEE Sowmiya V IV-EEE Sriee Vidhyaharini K IV-EEE | Completed 15-days internship training | 03.07.2024 to 18.07.2024 | Versa Drives Private Limited |
| 2. | Kathirvel K IV-EEE Balu Prathick IV-EEE Lakshmanan C IV-EEE | Undergone internship training in "Basic control circuit, Electrical panel board wiring, panel board mounting in machines and output wiring" | 23.07.2024 to 09.08.2024 | Srimathi Machine works, Manikkampalayam, Coimbatore-641107 |
| 3. | Dhivahar S IV-EEE Sathish Kumar G IV-EEE | Completed 6-days internship training | 29.07.2024 to 05.08.2024 | Protowiz Private Limited, Saibaba Colony, Coimbatore-641025 |
| 4. | Saravanakumar K IV-EEE | Undergone internship training under "electrical panel fabrication process and powder coating process and control wiring" | 06.08.2024 to 12.08.2024 | Sri Ohm Electricals, Rajapalayam, Virudhunagar-626117 |
| 5. | Kowsalya P IV-EEE Sakunth B IV-EEE Gowtham A IV-EE | Undergone internship training in "Electrical control panel assembling and wiring" | 25.07.2024 to 10.08.2024 | Maya Tech Saravanampatti, Coimbatore-641035 |
| 6. | Aswin R IV-EEE Dhanush B IV-EEE Guna M IV-EEE Kamalesh R IV-EEE Sathya Sanjeev G IV-EEE Ravichandran N IV-EEE | Completed 5-days internship training | 06.08.2024 to 10.08.2024 | Electromotive Power Drives Pvt Ltd, Chettipalayam, Coimbatore-641201 |





Student's event participation details:

| Sl. No. | Student name | Title of the Conference / Seminar / Workshop / FDP/ STTP Attended/Webinar | Date | Venue |
|---------|-------------------------|---|--------------------------------|--|
| 1. | Krishnaraja K II EEE | Participated in the Technical Quiz event of National Level Technical Symposium. | 04.10.2024 | Sri Sai Ranganathan Engineering college, Coimbatore. |
| 2. | Ranjith V II EEE | | | |
| 3. | Akilesh M II-EEE | Participated in the Project presentation event of National Level Technical Symposium. | 04.10.2024 | Sri Sai Ranganathan Engineering college, Coimbatore. |
| 4. | Lakshmanan C IV EEE | Attended one day national level workshop on “Artificial Intelligence and Machine Learning” | 16.11.2024 | Sree Sakthi Engineering College, Coimbatore. |
| 5. | Prem Kumar III EEE | | | |
| 6. | Lakshmanan C IV EEE | Attended one day national level technical Symposium “INTEROFEST-2K25” | 16.11.2024 | Sree Sakthi Engineering College, Coimbatore. |
| 7. | Prem Kumar III EEE | | | |
| 8. | Prem Kumar M III EEE | Successfully completed hands-on project in “AI for Students: Built your own generative AI model” | 12.08.2024 | NxtWave |
| 9. | Gowri Sri M II EEE | Participated in Throw Ball match organized by SRIET with Coimbatore Vizha Sports Fest 2024-25 | 22.11.2024 to 01.12.2024 | SRIET |
| 10. | Soundariya S II EEE | Successfully completed hands-on project in “AI for Students: Built your own generative AI model” | 12.08.2024 | NxtWave |
| 11. | Priyadharshini S II EEE | | | |
| 12. | Gowri Sri M II EEE | | | |





Program Organized:

| Faculty Name | Date | Title of the Programme | Duration | Resource Person Name, Designation & Address |
|----------------------|------------|--|------------------|--|
| Mr D Palanivel | 06.09.2024 | Organized seminar on “Advancement in Industrial Automation and Robotics” | 2 Hours | Mr S Sudhakar, Assistant Manager, Axis Global Automation, Coimbatore. |
| Mrs G Mariya Sundari | 16.09.2024 | Organized an online seminar on “State Space Modeling of DC-DC Converter” | 1 Hour 30 Min | Dr P Anbarasan ASP/EEE, St. Joseph Institute of Tech, OMR, Chennai. |
| Mr K Rajeshkumar | 18.09.2024 | Organized seminar on “The Key to an Entrepreneur’s Continuous Growth” | 2 Hours | Mr T Sathish Kumar MD, Sundrop Energy Solutions, Chennai. |



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|--------------------------------|--------------------------------|---|------------------|--|
| Mr P Meenakshi Sundaram | 03.10.2024 to 05.10.2024 | Arranged ADD-ON course on “MATLAB Applications in Electrical Engineering” | 3 Days | Mr M Madhan Kumar Proprietor- Power Integrated Solution, Tiruchy. |
| Mr K Muthuraj | 08.10.2024 | Organized seminar on “Industrial Automation and its Application” | 1 hour 30 min | Mr R Malleeshwaran, Project Engineer, Industrial Automation, IPCS Global Solutions Pvt. Ltd., Coimbatore. |
| Mrs G Mariya Sundari | 26.11.2024 | Gate Awareness Program | 1 Hr 30 Min | Mr N JAYAPRAKAS, Assistant Manager- Marketing ACE Engineering Academy |



Dr. V. NARAYANASAMY
Chairman, EEE Dept

Mr. Arthi Harikrishnan
Dean, EEE Dept

Dr. T. M. Chenthothegyan
Principal, EEE Dept

Dr. J. MAALMARUGAN
Head, EEE Dept

Dr. Palanisami
Asst. Prof, EEE Dept

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
INSTITUTION'S INNOVATION COUNCIL

EMEEER ASSOCIATION PRESENTS

One Day Seminar on
**Advancement in Industrial Automation
and Robotics**

Speaker
Mr.S.Sudhakar
Assistant Manager, Axis Global Automation (AGIT), Coimbatore

Date : 06.09.2024 (Friday) Time : 03.00 pm

Chief Patron: Dr. V. NARAYANASAMY
Chairman, EEE Dept

Patron: Mr. ARTHI HARIKRISHNA
Dean, EEE Dept

President: Dr. T. M. CHENTHOTHEGYAN
Principal, EEE Dept

Vice President: Dr. J. MAALMARUGAN
Head, EEE Dept

Co-Ordinator: G. MARIYA SUNDARI
Asst. Prof, EEE Dept



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EMEEER ASSOCIATION PRESENTS

One Day Seminar on
**State Space Modeling of
DC-DC Converter**

Speaker
Dr.P.Anbarasan
Associate Professor, Department of EEE,
St. Joseph Institute of Technology, OMR, Chennai

Date : 16.09.2024 (Monday) Time : 03.30 pm

Chief Patron: Dr. V. NARAYANASAMY
Chairman, EEE Dept

Patron: Mr. ARTHI HARIKRISHNA
Dean, EEE Dept

President: Dr. T. M. CHENTHOTHEGYAN
Principal, EEE Dept

Vice President: Dr. J. MAALMARUGAN
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EMEEER ASSOCIATION PRESENTS

One Day Seminar on
**The Key to an Entrepreneur's
Continuous Growth**

Speaker
Mr.T.Sathish Kumar
Managing Director,
Sundrop Energy Solutions, Chennai

Date : 18.09.2024 (Wednesday) Time : 03.00 pm

Chief Patron: Dr. V. NARAYANASAMY
Chairman, EEE Dept

Patron: Mr. ARTHI HARIKRISHNA
Dean, EEE Dept

President: Dr. T. M. CHENTHOTHEGYAN
Principal, EEE Dept

Vice President: Dr. J. MAALMARUGAN
Head, EEE Dept

Co-Ordinator: K. RAJESH KUMAR
Asst. Prof, EEE Dept



Conference Publication Details:


| S. No | Faculty name | Paper Title | Journal Name Volume No, Month/ Year, Page Nos. | Indexed by Thompson/ Scopus etc. |
|-------|-------------------------|---|--|--|
| 1 | Mr P Meenakshi Sundaram | Power quality enhancement using GWO optimized ANFIS controller based STATCOM in MG | Vol. 54 No. 3 (2024): Latin American Applied Research 26.06.2024 | Scopus |

Extension Activities:


Alumni interaction to II-, III- and IV-year EEE students, addressed by Mr Selvapandi 2020-24 Batch and Ms Dhanusha working in IBACUS.



Mr K Rajesh Kumar Successfully completed NPTEL-AICTE 12 weeks course on “Entrepreneurship” during July to Oct 2024 under IIT, Madras.



Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)




This certificate is awarded to
RAJESHKUMAR K
 for successfully completing the course
Entrepreneurship


with a consolidated score of **77** %


| | | | |
|--------------------|----------|----------------|---------|
| Online Assignments | 21.56/25 | Proctored Exam | 55.5/75 |
|--------------------|----------|----------------|---------|


Total number of candidates certified in this course: **9746**


Prof. Andrew Thangaraj
Chair
Centre for Outreach and Digital Education, IITM


Jul-Oct 2024
(12 week course)


Prof. Vignesh Muthuvijayan
NPTEL Coordinator
IIT Madras


Indian Institute of Technology Madras


FREE ONLINE EDUCATION

Roll No: NPTEL24MG93S552400924

To verify the certificate 

No. of credits recommended: 3 or 4



FDP/STTP/Seminar/Workshops Attended Details:

| Sl. No. | Faculty name | Title of the Conference / Seminar / Workshop / FDP/ STTP Attended | Date | Venue |
|---------|-------------------------|--|--------------------------------|--|
| 1. | Dr S Divya | Participated and successfully completed the 5-days online FDP on “Inculcating Universal Human Values in Technical Education” | 17.06.2024 to 21.06.2024 | All India Council for Technical Education (AICTE) |
| 2. | Dr S Divya | Undergone Innovation Ambassador (IA) training “Foundation Level” (16 session of 30 hours) | 05.07.2024 | MoE’s Innovation Cell & AICTE |
| 3. | Mrs G Mariya Sundari | | | |
| 4. | Dr S Divya | | | |
| 5. | Mrs G Mariya Sundari | Undergone Innovation Ambassador (IA) training “Advanced Level” (16 session of 30 hours) | 30.07.2024 | MoE’s Innovation Cell & AICTE |
| 6. | Dr J Maalmarugan | Attended the webinar on “Introduction to Electric Vehicles” | 31.07.2024 | SRM Madurai College for Engineering and Technology, Sivagangai |
| 7. | Mr Alex George | | | |
| 8. | Mr D Palanivel | | | |
| 9. | Mr K Rajeshkumar | | | |
| 10. | Mrs G Mariya Sundari | Successfully completed the training program entitled on “NM-ORACLE-FDP-EBPL-Coimbatore” | 05.08.2024 to 10.08.2024 | Adrol Technologies, Innovative solutions Pvt, Ltd |
| 11. | Mrs G Mariya Sundari | Recognized as “Oracle Cloud Infrastructure 2024 certified foundations associate” | 09.08.2024 | Oracle University |
| 12. | Dr J Maalmarugan | Participated in Session on “Angel Investment / VC Funding Opportunity for Early-Stage Entrepreneurs” | 28.08.2024 | Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai-62. |
| 13. | Mr Alex George | | | |
| 14. | Mr P Meenakshi Sundaram | | | |
| 15. | Mr D Palanivel | | | |
| 16. | Mr K Muthuraj | | | |
| 17. | Mr K Rajeshkumar | | | |
| 18. | Dr J Maalmarugan | Attended the workshop on “ChatGPT and AI Tools Workshop” | 22.09.2024 | be10X |
| 19. | Mr Alex George | | | |
| 20. | Mr P Meenakshi Sundaram | | | |
| 21. | Mr K Muthuraj | | | |
| 22. | Dr J Maalmarugan | Attended webinar on “CyRC developer series: Server-Side Request Forgery-OWASP Top 10 2021” | 30.10.2024 | BrightTALK |



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|-----|-------------------------|---|--------------------------|--|
| 23. | Mr D Palanivel | Attended webinar on “How Generative AI is Changing the SDLC” | 31.10.2024 | BrightTALK |
| 24. | Dr J Maalmarugan | Participated in the International Webinar on “Antenna Booster Technology for Wireless Communication” | 04.11.2024 | Study World College of Engineering, Coimbatore. |
| 25. | Mr D Palanivel | | | |
| 26. | Mr P Meenakshi Sundaram | | | |
| 27. | Mr Alex George | Participated and Completed ATAL FDP program on “Recent Advancements in Electric Vehicles and Hydrogen Fuel Cell Vehicles” | 08.11.2024 to 14.11.2024 | RVS Technical Campus, Coimbatore |
| 28. | Mr Alex George | Participated and Completed ATAL FDP program on “Role of Power electronics in Electric Vehicle Technology” | 25.11.2024 to 30.11.2024 | KKR&KSR Institute of Technology and Sciences, Coimbatore |
| 29. | Mr K Rajesh Kumar | Successfully completed NPTEL-AICTE FDP 12 weeks course on “Entrepreneurship” | July to Oct 2024 | IIT, Madras |
| 30. | Mr Alex George | Participated and completed AICTE-ATAL FDP on “Emerging Trends in Wearable Device and The Future Healthcare” | 09.12.2024 to 14.12.2024 | SNS College of Technology, Coimbatore |
| 31. | Mr Alex George | Participated and completed AICTE-ATAL FDP on “Renewable Energy and Electric Vehicles for Sustainable Future” | 16.12.2024 to 21.12.2024 | J J College of Engineering and Technology |
| 32. | Mr Alex George | Participated and completed AICTE-ATAL FDP on “Electric Vehicle: Technology, Power System, Energy Management, Testing and Certification” | 23.12.2024 to 28.12.2024 | PIMPRI Chinchwad College of Engineering |

Technical Message:

