

**Society of  
Electrical  
Engineers**

**25<sup>th</sup> year**

# *ELECTROVATE'25* **MAGAZINE**

**2024-2025**

*"Electricity Gives Light to The World and Hope to The People"*

*Society of Electrical Engineers*

**DEPARTMENT OF ELECTRICAL  
AND ELECTRONICS  
ENGINEERING**



**St. XAVIER'S**  
CATHOLIC COLLEGE OF ENGINEERING  
(Autonomous)

Chunkankadai, Nagercoil - 629003  
Kanyakumari District, Tamil Nadu





***ELECTROVATE'25***

***2024-25***

***A***

***MAGAZINE***

***BY***

***SOCIETY OF ELECTRICAL  
ENGINEERS***

***DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING***



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# EDITORIAL

It gives us immense pleasure to present *ELECTROVATE'25*, a reflection of the vibrant academic and co-curricular landscape of the Department of Electrical and Electronics Engineering. This magazine is a testament to the hard work, creativity, and innovation of our students and faculty, capturing the essence of our collective journey over the past year.

From academic achievements and technical milestones to sports victories and cultural excellence, every page of this magazine showcases our commitment to growth and excellence. We hope *ELECTROVATE'25* inspires and motivates every reader to pursue knowledge, challenge limits, and contribute meaningfully to society.

**Warm regards,**

*Editorial Team*

*Department of EEE*

**Editorial Team,**

- *Jenin J*
- *Joshuva Mosay A*
- *Kanimozhi K*
- *Mebin Raja N*
- *Vijesh V*



# DEPARTMENT OVERVIEW

## Department Vision & Mission

*Providing globally competent professionals, innovative researchers and successful entrepreneurs in the field of Electrical and Electronics Engineering for developing a technically empowered humane society.*



1. To impart high quality technical education in Electrical and Electronics Engineering with high caliber faculty members, excellent infrastructure and stimulating environment.
2. To lead the students to learn and practice technologies that are prevalent in the related industries.
3. To introduce the students to the latest concepts and innovations through technical gatherings and research collaborations.
4. To inculcate ethical values, team spirit and leadership qualities to meet the social challenges and needs.

## Programme Educational Objective (PEO's)

1. Build a solid foundation in mathematics, science, engineering and soft skills for diverse career and persistent learning.
2. Engage in life long process of learning and research to keep themselves abreast of new developments in the field of Electrical and Electronics engineering.
3. Have an ability to work in Multi-disciplinary Environment.
4. Practice their profession conforming to ethical values and environmentally friendly policies.
5. Model, design and develop a system and component or process the same to meet the needs of the society and industry within realistic constraints.

# Programme Outcomes (PO's)

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. 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.
- 11. 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.
- 12. 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.



# Programme Specific Outcomes (PSO's)

Utilize the Technological advancements in the field of modern Power Systems and formulate reliable and feasible solutions towards the eco-friendly and challenging environment.

Design and analyse fundamental Electronics and Embedded systems for real-world problems and develop smart products.

Apply recent Technology to control Electrical Machines with the aid of solid-state devices to enhance energy conservation and sustainability.

## THE WIZARDS BEHIND THIS ENDEAVOUR

<b>CHIEF PATRON</b>	:	Rev. Fr. S. Godwin Selva Justus, (Correspondent/ SXCCE)
<b>PATRON</b>	:	Dr. J. Maheswaran, M.E, Ph.D., (Principal/SXCCE)
<b>PRESIDENT</b>	:	Dr. S. V. Kayalvizhi, M.E, Ph.D., (HOD/ EEE)
<b>FACULTY ADVISOR</b>	:	Dr. A. Darwin Jose Raju, M.E, Ph.D., (Faculty Advisor/ SEE)

# OFFICE BEARERS (2024-25)

**FACULTY ADVISOR** : Dr. Darwin Jose Raju A

**SECRETARY** : Jenin J *(Final year)*

**TREASURER** : Vijesh V *(Final year)*

**JOINT SECRETARY** : Sowmiya M *(Third year)*

**ASSISTANT SECRETARY** : Oswin Franco I *(Second year)*

**EXECUTIVE MEMBERS** : Dave Andrew A *(Final year ME)*

: Karthikeyan N *(Final year)*

: Steny S *(Final year)*

: Kanimozhi K *(Final year)*

: Shijo Jebrish N J *(Third year)*

: Mohammed Niyash S *(Third year)*

: Aarthika S H *(Third year)*

: Akash S V *(Second year)*

: Aadharsha M K *(Second year)*

: Cynthia C *(Second year)*

# SEE PRESIDENTS MESSAGE

Dear colleagues, students, and esteemed members of our academic community,

It's with great pleasure that I share this special edition of our department's magazine with you. The pages that follow are not just a reflection of our achievements, but a celebration of the collective efforts, innovation, and passion that define us.

Each year, I am filled with pride as I witness the dedication and enthusiasm that both our faculty and students bring to the department. This magazine stands as a testament to our continued commitment to excellence, collaboration, and forward-thinking in our field. From groundbreaking research to impactful community outreach programs, every accomplishment deserves to be celebrated.

I encourage each of you to take a moment to read through the stories, reflections, and highlights shared in this edition. These are more than just words on paper—they are snapshots of the exceptional talent, resilience, and creativity that shape our department.

As we look ahead, let us continue to inspire each other, push the boundaries of knowledge, and, above all, support one another in our shared mission of excellence. Together, we can achieve even greater milestones in the years to come.

Thank you for your continued dedication and contribution to our community. Let's keep moving forward, hand in hand, toward a bright and impactful future.

Warm regards,

**Dr. S. V. Kayalvizhi,**

*Head of the Department,*

*Department of Electrical and Electronics Engineering.*

# FACULTY ADVISOR MESSAGE

I am exhilarated to publish the 25th Annual magazine of the SEE Association of the Electrical and Electronics Engineering Department at St. Xavier's Catholic College of Engineering. The aim of this magazine is to communicate with the members of SEE about the activities we have organized during the past year and to showcase the achievements of our members.

"A dream doesn't become reality through magic; it takes sweat, determination, and hard work". Congratulations to all the office bearers who have shown a lot of dedication in raising the standards of our SEE Association. Bringing out a magazine is not an easy task, and I would like to thank the editorial team who are behind this hard work. I would also like to thank our Correspondent, Principal, Financial Administrator, HOD, staff members, office bearers, students, and all those who have been supporting us throughout our journey.

**Dr. A. Darwin Jose Raju,**  
*Faculty Advisor, SEE*

# FACULTY PROFILES



**Dr. S. V. Kayalvizhi, M.E,  
Ph.D.,**  
*Head of the Department*



**Dr. M. Marsaline Beno,  
M.Tech, Ph.D.,**  
*Professor &  
Dean of Research*



**Dr. J. Merry Geisa, M.E,  
Ph.D.,**  
*Professor*



**Dr. M. Germin Nisha,  
M.E, Ph.D.,**  
*Professor*



**Dr. A. Darwin Jose Raju,  
M.E, Ph.D.,**  
*Associate Professor*



**Dr. M. John Bosco, M.E,  
Ph.D.,**  
*Associate Professor*



**Mr. Almond D'Souza,  
M.E,**  
*Assistant Professor*



**Dr. S. S. Selva Pradeep,  
M.E, Ph.D.,**  
*Assistant Professor*



**Ms. P. Suji Garland, M.E,**  
*Assistant Professor*



**Dr. Jain B. Marshel,**  
***M.E, Ph.D.,***  
***Assistant Professor***



**Mr. M. Abragam Siyon**  
***Sing, M.E,***  
***Assistant Professor***



**Dr. V. Jesus Bobin, *M.E,***  
***Ph.D.,***  
***Assistant Professor***



**Dr. J. Leon Bosco Raj,**  
***M.E, Ph.D.,***  
***Assistant Professor***



**Mrs. S. Shiny, *M.E,***  
***Assistant Professor***



**Mr. T. Xavier Ugin,**  
***Skilled Assistant***



**Mr. G. Sahaya Glitus,**  
***Skilled Assistant***



**Mr. J. Fabiyan Raj,**  
***Skilled Assistant***



**Mr. S. Benziher,**  
***Skilled Assistant***



**Mr. D. Augustin,**  
***Attendant***



# ANNUAL REPORT

The Annual Report of the Electrical and Electronics Engineering Department presents a comprehensive overview of the activities, achievements, and milestones accomplished during the academic year 2024-2025. It reflects our commitment to academic excellence, research innovation, student development, and community engagement. This report showcases the collective efforts of faculty, students, and staff, and stands as a testament to the vibrant spirit and growth of our department. We continue to move forward with passion, perseverance, and a vision to achieve greater heights.

## Events & Activities

- August 19–23, 2024: The Electric Vehicle Training Program was conducted at the Electric Vehicle Lab, covering EV architecture, battery pack design, ADAS basics, and BMS software tools, enhancing participants' practical knowledge.
- September 5, 2024: The Teacher's Day Celebration was organized by the Society of Electrical Engineers (SEE) to honour and appreciate faculty contributions.
- September 12, 2024: The Project Idea Display Event, organized by SEE at the EEE Seminar Hall, showcased innovative student projects, emphasizing technical skills, creativity, and teamwork.
- September 18, 2024: The SEE Inauguration was held at the EEE Seminar Hall, marking the 25th anniversary of SEE.
- September 18, 2024: Technical Seminar on Modern technologies on substation, a session by Mr. S. Velappan, B.E., Assistant Executive Engineer from the Electricity Distribution Circle, Nagercoil. Drawing from his experience, he discussed digital substations, GIS, SCADA, IoT-based monitoring, and smart protection systems. The interactive session enhanced understanding of reliability, safety, and automation in modern power distribution.
- September 20, 2024: The Industrial Visit to Tuticorin Thermal Power Station provided II-year EEE students with exposure to power generation, protection schemes, and real-time operations, guided by TTPS engineers.
- October 22, 2024: The Resume Competition, organized by SEE at the EEE Seminar Hall, featured a seminar on resume building and HR interview tips by Mr. M. Anto Xavier Roche.
- October 22, 2024: A Hands-on Training on Verilog HDL was organized by the Society of Electrical Engineers (SEE) at the Embedded Lab, providing students

- with practical exposure to hardware description languages crucial in digital system design.
- November 18, 2024: The seminar on "Basics of Intellectual Property Rights and Its Importance for Innovators and Entrepreneurs", organized by SEE and the Institution's Innovation Council, educated 99 student participants on patents, copyrights, trademarks, and entrepreneurship.
  - November 30, 2024: The Society of Electrical Engineers (SEE) organized the Department Alumni Meet at the EEE Seminar Hall, reuniting former students and faculty for a day of reconnection.
  - January 17–27, 2025: A 10-day Educational Tour for IV Year EEE students covering historical and cultural sites in North India, including the Taj Mahal, Golden Temple, Wagah Border, Manali, and Delhi, providing students with a memorable enriching experience.
  - January 29, 2025: The IET-SXCCE On-Campus and the Society of Electrical Engineers (SEE) jointly organized the IET KKLN Technological Seminar Series–I at the EEE Seminar Hall, with 51 participants.
  - February 3–8, 2025: The Electrical Designing and Drafting Training Program, organized by SEE at the EEE Seminar Hall and Simulation Lab, equipped 74 participants with practical skills in electrical design, AutoCAD, and circuit classification, ending with an assessment and internship opportunity for top performers.
  - March 10, 2025: Industrial Visit – TANTRANSCO 765/400kV Substation, Virudhunagar for II and III-year students visited the high-voltage substation to understand grid operations, SCADA systems, transformers, and protective equipment.
  - March 21, 2025: Technical Seminar on Renewable Energy and Its Future Prospects was organized by the Society of Electrical Engineers (SEE) at the EEE Seminar Hall, attended by 58 participants. The resource person, Er. R. Kathiresan, Assistant Engineer at TNGECL/TNEB – Renewable Energy, delivered an insightful session on solar, wind, hydro, and biomass energy, with special emphasis on Tamil Nadu's leadership in wind power.
  - March 21, 2025: The Society of Electrical Engineers (SEE) organized National Level Technical Symposium *Electrovate'25* under the theme "Electrifying the Path to Innovation" at the EEE Seminar Hall. The event brought together participants from over 10 colleges and featured both technical events and non-technical events. Eminent guests from TNEB's Renewable Energy division and alumni graced the event, sharing valuable insights.
  - March 22, 2025: MEP Final Assessment Presentation, organized in collaboration with Unique MEP Pvt Ltd, Chennai, the final project assessment and presentation session was conducted for students who underwent MEP training. Eleven students were selected for internships post evaluation.

- April 16, 2025: The Tech Fest 2K25, organized by the Centre for Research and Development, SXCCE in collaboration with the Society of Emerging Engineers (SEE), was held under the inspiring theme "AI and Engineering for a Sustainable Future." The event brought together bright minds and innovative ideas through a series of engaging activities including a Project Showcase, Paper Presentation, Poster Presentation, and the Quiz Bowl.
- May 7, 2025: SEE Valedictory 2K25, the annual valedictory celebrated the year's milestones. Highlights included a video-oral annual report presentation, a guest address by Er. J. G. Benny Jackson (Capestart Pvt. Ltd.), awards ceremony, and recognition of placed students with their company names read aloud. Certificates were distributed for MEP and TVS training. The program concluded with a group photo session and a vote of thanks.
- international level by IGEN on September 15, 2024.
- Dr. M. Marsaline Beno received both the Star Green Organizer and the IGEN COP29 CO<sub>2</sub> Promoter Award from IGEN at the international level on October 21, 2024.
- On October 26, 2024, Dr. S.S. Selva Pradeep took the Green Action Pledge with IGEN.
- P. Suji Garland participated in the IEIKKLC-Eighth Annual Meeting-2024 at the district level on October 26, 2024.
- Abragam Siyon Sing M received the Green Commander Award from IGEN at the national level on October 30, 2024.
- Dr. M. Marsaline Beno was recognized as an IGEN LIMCO Book of Records Achiever by IGEN at the international level on October 31, 2024.
- Dr. J. Merry Geisa achieved the Topper position in NPTEL-AICTE at the national level on November 21, 2024.
- Dr. S.S. Selva Pradeep was awarded the IGEN SDG Warrior – SDG1 by IGEN at the international level on November 22, 2024.
- Dr. S.V. Kayalvizhi received the IGEN SDG Warrior (SDG7) Award from The Institution of Green Engineers at the international level on November 22, 2024.
- Abragam Siyon Sing M received the IGEN EnSAv Club Best Ambassador of the Year 2024 and the IGEN SDG7 Icon of the Year 2024 from IGEN at the national level on November 22, 2024.

### Faculty achievements

- Dr. J. Merry Geisa served as a Reviewer for IJIRE at the international level on August 13, 2024.
- Dr. S.S. Selva Pradeep acted as a Resource Person for the Green Agri Club of India at the district level on August 21, 2024.
- Dr. S.V. Kayalvizhi served as a Judge for the Poster Presentation organized by EnSav Club at the national level on October 4, 2024.
- Abragam Siyon Sing M was honoured with the IGEN Green Engineer Award 2024 at the

- Dr. Jesus Bobin V was honoured with the IGEN EnSaver Award 2024 and the IGEN EnSAV Club Organizer Award 2024, both at the international level on November 22, 2024.
- Dr. M. Marsaline Beno was recognized with the Distinguished Professor Award by IET KKLN at the national level on December 13, 2024.
- Abragam Siyon Sing M received the IGEN Sustainability Champion Award 2024 from IGEN at the national level on December 14, 2024.
- On December 18, 2024, Dr. S.S. Selva Pradeep was honoured with the Best Faculty Advisor Award by IET KKLN at the national level.
- Dr. M. John Bosco received the Best Innovator Award for both Design Patent and Utility Patent from IPR at the national level on December 19, 2024.
- Society Madras Summit 2024, held at Rohini College of Engineering and Technology, on 9th November 2024, at the state level.
- Antony Aakash S, III-year student, received the Outstanding Volunteer Award at the IET KKLN Award Ceremony, organized by IET, on 10th November 2024, at the national level.
- Sanjeev Mugunthan A V, an ex-IV year student received the IET KKLN YP Best outgoing student award 2024 at the IET KKLN Award Ceremony, organized by IET, on 10th November 2024, at the national level.
- Vijesh V, IV-year student, received the IGEN ENSAV Club Organizer Award 2024 at the IGEN Annual Day 2024, organized by IGEN, on 22nd November 2024, at the national level.
- Jaculine Rose R J, IV-year student, was recognized as an IGEN ENSAV Green Promoter 2024 at the IGEN Annual Day 2024, organized by IGEN, on 22nd November 2024, at the national level.
- Rojar Donald, an ex-IV year student was recognized as the IGEN ENSAV Promising student of the year 2024 at the IGEN Annual Day 2024, organized by IGEN, on 22nd November 2024, at the national level.
- Sreedevi K R, II-year student, won First Place in the Group Song event at Kumari Kalai Kazhagam, held at Dwaraka, Nagercoil, on 07th December 2024 at the district level.
- Joshua Mosay A, Mebin Raja N, Dinesh D, and Jaculin Rose RJ had presented their paper "Smart

### Student Achievements

- Alan Lal M A, Jaculin Rose R J, and Prithvi P, students of final year, secured first prize in the poster presentation on "Empowering Women Leaders" at the IEEE WIE International Leadership Summit, CEG, Anna University, Chennai, from 3rd to 5th October 2024, at the international level. They were awarded a cash prize of ₹2000.
- Sreedevi K R, II-year student, secured Second Place in the Group Song event at Fine Arts Day 2024 on 26th October 2024, at the college level.
- Joshua Mosay A, IV-year student, participated in the IEEE Reliability

Visitor Monitoring and Alert System Based on IoT” for IEEE TENCON 2024 at Marina Bay Sands, Singapore.

- Jeofrin J M, Lijo J, and Aksho Selgin R, III-year EEE students, participated in SUSTAINATHON 2025, an Ideathon event, held at Mar Baselios College of Engineering and Technology, Trivandrum, Kerala, on 21st February 2025 at the national level.
- Sreedevi K R, II-year student, won First Place in the Western Song event at ALEGRIA, held at Malankara Catholic College, Mariagiri, on 21st February 2025 at the college level.
- Adhith G, II-year student, secured Second Place in the Western Dance event at ALEGRIA, held at Malankara Catholic College, Mariagiri, on 21st February 2025 at the college level.
- Mohammed Abdul Hakkim A and Joshuva Mosay A, IV-year students, participated in the International Conference on Innovative Trends in Information Technology (ICITIIT '25) at IIIT, Kottayam, Kerala, on 21st & 22nd February 2025 at the international level.
- Akash A, Sam Rajkumar S R, and Antony Akash S, IV-year students, participated in the Paper Presentation event at ELECSPIRE 2K25, held at Mar Ephraem College of Engineering and Technology on 07th March 2025 at the national level.
- Antony Akash S, III-year student, secured First Place in the Project Expo at ELECSPIRE 2K25, held at Mar Ephraem College of

Engineering and Technology on 07th March 2025 at the national level.

- Jeyasurya G, IV-year student, secured First Place in the Fastrack Bot event and Second Place in the Click Clash event at ELECSPIRE 2K25, held at Mar Ephraem College of Engineering and Technology on 07th March 2025 at the national level.
- Jenin J, a IV-year student, secured Second Place in the Fastrack Bot event at ELECSPIRE 2K25, held at Mar Ephraem College of Engineering and Technology on 07th March 2025, at the national level.
- Jerin Renisto S J, IV-year student, secured First Place in the Fastrack Bot event and First Place in the Creative Cuts event at ELECSPIRE 2K25, held at Mar Ephraem College of Engineering and Technology on 07th March 2025 at the national level.
- Shanu R, a IV-year student, secured First Place in the Creative Cuts event at ELECSPIRE 2K25, held at Mar Ephraem College of Engineering and Technology on 7th March 2025 at the national level.
- Jeofrin J M, III-year student, presented a poster at the CSIR-NIIST Golden Jubilee Conclave, held at CSIR, Trivandrum, on 12th March 2025 at the national level.
- Hari Krishnan, IV-year student, successfully completed the FOSSEE Semester-Long Internship 2024 at IIT Bombay, working on the Scilab Case Study Project. He completed three case study projects and



received an honorarium of Rs. 15,000 from the FOSSEE Project.

- Kanimozhi K, IV-year student, successfully completed the eSim circuit simulation project titled “Variable Nine Pulse AC Converter” at FOSSEE, IIT Bombay, and received an honorarium of Rs. 2,000 from the FOSSEE Project.
- Antony Aakash S, III-year student, participated in a paper presentation at the Present Around The Local Network event held at St. Xavier’s Catholic College of Engineering (SXCCE) at the state level.
- Sherjin Sam, a III-year student, has been awarded the CWS (Cadet Welfare Society) Scholarship for Meritorious NCC Cadets 2024–2025 in recognition of his exemplary performance as an NCC cadet. He is one of three cadets selected from the battalion, comprising 1 Senior Division (SD) cadet and 2 Senior Wing (SW) cadets.
- Antony Aswin A, a IV-year student, secured Second Place in the Technical Quiz event at MAR NXT 25, organized by the Department of EEE, held at Mar Ephraem College of Engineering and Technology on 2nd May 2025 at the national level.
- Jenin J, Mohammed Abdul Hakkim A, Vijesh V, IV-year students, secured Second Place in the Project Expo event for the project titled “Sign Language Interpreter Using ML Algorithm” at MAR NXT 25, organized by the Department of EEE, Mar Ephraem College of Engineering and Technology, on 2nd May 2025 at the national level.

- Erudite Wren J, IV-year student, secured Second Place in the Mindscape event at MAR NXT 25, organized by the Department of EEE, held at Mar Ephraem College of Engineering and Technology on 2nd May 2025 at the national level

### Sports Achievements

- Aksho Selgin R (III year) secured Third place in the 1500m Running, Second place in the 400m Running, and Second place in the 4x200 Relay.
- Ashini Jenisha P (III year) secured Third place in the 200m Running.
- Ashika E R (IV year) secured First place in the 4x100 Relay and Third place in the 4x200 Relay.
- Brijith S (IV year) Secured Second in Football at university Kanyakumari zone.
- Jaculin Rose R J (IV year) secured First place in the 4x100 Relay and Third place in the 4x200 Relay.
- Jeekal S (II year) secured First place in the 4x100 Relay, Third place in the 4x200 Relay and 1500m Running.
- Jerbin Raj J (IV year) secured Third place in the Triple Jump.
- Kanimozhi K (IV year) secured First place in the 1500m Running and in the 4x100 Relay, and Third place in the 4x200 Relay.
- Ribin R A (II year) secured Second place in the 100m Running, First place in the 200m Running, First place in the 4x100 Relay, and Second place in Football.
- Sherjin Sam S (III year) secured Second place in the 4x200 Relay Third place in the 800m Running and 400m Running.



# ACADEMIC TOPPERS

## Semester I



*Aadharsha M K*

FIRST



*Cynthia C*

SECOND

## Semester II



*Cynthia C*

FIRST



*Aadharsha M K*

SECOND

## Semester III



*Ashika Jobin A K*

FIRST



*Aarthika S H*

SECOND

## Semester IV



*Ashika Jobin A K*

FIRST



*Akash A*

SECOND

## Semester V



*Hari Krishnan*

FIRST



*Joshuva Mosay A*

SECOND

## Semester VI



*Hari Krishnan*

FIRST



*Joshuva Mosay A*

SECOND

# SPORTS ACHIEVEMENTS



**Jeekal S (II Year)**  
secured First place in the 4x100m Relay, Third place in the 4x200m Relay, and Third place in the 1500m Running.



**Ashika E R (IV Year)**  
secured First place in the 4x100m Relay and Third place in the 4x200m Relay.

**Ribin R A (II Year)**  
secured Second place in the 100m Running, First place in the 200m Running, First place in the 4x100m Relay, and Second place in Football.



**Brijith S (IV Year)**  
Secured Second Place in Football at the University Kanyakumari Zone Tournament.



**Aksho Selgin R (III Year)** secured Third place in the 1500m Running, Second place in the 400m Running, and Second place in the 4x200m Relay.



**Jaculin Rose R J (IV Year)** secured First place in the 4x100m Relay and Third place in the 4x200m Relay.

**Ashini Jenisha P (III Year)** secured Third place in the 200m Running.



**Jerbin Raj J (IV Year)** secured Third place in the Triple Jump.



**Sherjin Sam S (III Year)** secured Third place in the 800m Running, Third place in the 400m Running, and Second place in the 4x200m Relay.



**Kanimozhi K (IV Year)** secured First place in the 1500m Running, First place in the 4x100m Relay, and Third place in the 4x200m Relay.

# COLLEGE DAY AWARDS (2025)



**Dr. S. S. Selva Pradeep & Dr. M. Marsaline Beno** received the *SXCCE Award of Seed Money Fund* for their innovative research project titled “*Solar Electric Truck for Educational Institutions.*”



**Dr. A. Darwin Jose Raju**

*Recognized as the Best Voracious Reader of the year.*



**Aravinth M T** (II year)

*Awarded the Best Voracious Reader Award among students for the year.*

**Mebin Raja N** (IV Year)

*Securing a place in the top 2% in the NPTEL course “Sensors and Actuators,” receiving an Elite + Silver*



**Hari Krishnan** (IV Year)

*Honoured as the Best Outgoing Student for the year, in recognition of his exceptional performance.*



**Kanimozhi K** (IV Year)

*Received the Andrews Micheal Memorial Award, presented by the 2000–2004 batch as part of the Endowment Awards.*



**Thanish T** (IV Year)

*Received the Andrews Micheal Memorial Award, presented by the 2000–2004 batch as part of the Endowment Awards.*

**Shiny R** (IV Year)

*Presented with the Excellence Award by the students of the 2018–2022 EEE batch as part of the Endowment Awards.*



**Mohammed Abdul Hakkim A** (IV Year)

*Received the Excellence Award from the 2018–2022 batch as part of the Endowment Awards.*





**Jenin J** (IV Year)

*Honoured as the Best Leader Award for the year, for his outstanding leadership, commitment, exceptional performance, inspired his student excellence.*

## 100% ATTENDANCE (2023-2024)

### Odd Semester



**Bensten Schofer W M**  
(II year)



**Sabin L**  
(II year)



**Lijo J**  
(III year)



**Dinesh D**  
(IV year)



**Vijesh V**  
(IV year)

### Even Semester



**Bensten Schofer W M**  
(II year)



**Babin S**  
(II year)



# PLACEMENT RECORDS

The EEE department recorded an outstanding 97.06% placement rate with 70 offers.

## *SRI SAI POWER AND EQUIPMENTS PRIVATE LIMITED*



*Alan Lal M A*



*Joshuva Mosay A*



*Karthikeyan N*



*Naveen N*



*Thanish T*

## *QUINTESSENCE BUSINESS SOLUTIONS & SERVICES, CHENNAI*



*Abiya J R*



*Dinesh D*



*Hemavathy P*



*Jaculin Rose R J*



*Kanimozhi K*

## *THE ENGLISH ACADEMY*



*Alan Lal M A*



*Dinesh D*



*Arul George Bell A*



*Karthikeyan N*



*Kanimozhi K*

## *PINNACLE INFOTECH, MADURAI*



*Abiya J R*



*Prithvi A S*



*Ashika E R*



*Femisha L S*



*Kanimozhi K*



*Erudite Wren J*



*Shiny R*

## *L. G. BALAKRISHNAN & BROS LTD., COIMBATORE*



*Abilash K*



*Ajay S*



*Barath R S*



*Brijith S*



*Ebin E G*



*Jerin S*



*Jino S S*



*Vasanthan V*



## *VI MICRO SYSTEMS PRIVATE LIMITED, CHENNAI*



*Alan Lal M A*



*Jenin J*



*Joshuva Mosay A*



*Mebin Raja N*



*Mohammed Abdul  
Hakkim A*



*Thanish T*



*Vijesh V*

## *EXALCA TECHNOLOGIES    COGNIZANT*

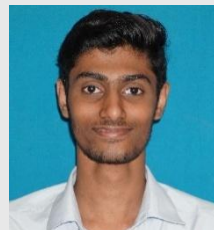


*Hari Krishnan*



*Hari Krishnan*

## *FLOW GLOBAL*



*Hari Krishnan*

## *SAKURA AUTOPARTS INDIA PVT. LTD, CHENNAI*



*Abiya J R*



*Ajay S*



*Adarsh T*



*Erudite Wren J*



*Jerin S*



*Jenin J*



*Vasanthan V*



*Muhamathu Arsath S*



*Sree Ram Vignesh K S*



*Kanimozhi K*

## *H&MV ENGINEERING, BANGALORE*



*Dinesh D*

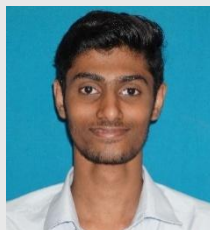


*Mebin Raja N*



*Shiny R*

## *SAIF SALIM ESSA AL HARASI & CO. LLC, MUSCAT, OMAN*



*Hari Krishnan*

## *JUST DIAL Ltd*



*Naveen N*



*Jerin S*



*Jenin J*



*Ajay S*



*Brijith S*



*Jeya Surya G*



*Erudite Wren J*



*Anto Nishanth B*



*Rejilin Rajan R*



*Yogeshwaran R S*

# TECHFEST PRIZES

## PROJECT SHOWCASE

*First*



**Jenin J**  
(IV year)



**Jerbin Raj J**  
(IV year)



**Barath R S**  
(IV year)



**Dinesh D**  
(IV year)



**Mohammed  
Abdul Hakkim A**  
(IV year)



**Vijesh V**  
(IV year)



**Joshuva Mosay A**  
(IV year)



**Mebin Raja N**  
(IV year)

*First*



**Antony Aakash S**  
(III year)



**Sridhar V**  
(III year)

## SUSTAINABLE ENERGY CHALLENGE

*Second*



**Mohammed Niyash S**  
(III year)



**Jeofrin J M**  
(III year)



## PAPER PRESENTATION

*First*



**Joshuva Mosay A**  
(IV year)

*Second*



**Aarthika S H**  
(III year)



**Sowmiya M**  
(III year)

*First*



**Antony Aakash S**  
(III year)

*Second*



**Kanimozhi K**  
(IV year)

## POSTER PRESENTATION

*First*



**Antony Aakash S**  
(III year)



**Sridhar V**  
(III year)

## ROBOTICS CHALLENGE

## QUIZ BOWL

*First*



**Mohamed Fadil M**  
(II year)

*Second*



**Oswin Franco I**  
(II year)



# SEE AWARDS 2025



SHINING STAR OF THE YEAR

*Hari Krishnan*  
(IV year)



BEST OUTSTANDING  
STUDENT OF THE YEAR

*Mebin Raja N*  
(IV year)



SEE ICON OF THE YEAR  
AWARD

*Jenin J*  
(IV year)



SEE LEADERSHIP AWARD

*Mohammed Abdul  
Hakkim A*  
(IV year)



SEE AMBASSADOR AWARD

*Vijesh V*  
(IV year)



SEE GLADIATOR AWARD

*Sam Raj Kumar S R*  
(III year)



SEE TESLA AWARD

*Antony Aakash S*  
(III year)



SEE CHRONICLE STAR  
AWARD

*Sree Ram Vignesh K S*  
(IV year)



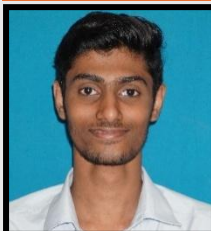
SEE MARVEL AWARD

*Jaculin Rose R J*  
(IV year)



SEE BEST ORGANIZER OF  
THE YEAR

*Jenin J*  
(IV year)



**BEST PLACEMENT  
RECORDER**

*Hari Krishnan  
(IV year)*



**BEST PLACEMENT  
RECORDER**

*Kanimozhi K  
(IV year)*



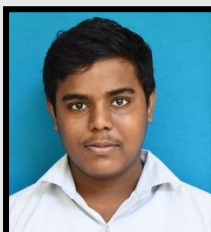
**SEE BEST VOLUNTEER**

*Abilash K  
(IV year)*



**SEE BEST VOLUNTEER**

*Sherjin Sam S  
(III year)*



**SEE BEST VOLUNTEER**

*Akash S V  
(II year)*



**SEE CRUSADER AWARD**

*Steny S  
(III year)*



**SEE CRUSADER AWARD**

*Sowmiya M  
(III year)*



**SEE CRUSADER AWARD**

*Cynthia C  
(II year)*



**SEE ELECTRA AWARD**

*Karthikeyan N  
(IV year)*



**SEE ELECTRA CONTRIBUTOR  
AWARD**

*Jerbin Raj J  
(IV year)*



**SEE BEST EXTRA  
CURRICULAR PERFORMER  
AWARD**

*Sree Devi K R*



**SEE ANCHOR OF THE YEAR**

*Stephenson Moses  
Chadwick A  
(III year)*



SEE MARVEL DESIGNER  
AWARD

*Shanu R*  
(IV year)



SEE MARVEL DESIGNER  
AWARD

*Jenin J*  
(IV year)



SEE MARVEL DESIGNER  
AWARD

*Joshuva Mosay A*  
(IV year)



CONSISTENT ATTENDANCE OF  
THE YEAR

*Vijesh V*  
(III year)



CONSISTENT ATTENDANCE OF  
THE YEAR

*Dinesh D*  
(IV year)



CONSISTENT ATTENDANCE OF  
THE YEAR

*Lijo J*  
(III year)



CONSISTENT ATTENDANCE OF  
THE YEAR

*Babin S*  
(II year)



SEE SPORTS PERSON OF THE  
YEAR

*Naveen N*  
(IV year)



SEE SPORTS PERSON OF THE  
YEAR

*Aksho Selgin R*  
(III year)



SEE SPORTS PERSON OF THE  
YEAR

*Ribin R A*  
(II year)



GATE 2025 EXAMINATION

*Mebin Raja N*  
(IV year)



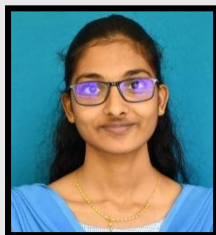
NPTEL

*Mebin Raja N*  
(IV year)



## BEST ACADEMIC PERFORMANCE OF THE YEAR

**FIRST**



Cynthia C  
(II year)

**SECOND**



Aadharsha M K  
(II year)

**FIRST**



Hari Krishnan  
(IV year)

**SECOND**



Joshuva Mosay A  
(IV year)

**FIRST**



Ashika Jobin A K  
(III year)

**SECOND**



Aarthika S H  
(III year)



Akash A  
(III year)

**FIRST**



Dave Andrew A  
(II year ME)

## RESUME BUILDING COMPETITION

**IV year**

**FIRST**



Hari Krishnan

**SECOND**



Kanimozhi K

**THIRD**



Femisha L S

**II year**

**FIRST**



Antony Joel A

**III year**

**FIRST**



Ashika Jobin A K

**SECOND**



Antony Aakash S

**THIRD**



Jeofrin J M



Ashmi M

## CONFERENCE



Jaculin Rose R J  
(IV year)



Prithvi A S  
(IV year)



Hemavathy P  
(IV year)

INTERNATIONAL CONFERENCE ON  
(ICCICCT-2025), ORGANIZED BY  
NICHE, HELD ON 24TH AND 25TH  
APRIL 2025 AT KUMARACOIL.

IEEE TENCON 2024,  
HELD AT MARINA BAY  
SANDS, SINGAPORE



Joshuva Mosay A  
(IV year)



Dinesh D  
(IV year)



Jaculin Rose R J  
(IV year)



Mebin Raja N  
(IV year)



Abinesh P R  
(IV year)



Arul George Bell A  
(IV year)



Pravin Nijo M  
(IV year)



Muhamathu  
Arsath S  
(IV year)

INTERNATIONAL CONF-  
ERENCE ON (ICCICCT-  
2025), ORGANIZED BY  
NICHE, HELD ON 24TH  
AND 25TH APRIL 2025  
AT KUMARACOIL.



Jeofrin J M  
(IV year)

POSTER PRESENTATION AT  
THE CSIR-NIIST GOLDEN  
JUBILEE CONCLAVE



Mohammed Abdul Hakkim A  
(IV year)

INDIAN INSTITUTE OF  
INFORMATION TECHNOLOGY,  
KOTTAYAM DURING 21-22  
FEBRUARY, 2025



## TECH FEST CONSOLIDATION PRIZES

### PROJEST SHOWCASE

#### *IV year*



Alan Lal M A



Brijith S



Thanish T



Yogeshwaran R S



Sree Ram Vignesh K S



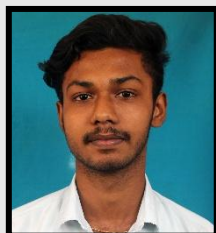
Antony Aswin A

### PAPER PRESENTATION

#### *III year*



Akash A



Sam Raj Kumar S R



Ashika Jobin A K

# ARTICLES

## ***ELECTRICAL SAFETY IN THE AGE OF SMART DEVICES***

### **Introduction:**

With the rapid growth of smart technology, our homes and workplaces are becoming increasingly interconnected. Smart devices such as smart plugs, automated lighting, and AI-driven home assistants provide convenience and efficiency. However, they also introduce new challenges in electrical safety. Understanding these risks and implementing proper safety measures is crucial to prevent electrical hazards.

### **Potential Electrical Risks with Smart Devices:**

1. **Overloading Circuits:** Many smart devices continuously draw power, which can overload circuits if not managed properly.
2. **Cybersecurity Threats:** Hacked smart devices can manipulate electrical systems, causing overheating or short circuits.
3. **Faulty or Non-Compliant Devices:** Cheap, unregulated smart devices may not meet safety standards, increasing the risk of electrical fires.
4. **Battery Hazards:** Lithium-ion batteries in wireless smart devices can overheat if damaged.

### **Safety Measures for Smart Devices:**

1. Purchase devices that comply with national and international safety standards.

2. **Proper Load Management:** Avoid overloading power strips and ensure circuits can handle the total load.
3. **Regular Inspections:** Periodically check smart devices for signs of overheating, wear, or damage.
4. **Secure Your Network:** Use strong passwords and encryption to protect smart devices from cyberattacks.
5. **Follow Manufacturer Guidelines:** Adhere to recommended usage, charging, and maintenance instructions.

### **The Role of Smart Technology in Enhancing Safety:**

Interestingly, smart technology can also improve electrical safety. Many devices now include features like:

- Automatic Power Cutoff
- Remote Monitoring
- AI-Based Alerts

### **Conclusion**

As smart devices become integral to daily life, ensuring their safe operation is essential. By understanding potential risks, following best practices, and leveraging smart safety features, we can enjoy the benefits of technology without compromising electrical safety.

**- Kanimozhi K** (IV Year)

# QUANTUM ENTANGLEMENT

## Abstract

Quantum entanglement is a fundamental phenomenon in quantum physics where particles become interconnected such that the state of one particle instantly influences the state of another, regardless of the distance between them. This non-local correlation violates classical physics and serves as the backbone of emerging technologies like quantum computing and quantum communication.

## Introduction

Quantum mechanics, the physics governing the microscopic world, introduces many unintuitive concepts—none more intriguing than quantum entanglement. First introduced by Einstein, Podolsky, and Rosen in 1935, entanglement was once considered a “spooky action at a distance.” Today, it is a cornerstone of quantum theory, offering revolutionary implications in computation, encryption, and teleportation.

## Technical Background

In classical systems, properties such as position and momentum are well-defined independently. However, in entangled quantum systems, the properties of one particle cannot be described without reference to the other. When two particles are entangled, measuring the state of one instantly determines the state of the other, even if they are light-years apart. Mathematically, entangled states are represented using tensor products in a Hilbert space.



## Applications

- **Quantum Computing:** Entanglement enables quantum gates and operations that allow for exponential speed-up in solving certain problems.
- **Quantum Cryptography:** Protocols like Quantum Key Distribution (QKD) use entangled photons for ultra-secure communication.
- **Quantum Teleportation:** Allows the transmission of quantum states across distances using entangled particles, without moving the particle itself.
- **Entanglement-Based Sensors:** Improve precision in measurement and imaging applications.

## Conclusion

Quantum entanglement, once a theoretical curiosity, is now at the heart of next-generation technologies. As research progresses, the practical realization of entanglement-based systems could redefine computing, communication, and our understanding of the universe itself.

- **Mebin Raja N** (IV Year)

# ***A BUDGET-FRIENDLY NIGHT ROAD ACCIDENT CONTROL DEVICE USING LIGHT-BASED DIMMING TECHNOLOGY***

## **Abstract**

Night time Road accidents are a major concern, particularly due to the glare caused by high-intensity headlights from oncoming vehicles. This project presents a low-cost and efficient solution that automatically dims vehicle headlights using a sensor-based circuit. The device operates by detecting incoming light using an LDR (Light Dependent Resistor) and automatically switches the headlight from bright to dim mode, thus reducing the glare effect. The primary objective is to enhance road safety by preventing temporary blindness in drivers caused by bright lights at night. This system is especially beneficial in rural and urban areas where road lighting infrastructure is inadequate.

## **Proposed System:**

The core of this project is a sensor-based system that adjusts headlight brightness based on the intensity of incoming light. The device consists of an LDR module, a relay, a variable resistor, a transistor, and a resistor. When the LDR detects bright light from an oncoming vehicle, it triggers a response in the transistor, which in turn activates the relay to switch the headlights to dim mode. This process is entirely automatic and does not require driver intervention. The system is designed to be compact, energy-efficient, and compatible with existing headlight configurations.

## **Working:**

The device operates on the principle of light sensing and electrical switching. In normal conditions, the headlights remain in bright mode. When light from an oncoming vehicle falls on the LDR, the resistance of the LDR drops, allowing current to flow through the circuit. This change is detected by the NPN transistor, which then becomes forward-biased. The transistor conducts and sends a signal to the relay. The relay, in turn, switches the headlight from bright to dim mode. Once the incoming light disappears, the LDR's resistance increases again, and the circuit returns to its original state. This process ensures that headlights are automatically dimmed without any manual input.

## **Advantages**

- Significantly reduces the risk of night time road accidents.
- Eliminates the need for manual switching of headlight modes.
- Enhances driver comfort and safety
- Low cost and easy to implement.

## **Conclusion:**

The automatic headlight dimming device is a practical and economical solution to a critical safety issue on the roads. By leveraging simple electronics, it enhances driving safety by reducing glare from oncoming vehicles. The system is easy to build, install, and maintain, making it suitable for widespread adoption.

**- Sam Raj Kumar S R** (III Year)

## ***ELECTRICAL LIFE***

Your life must have a “Theory”  
But your action in “Practical”  
Built your “Circuit” in life  
Connect a “Battery” of health  
Pass a “Current” of love  
Measure your thoughts with an “Ammeter”  
Observe your talent in “Voltmeter”  
After your ideas in “Capacitor”  
Have “Resistance” towards trouble  
Adjust your tension with a “Rheostat”  
Change your character by a “Reflector”  
Have “Time limits” for all aspect of life  
Stop your “Switch” at a proper time  
Calculate the “Solution” of life  
Draw a “Graph” of your future  
Don’t try “Short circuit”  
Make use of the “Transformer” to modify the life  
Phase your life with “God”

- **Jenin J** (IV Year),  
Secretary Of SEE



# SEE GALARY



*SEE Inauguration*



*TVS Training*

## Teachers Day

### Project Idea Display





***TTPS Visit II-year***



***Industrial Visit III-year***





***Seminar on Modern Technologies in Substation***



***Training on Verilog HDL***



***Seminar On “Basics of Intellectual Property Rights and its importance for Innovators and Entrepreneurs”***



***Resume Competition***





***MEP Electrical Design Training***



***Electrovate Technical Symposium***



***Industrial Visit – TANTRANSCO Virudhunagar***



***MEP Final Assessment Presentation***





*Alumni Meet*



*SEE & IET KKLN Technological Seminar Series-I*



***North India Tour IV year***



***SEE Valedictory***







***TOGETHER, LET'S SPARK ANOTHER YEAR  
OF BRILLIANCE AND MEMORIES***