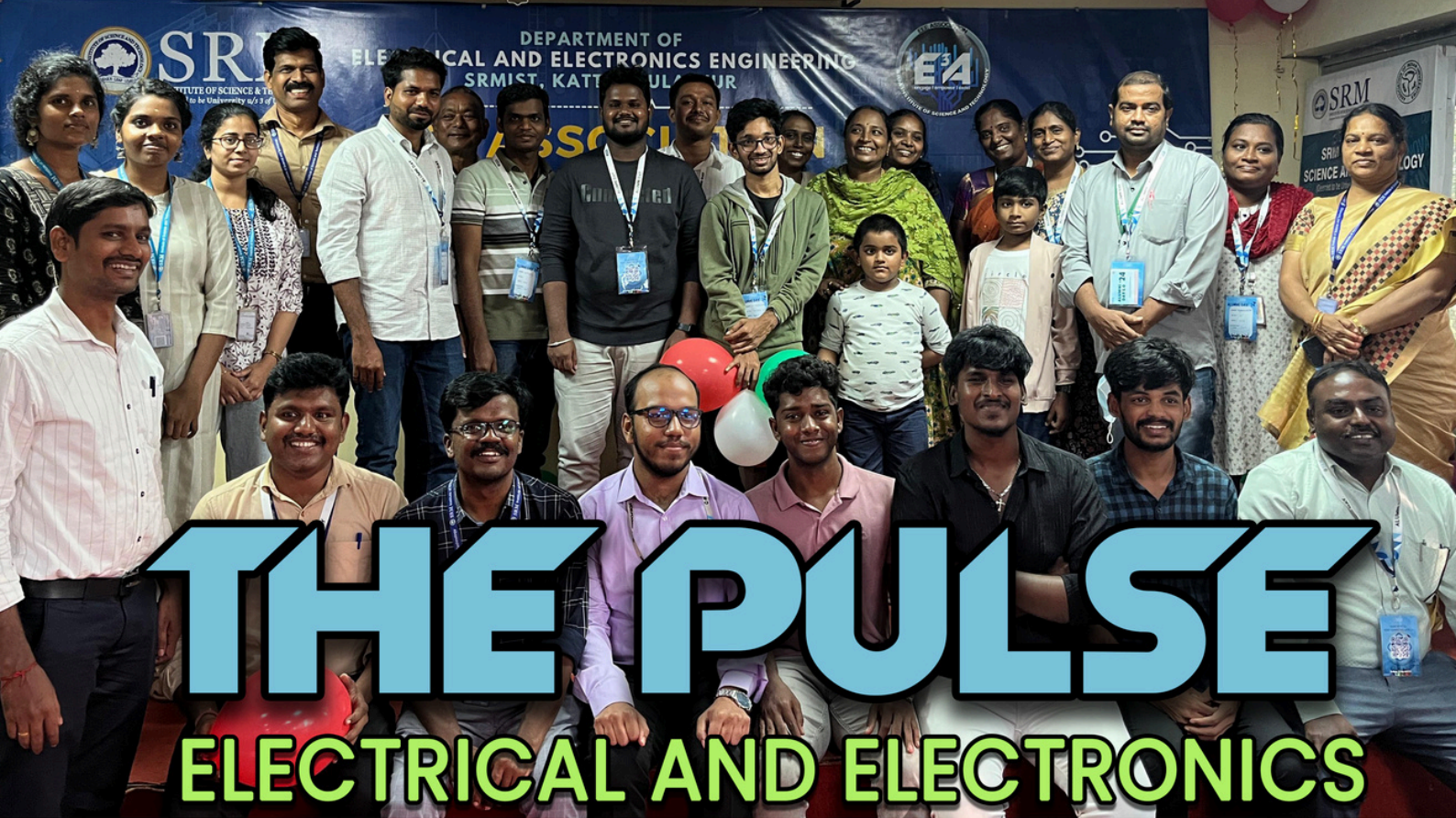




SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s of UGC Act, 1956)



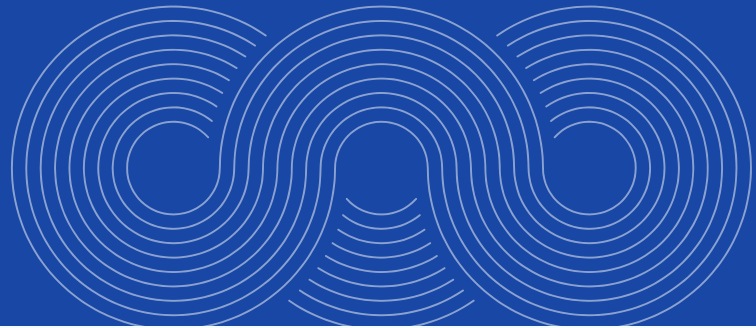
THE PULSE

ELECTRICAL AND ELECTRONICS ENGINEERING

2024 ISSUE 4



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About the Department

The Department of Electrical and Electronics Engineering at SRM was established in the academic year 1992-1993 as a core branch under SRM Engineering College, affiliated with the University of Madras. It transitioned to Anna University in 2001-2002 and later to SRM Institute of Science and Technology (Deemed University) in 2003-2004.

The department offers B.Tech. (Electrical and Electronics Engineering), B.Tech. (Electric Vehicle Technology), M.Tech. (Power Electronics and Drives), M.Tech. (Power Systems), and PhD programs. The B.Tech. EEE program at Kattankulathur Campus is accredited by ABET and NBA. With 57 faculty members, the department received the AICTE-CII Award for Best Industry Linked Institute (2019-2020) and is ranked 10th in India, 2nd among private institutions, and 301-350 in QS World University Rankings 2024.

Vision



To impart quality education in the field of Electrical & Electronics Engineering and to produce globally competent engineers to serve the society.

Mission



- To educate the student to become better practicing engineers to meet global excellence.
- To provide better environment through latest developments in electrical engineering involving problem solving, design, practice and training.
- To motivate the graduates to become a good leader, designer and researcher through industry-oriented trainings with social and ethical responsibilities.

Dean's Message



Dr.K.VIJAYAKUMAR
Dean, SoEEE

Dear Students, Faculty, and Esteemed Colleagues,

As we embark on another promising year, I take great pride in reflecting on the achievements of our department and envisioning the path ahead. Together, we are shaping a future of excellence, innovation, and meaningful contributions to society. I encourage every faculty member to enhance their engagement beyond the classroom by actively participating in consultancy projects and forging industry collaborations. Such initiatives not only bring valuable insights and resources to our institution but also elevate its standing in the academic and professional world.

Students participation in outreach programs and projects aimed at societal betterment has been truly inspiring. Let us continue this momentum by developing products and solutions that address community challenges. These initiatives reflect our commitment to blending technical knowledge with social responsibility.

I also urge both students and faculty to enhance our presence in national and international competitions, workshops, and conferences. Such platforms provide opportunities to learn, network, and showcase the incredible talent and ingenuity that our institution holds.

Let this year mark a new phase of growth where we strengthen our connections with the world outside, expand our influence, and make impactful contributions to both industry and society. Together, let us commit to making our institution a beacon of learning, innovation, and service.

Wishing you all a year filled with purposeful endeavors and success

HoD's Message



Dr.R.SRIDHAR
Professor and Head
Department of EEE

Dear Faculty and Students,

As we welcome the New Year 2025 with enthusiasm and hope, I extend my warm greetings to each one of you. May this year bring renewed energy, opportunities, and accomplishments for our Electrical and Electronics Engineering department, Kattankulathur campus. In this spirit, I encourage our esteemed faculty to embrace innovative pedagogical styles that align with the changing dynamics of education. It is imperative to adopt teaching methods that inspire curiosity, foster creativity, and instil practical knowledge in our students.

I am also delighted to announce the inception of the exclusive facility for students to undertake their project works- Project Laboratory, a dedicated space for nurturing innovation and collaboration. This facility is designed to support extended hours, enabling students to work on projects, experiment, and turn their ideas into reality. I urge all students to make full use of this resource and explore the unexplored territories of technology and design.

Beyond academics, we must strive for holistic development. As an engineering community, let us commit to balancing technical excellence with personal growth, ethics, and societal responsibility. Together, let us create an environment where learning is not just a task but a journey toward becoming well-rounded individuals. I am confident that with dedication and teamwork, we can make 2025 a remarkable year for our department.

Wishing you all a year of success, growth, and fulfilment!

Editors' desk

Dear Readers,

Welcome to the fourth edition of "The Pulse" for 2024! We're excited to share the latest updates and accomplishments from the Electrical and Electronics Engineering department for the period from October to December.

These past months have been filled with significant achievements, including new publications, patents, and outreach activities. Our students and faculty have excelled, contributing to various technical and non-technical events. Highlights include the Freshers Day, Freshers welcome day out, International professor visit and many other initiatives showcasing the dedication and talent within our community.

We hope this edition is both informative and inspiring.

Warm regards,
Team Newsletter.

Team members



Dr. PRADEEP V
Assistant Professor
Faculty Mentor



Dr. THAMIZH THEENTRAL T M
Assistant Professor
Faculty Mentor



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III Year, EEE
Content Writer



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II Year, EEE
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II Year, EEE
Event Coverage Lead



VEDANT JAIN
I Year, EEE
Digital Content Manager

LEADER'S KEY ACHIEVEMENTS

The Institution of Engineers India , Kolkata has awarded the Academic Excellence Award 2024 (Platinum Category) to SRM INSTITUTE OF SCIENCE AND TECHNOLOGY for the academic excellence in areas such as research and development, consultancy, patents, publications, skill development programs, industry collaboration, and the implementation of the National Education Policy (NEP).



Dr.K.Vijayakumar, Dean SoEEE is one of the members representing SRMIST in the panel discussion on the topic "How NEP 2020 is making impact through adoption and industrial connect?" held at IEI Academic Excellence award 2024 function held at Novotel Hotel, Kolkata organized by Institution of Engineer India.



LEADER'S KEY ACHIEVEMENTS

Dr.K.Vijayakumar, Dean of the School of Electrical and Electronics Engineering along with VC and other team members, visited Ogarev Mordovia State University, Russia, from October 28 to 31, 2024, to strengthen research collaborations and academic partnerships. The visit fostered deeper ties between SRMIST and Mordovia State University, highlighting opportunities for joint research, student exchanges, and cultural synergy.



The Solar Ambassador Workshop 2024, held at SRMIST on October 2, Gandhi Jayanti, promoted solar energy and sustainability in collaboration with Unnat Bharat Abhiyan and the Energy Swaraj Foundation. Coordinated by Dr. R. Sridhar, HoD, EEE, the event equipped participants with knowledge and skills to serve as renewable energy ambassadors, aligning with Mahatma Gandhi's principles of self-reliance and sustainability.



GLOBAL TIES

Dr. Jiun-Haw Lee, Vice President for International Affairs at National Taiwan University, visited the EEE Research Lab at SRMIST on 23rd November 2024. His visit focused on fostering academic exchange, research collaborations, and innovation between SRMIST and NTU. Dr. Lee's insights inspired both faculty and students. The visit marked a significant step towards strengthening international academic partnerships.



Students'

CORNER

FRESHERS' DAY CELEBRATION: "EEE PREMIERE"



The EEE Association at SRM Institute of Science and Technology hosted a spectacular Freshers' Day celebration, themed "EEE Premiere," offering a red-carpet experience to welcome the new batch of students. Held in the esteemed Faraday Hall, the event combined entertainment, inspiration, and camaraderie, creating a memorable start to the academic journey of the first-year students of 2028 batch.



The program began on a warm note with the Welcome Address, setting the stage for the day's activities. The Dean and Head of the Department inspired the freshers with encouraging messages, while the Academic Advisor guided them in taking an oath of dedication, setting the tone for a meaningful academic and personal journey. The cultural segment was a vibrant mix of music, dance, and talent.



Highlights included a soulful singing performance by Pratyush Anand, a high-energy group dance, and a Tamil song by Gemini that had the audience captivated. Freshers also showcased their skills through a lively group dance, a harmonious trio song, and an impressive beatboxing act, earning enthusiastic applause from the crowd. Adding to the excitement were interactive games that encouraged friendly competition and fostered camaraderie among the students.



PLACEMENT RECORDS

2021 - 2025 BATCH



Mehul Agarwal



**M J Mohamed
Nawfal**



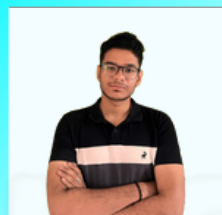
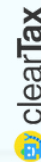
**Nandini
Pandhare**



**Vinotha
Varsha G**



**Gowtham
Prakash S**



Atul Nair U



Dinesh Kumar S



Ajay Aksanth J



Akarsh Prasad



**Dhaniska
Gaikwad S**



**Sowmiya
Lakshmi P**



Atul Nair U



**Dhaniska
Gaikwad S**



Akarsh Prasad

AWARDS AND ACHIEVEMENTS



Rohan Raj Singaperumalkoil Janakiraman, a first-year student, won second prize in the **State Level Athletic Meet** on October 26, 2024, at **Tamil Nadu Physical Education and Sports University**.

Pinaki Mandal, a first-year student, secured 1st position in **JIPMER 2024** on October 8, 2024, organized by the **Directorate of Student Affairs, SRMIST**.

Sentamizh K, Monis Thilak, Rajesh S, first year student won 1st place in the **Circuit Crafter: Design to Hardware Challenge** on October 7, 2024, organized by the **EEE Association, SRM Institute of Science and Technology**.

Rohan Raj Singaperumalkoil Janakiraman, a first-year student, won first place in the **100m Running event at ACE 2024** on November 5, 2024, at **SRM Institute of Science and Technology**.

Utsav Jain, a third-year student, won in the **Idea Palette competition** on November 7, 2024, at **SRM Institute of Science and Technology**.

Dalli Shanmukha Srinivas, a first-year student, won first place in **Cricket at ACE 2024** on November 5, 2024, at **SRM Institute of Science and Technology**.

Sanjay P.D., a first-year student, was won and selected for the **Engineering SRM IST University Team at ACE 2024** on November 5, 2024, at **SRM Institute of Science and Technology**.

Nirmalya Bhattacharjee, a first-year student, won second place in **Creative Ingenuity '24** on November 29, 2024, organized by the Department of Mechanical Engineering, **SRM Institute of Science and Technology**.

Mohit Verma, Nandini Pandhare, and Chandan Thakur, final-year students, won the first prize in the **Research Symposium on Emerging Trends in Electrical, Electronics, and Biomedical Engineering** held on December 27-28, 2024, at **Vignan University**.

Utsav Jain, a third-year student, won the first prize for **Outstanding Achievement** on December 19, 2024, at **IIT Bombay's Tech Sanrakshan 2024**.

Rohan Philip, Soham Anil Kumar, Devarsh Sunil, and Nirmalya Bhattacharjee, first-year students, won first place in **Techknow** on December 5, 2024, organized by the Department of Physics and Nanotechnology, **SRM Institute of Science and Technology**.

STUDENTS PARTICIPATION



Sachin Anand, a first-year student, participated in **"The Chief Minister's Trophy"** on October 1, 2024, organized by the Sports Development Authority of Tamil Nadu.

Shriram Jayan, a second-year student, participated in the **"PALS Tinkathon"** on October 1, 2024, at SRM Institute of Science and Technology.

Rishe S.M, Janani K. Pillai, Samuel Lawrence M , Sharvesh SM , Ujjwal Aryan, dhanya sri M, Madhunisha, Dharani dharan S, Shalikh Grehor Pereira, Ayush Govindarajan, Rajesh S, Pranavraj V, sharulatha B, Subhasish Bhattacharjee, kousalya MN , MD SHAHIL ANSARI , sentamizh k, J M PRANAV, Akash S, Monis Thilak, Vimal M, Srujan J Acharya from 1st year students , participated in the **"Solar Ambassador Workshop"** on October 2, 2024, under the Unnat Bharat Abhiyan initiative.

Mayank Umrey, Sharulatha B, Dhanya Sri M, Madhunisha G, Toopalle Monish Vardhan, Dharani Dharan S, Jinessh J.P., Gaurang Kharwar, Samuel Lawrence M, Khadeeja Marjan K, Divit Sugumar, Pranavraj V, Eshan Vengal George, Kousalya M.N., and Rishe S.M., all first-year students, participated in the **"Circuit Crafter: Design to Hardware Challenge"** on October 7, 2024, organized by the EEE Association, SRM Institute of Science and Technology

Sanjay P.D., a first-year student, participated in the **"9th Sri M.S. Venkataraman Memorial International FIDE Rating Chess Tournament"** 2024 on October 10, 2024, at Mount Chess Academy, New Prince Shri Bhavani College of Engineering and Technology.



Hari Prasath M, a second-year student, participated in a **"Hands-on Training on Arduino"** on October 12, 2023, at SRM Institute of Science and Technology.

Utsav Jain, a third-year student, participated in the **"Palm Seed Collection activity"** on October 20, 2024, at SRM Institute of Science and Technology.

Ujjwal Aryan, a first-year student, participated in a webinar on **"Resilient Smart Grid"** on October 25, 2024, organized by the Department of EEE, SRM Institute of Science and Technology.



Rajesh S, a first-year student, participated in **"MSME Sangamam"** on November 24, 2024, organized by the **MSME Association**.

Atish Dinda, Souvik Maity, and Utsav Jain from 3rd year students participated in the **"IIT Bombay Techfest"** on October 27, 2024, held at the **Global Academy of Technology**.

Hari Prasath M, Chandru S, Neethu K Narayanan, Dharaneesh S, Goldwin R, Varshini V.S., Iniyan R, along with Selvasri B, Karthikram G, Dharmendiramurthy A, Selvakumar U, Madhav B.V., Hari Govind M, Ethish Karthikeyan R, Elgin Calister F, Deenavarshan T, Bharani Balan, Abishek Krishna T, Balaji S, Deepak M.S., and R. Ashish Raghav, from 2nd year attended an **internship at the Welding Research Institute (BHEL)** in Trichy from **December 6, 2024, to December 20, 2024**.



Balasubramaniam, S. Rohan, Siddharth S.M., and J. Nithish, third-year students, participated in a workshop on **"Power Electronics Converters, Charging Circuits, and Controller Design"** from December 12-14, 2024, at **SRM Institute of Science and Technology**.



Rohit Jhajhria, a second-year student, participated in a **"Virtual Internship on Embedded System Development"** organized by **AICTE** on **December 25, 2024**.

Hariharan J, a first-year student, completed an internship at **"Megawin Switchgear Private Limited (Unit II)"**, Salem, from **December 23, 2024, to December 30, 2024**.

Kousalya M.N., Janani K. Pillai, and Sentamizh K., Monis Thilak first-year students, participated in the **"Energy Audit Competition"** on **December 14, 2024, at VIT, Vellore**.

FRESHERS WELCOME DAY OUT



The Department of Electrical Engineering organized a vibrant Fresher's Welcome Day Out to Mahabalipuram for the first-year students of the 2028 batch. This thoughtfully curated trip blended fun, learning, and camaraderie against the backdrop of Mahabalipuram's rich heritage and scenic beauty, setting the tone for an exciting academic journey ahead.

The event was graced by the presence of the Dean of the School of Electrical Engineering, the Head of the Department, the Faculty Advisor, and the Academic Advisor for the 2024 batch. Their warm interactions with the freshers highlighted the institution's commitment to fostering a supportive environment.



Members of the Counseling Cell and Association In-charges also participated, offering guidance and encouragement, making the students feel welcome and valued.



The day was filled with engaging activities, from exploring the cultural marvels of Mahabalipuram to participating in team-building games, interactive ice-breaker sessions, and bonding activities on the beach. These activities helped students forge friendships, build teamwork skills, and create lasting memories.

Students Article



Swethasree Saravanan
RA2411005010021



PRANAV MAHENDRAN M
RA2411005010059

The AI Revolution: The Ways Students are Coping and Dealing with AI Tools in Education

by GRACIA SAMITHA S (RA2411005010042)

Artificial intelligence, or AI for short, has begun to change the scope of education and facilitate the student learning process in an effective way. In the same vein, It is also communised across the board what AI tools are doing, and that is changing the way learning is experienced by students.

The breakout effect that AI's use in education provide is referred to as personalized learning. Automation platforms like adaptive quizzes as well as virtual tutors assess the student to automatically suggest an average lesson whilst allowing the student to learn at their preferred pace. Platforms such as Duolingo and Khan Academy act as a supplement to help students better understand the content.

Regardless, AI incorporates the language barrier as well as the worst of all, the lack of time. App translation provides one with the insight of everything that's out there and virtual assistance is available around the clock to assist with any uncertainties and act as an organizer. Writing enhancers such as Grammarly and ChatGPT help with editing papers and coming up with ideas for writing, leaving students with more time to focus on their study.

Although this is a strong candidate for an argument, areas such as critical thinking and problem solving could be challenged as other rely too heavily on AI, but To balance this out, teachers are promoting digital literacy and focus mainly on how to discuss or use AI correctly and properly.

Technology and people together will boost the capabilities of mankind and the students using such tools responsibly prepares them for the future

Facultys'

CORNER

PUBLICATIONS AND PATENTS

Number of papers published in 2024 : **237**

Number of papers in IEEE Transactions : **8**

Total citations of the department : **5642**

H-Index of the department : **64**

i10-Index of the department : **667**

Number of patent published in 2024 : **20**

Number of patent granted in 2024 : **15**

List of Articles

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- S, Usha, Geetha A, Palanisamy R, Ismail Hossain, Mohammed A. Qasim, and Subhashree Choudhury. 2024. "Integrated Control Strategy: Simulation Validation of Combined Field-Oriented Control and Direct Torque Control for Induction Motor Drive." Pp. 1-6 in 2024 3rd Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON). IEEE.
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IEEE Transaction Papers

- **Rahulkumar, J, R. Narayanamoorthi, and Harish S. Krishna. 2024. "An Inherent CC-CV Charging Architecture for Dual Receiver Semi-Dynamic Resonant Inductive Wireless Electric Vehicle Charging System." IEEE Transactions on Transportation Electrification 1-1. doi: 10.1109/TTE.2024.3494866.**
- **Rahulkumar, J., R. Narayanamoorthi, and Harish S. Krishnamoorthy. 2024. "Double 'D' And 'O' Coupler Optimization Using Reinforcement Learning For Wireless Power Transfer Electric Vehicle Charging System." IEEE Transactions on Transportation Electrification 1-1. doi: 10.1109/TTE.2024.3509677.**

PATENTS

Granted

- **Dr.R.Narayanamoorthi** received patent grant for the title, " A system for alignment of wireless charging pads of an electric vehicle and a method thereof ", Government of India, Grant number: 554882
- **Dr.C.S.Boopathi** received patent grant for the title, "Wearable Cardiac ECG Signal Recording Device ", Government of India, Grant number: 425230-001.
- **Dr.U.Sowmmiya** received patent grant for the title, " Weeding blade for tractor pulled agricultural robot device ", Government of India, Grant number: 431555-001
- **Dr.S.Shanmugapriya** received patent grant for the title, "IOT based Smart Protective Grid ", Government of India, Grant number: 432639-001.

Published

- **Dr.R.Narayanamoorthi** published patent title, "A concrete composition for dynamic wireless power transmission and a process for its preparation", Indian patent, Application Number: 202441086901 A.
- **Dr.R.Narayanamoorthi** published patent title, "A vacuum assisted resin transfer molding method for manufacturing high-efficiency and non toxic solar panels", Indian patent, Application Number: 202441029390 A.
- **Dr.R.Narayanamoorthi** published patent title, "A system for authentication and billing of wireless electric vehicle chargers and method thereof", Indian patent, Application Number: 202341078576 A.
- **Dr.R.Narayanamoorthi** published patent title, "An IoT based bidirectional wireless charging system with V2H and H2V interface and method thereof", Indian patent, Application Number: 202341078576 A.
- **Dr.R.Narayanamoorthi** published patent title, "A system and a method for multitasking medical assistance", Indian patent, Application Number: 202341078830 A.
- **Dr.R.Narayanamoorthi** published patent title, "Interoperable dynamic wireless charging system with adaptability to static wireless charging and method thereof", Indian patent, Application Number: 202441066981.
- **Dr.R.Narayanamoorthi** published patent title, "An autonomous robotic arm for electric vehicle charging and method thereof", Indian patent, Application Number: 202441068452.
- **Dr.R.Sridhar** and **Dr.R.C.Ilambirai** published patent title, "Dual mode modified phase shifted full bridge converter with integrated flyback operation in EV charging application", Indian patent, Application Number: 202441099753 A.
- **Dr.R.C.Ilambirai** published patent title, "An intelligent IoT based security system for alone woman", Indian patent, Application Number: 202441077991 A.
- **Dr.R.C.Ilambirai** and **Dr.S.Lourdu Jame** published patent title, "A novel IoT based energy saving system for classroom based on campus card", Indian patent, Application Number: 202441077982 A.
- **Dr.U.Poornima**, **Dr.R.C.Ilambirai** and **Dr.S.Lourdu Jame** published patent title, "AI based E-Menu card system for Intelligent E-Restaurants in smart cities", Indian patent, Application Number: 202441077982 A.
- **Dr.S.Shanmugapriya** published patent title, "IOT based Smart Protective Grid", Indian patent, Application Number: 432646-001.

AWARDS AND ACHIEVEMENTS

- **Dr.A.Geetha** received the award for **Industrial Safety Engineering** for being recognized as **topper (top 5%)** in NPTEL Online Courses.
- **Dr.K.M.Ravi Eswar** was awarded the **first prize in a research symposium** at the Vignan University.
- **Dr.S.Usha** received the **Best Paper Award** from Electro Spec 2024 at Karpaga Vinayaga College of Engineering and Technology.
- **Dr.C.Bharatiraja** is recognized for his role as an **Editorial Member** of **Frontiers in Environmental Research**.
- **Dr.R.Narayanamoorthi** becomes the **Editorial Board Member** at **Scientific Reports**.
- **Dr.J.Divya Navamani** becomes the **Editorial Board Member** at **Journal of Circuits, Systems, and Computers**.
- **Dr.R.Palanisamy** becomes the **Guest Editor** at the International Journal of Modelling and Simulation.
- **Dr.N.Chellamal** was honoured with the title of **Review Editor** for his work on **Frontiers in Smart Grids**.
- **Dr.P.Kanakaraj** received the **Best Paper Award** from IEI- Tamil Nadu State Centre for the year 2024.
- **Dr.J.Divya Navamani** was awarded as an **Academic Mentor** from the IEEE India Council at SRMIST.
- **Dr.J.Preetha Roselyn** and **Dr.C.Nithya** received the **Best Paper Award** at IIM Bodh Gaya at an International conference.
- **Dr.M.Arun Noyal Dass** and **Dr.C.Naveen** was promoted to **IGEN Ambassador** at Anna University for successfully mentoring and inspiring more than 50 students from 22nd to 29th oct 2024.

FACULTY FACILITATIONS

Dr. N. Kalaiarasi, Dr. R. Rajarajeswari participated in the **BIS World Standards Day** celebration organized by the BIS Standards Club, Chennai, on 14.10.2024.

Dr.R.Sridhar served as a member of the **Department Advisory Committee** for the Department of Electrical and Electronics Engineering at DMI College of Engineering, Chennai, on 11.10.2024.

Dr.A.Geetha and Dr.S.Usha served as **resource persons** for an event organized by Karpaga Vinayaga College of Engineering and Technology on 15.11.2024.

Dr.R.Sridhar participated in a **DC meeting** for the Department of Electrical and Electronics Engineering at St. Joseph College of Engineering, Chennai, on 31.11.2024.

Dr.R.Ramya served as a **resource person** for an event organized by Saranathan College of Engineering on 17.10.2024.

Dr.A.Geetha and Dr.S.Usha served as **resource persons** for an event organized by Builders Engineering College, Tirupur, from 04.11.2024 to 08.11.2024.

Dr.S.Vijayalakshmi and Dr.C.Anuradha served as a **jury member** for the paper presentation during the Drestein'24 Symposium at Saveetha Engineering College on 09.11.2024.

Dr.R.Narayanamoorthi served as a **resource person** for an event organized by Marwadi University on 14.11.2024.

Dr.S.Shanmugapriya served on the organizing committee for the **9th International Conference on Human Values in Higher Education** - WORLDWIDE - ONLINE, hosted by SRMIST held from 22.11.24 to 24.11.24.

Dr.R.Ramya participated as a delegate in the **9th International Conference on Human Values in Higher Education**, organized by SRMIST held from 22.11.24 to 24.11.24.

Dr.R.Uthra participated in the **WFCC Arab Youth Competition** 2025, organized by the University of Doha for Science and Technology, starting on 27.11.2024

Dr.R.Femi served as the coordinator for the National Level Short Term Training Program on **"Java Full Stack with React JS & AI,"** organized in association with Brainovision Solutions India Pvt. Ltd. and AICTE, held from 02.12.2024 to 22.12.2024 at SRMIST, KTR

Dr.M.Jagabar Sathik participated in a **DC meeting** on 05.12.2024 at the University College of Engineering, BIT Campus, Trichy. The event was national.

Dr.R.Sridhar participated in a **DC meeting** for the Department of Electrical and Electronics Engineering at Sri Easwari College of Engineering, Chennai, on 09.12.2024.

FACULTY FACILITATIONS

Dr.C.Subramani served as a **resource person** for an event organized by Dayananda Sagar College of Engineering on 09.12.2024.

Dr.M.Jagabar Sathik participated in a **DC meeting** at Bannari Institute of Technology, Sathiyamangalam, on 12.12.2024.

Dr.K.M.Ravi Eswar served as a **resource person** for an event organized by the Department of Electrical and Electronics Engineering at Navodaya Institute of Technology, Raichur, Karnataka, on 13.12.2024.

Dr.A.Geetha served as a resource person for the AICTE-sponsored FDP on the topic "**Integrating Electric Vehicles with Smart Grids: Innovations for Sustainable Mobility Solutions**" from 16.12.2024 to 21.12.2024 at Sri Venkateswara College of Engineering & Technology, Andhra Pradesh.

Dr.K.M.Ravi Eswar served as a **resource person** for an event organized by the Department of Electrical and Electronics Engineering at RGM College of Engineering & Technology, Nandyal, Andhra Pradesh, on 19.12.2024

Dr.C.Subramani served as a **resource person** for an event organized by Kuppam Engineering College, Andhra Pradesh, on 21.12.2024

Dr.N.Chellamal served as a resource person for the AICTE-sponsored FDP on the topic "**Building a Sustainable Future: The Role of Renewable Energy in EV Revolution**" in FDP held on 22.12.2024 at Panimalar Engineering College.

Dr.C.Bharatiraja served as a resource person for the AICTE-sponsored FDP on the topic "**Renewable Energy and Electric Vehicle Technologies for a Sustainable Future,**" held on 22.12.24 at J.J. College of Engineering and Technology.

Dr.M.Jagabar Sathik served as a resource person for 5-day Short Term Training Program on "**Power System and Power Electronics Research, Applications, and Real-Time Simulation**" held on 24.12.2024 at the National Institute of Technology, Raipur, Chhattisgarh.

Dr.S.Vijayalakshmi served as a **resource person** for an event organized by Panimalar Engineering College, Poonamallee, Chennai, on 25.12.2024

Dr.M.Jagabar Sathik served as a **BOS member** for the 11th BOS meeting held on 30.12.2024 at Paavai Engineering College, Namakkal.

FACULTY PARTICIPATION

Dr.S.Shanmugapriya attended a 2 days workshop titled "**Academia-Industry Partnership and Intellectual Property Rights- Workshop**" from 03-10-2024 to 04-10-2024.

Dr.S.Shanmugapriya attended a 2 days workshop titled "**Two-Days Workshop on Holistic Health**" from 10-10-2024 to 11-10-2024.

Dr.K.Vijayakumar and **Dr.R.Sridhar** attended a 5 days faculty development program titled "**UHV-II**" from 01-10-2024 to 05-10-2024.

Dr.P.U.Poornima, **Dr.R.Femi** and **Dr.S.Lourdu Jame**, **Dr.B.Vinothkumar** and **Dr.C.Subramani** attended a 3 days faculty development program titled "**Three days FDP on Data Science for Non-CSE**" from 16-10-2024 to 18-10-2024.

Dr.B.Vinothkumar and **Dr.C.Subramani** attended a 6 days faculty development program titled "**Solar Thermal and Photovoltaic Systems**" from 07-10-2024 to 12-10-2024.

Dr.R.Femi attended 1 day webinar titled "**Being a steward of good science: A complete prime on peer review**" on 24-10-2024.

Dr.Y.Jeyashree attended a 2 days faculty development program titled "**International Conference on Intelligent System**" from 24-10-2024 to 25-10-2024.

Dr.C.Anuradha attended 1 day workshop titled "**Solar Ambassador Workshop 2024**" on 02-10-2024.

Dr.D.Anitha, **Dr.R.Uthra**, **Dr.N.Kalaiarasi**, **Dr.D.Suchitra** and **Dr.R.Rajarajeswari** attended a 6 days faculty development program titled "**Satellite Communications: Innovating for a connected world**" from 15-10-2024 to 20-10-2024.

Dr.N.Kalaiarasi attended 1 day webinar titled "**Webinar on Resilience Smart Grid**" on 25-10-2024.

Dr.K.Selvakumar, **Dr.R.Palanisamy**, **Dr.S.Vidyasagar**, **Dr.T.M.Thamizh Thentral**, **Dr.D.Selva Bharathi**, **Dr.D.Karthikeyan**, **Dr.V.Kalyanasundaram**, **Dr.A.Sureshkumar** and **Dr.K.Saravanan** attended a 6 days faculty development program titled "**Evolution To Green Grid By Renewable Energy Integration in EV Charging For Future India**" from 18-11-2024 to 23-11-2024.



Dr.A.Geetha and Dr.S.Usha attended a 2 days International conference titled **"3rd Odisha International Conference on Electrical and Power Engineering , Communication Technology (ODICON'24)"** from 08-11-2024 to 09-11-2024.

Dr.R.Femi attended a 5 days faculty development program titled **"Integrating AI in Academic Research: Tools and Techniques"** from 13-11-2024 to 17-11-2024.

Dr.R.Palanisamy and Dr.T.M.Thamizh Thentral attended a 5 days faculty development program titled **"Emerging Technologies in Power Energy: Shaping the Future of Sustainable Solutions"** from 19-11-2024 to 23-11-2024.

Dr.Y.Jeyashree attended a 6 days International conference titled **"Real -Time Controllers for Electrical Engineering Applications"** from 04-11-2024 to 08-11-2024.

Dr.Y.Jeyashree attended a 2 days International conference titled **"Multiport converter for Electric Vehicle Application"** from 28-11-2024 to 29-11-2024.

Dr.S.Vidyasagar attended a 52 days faculty development program titled **"Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System"** from 27-08-2024 to 22-11-2024.

Dr.C.Subramani and Dr.T.M.Thamizh Thentral attended a 2 days International conference titled **"International Conference on ICPERES 2024"** from 20-12-2024 to 21-12-2024.



Dr.R.Femi attended a 5 days faculty development program titled **"Nanotechnology/ Quantum Technology / Semiconductor Device Simulation & Experimental Characterization"** from 25-11-2024 to 29-11-2024.

Dr.Phani Teja Bankupalli and Dr.Ravi Eswar K M attended a 5 days faculty development program titled **"Renewable Energy Systems in Smart Grids"** from 06-12-2024 to 10-12-2024.

Dr.R.Femi attended 1 day faculty development program titled **"A guide to maximizing speed and quality for scholarly writing"** on 11-12-2024.

Dr.Femi.R, Dr.J.Divya Navamani and Dr.A.Lavanya attended a 10 days faculty development program titled **"Emerging Technologies for Smart Grids and Green Energy Integration"** from 25-11-2024 to 06-12-2024.

Dr.D.Sattianadan and Dr.V.Kalyanasundaram attended a 6 days faculty development program titled **"AI in IOT: Enhancing the power power of smart gadgets"** from 16-12-2024 to 21-12-2024.

Dr.S.Shanmugapriya, Dr.S.Geethanjali attended a 5 days faculty development program titled **"Innovative Research Practices & IPR - A Real Case Studies Based Approach"** from 09-12-2024 to 13-12-2024.

Dr.K.Saravanan Dr.S.Vidyasagar and Dr.V.Kalyanasundaram attended a 6 days faculty development program titled **"AI in Revolutionizing Industry 4.0 & Health Care"** from 02-12-2024 to 07-12-2024.

Dr.C.S.Boopathi attended a 5 days faculty development program titled **"Recent Trends and Advancement in Integrated Power Systems"** from 16-12-2024 to 21-12-2024.

Dr.R.Ramya attended 1 day faculty development program titled **"Virtual Labs"** on 10-12-2024.

Dr.C.Anuradha, Dr.S.Shanmugapriya, Dr.B.Vinothkumar and Dr.R.Femi, attended a 21 days faculty development program titled **"JAVA Full Stack with React.js and AI - National Level Short-Term Training Program"** from 02-12-2024 to 22-12-2024.

Dr.S.Vijayalakshmi attended a 3 days faculty development program titled **"Creating the Future of HPC: Harnessing DevOps for Revolutionary Innovation"** from 09-12-2024 to 13-12-2024.

Dr.S.Vijayalakshmi and Dr.R.Narayanamoorthi attended a 6 days faculty development program titled **"Electric Vehicles: Technology, Power System, Energy Management, Testing and Certification"** from 23-12-2024 to 27-12-2024.

Dr.R.Narayanamoorthi, Dr.S.Geethanjali and Dr.S.Shanmugapriya attended a 5 days faculty development program titled **"Foundations of AI"** from 02-12-2024 to 06-12-2024.

Dr.R.Narayanamoorthi attended a 6 days faculty development program titled **"Generative AI and It's Applications with Computer Vision"** from 16-12-2024 to 21-12-2024.

Dr.V.Pradeep, Dr.R.SenthilKumar, Dr.P.Suresh, Dr.A.Sureshkumar and Dr.R.Narayanamoorthi attended a 6 days faculty development program titled **"Synergizing Advanced Battery Management with AI-Driven Cell Balancing for Optimal Electric Vehicle Performance"** from 09-12-2024 to 14-12-2024.

Dr.C.Anuradha attended a 6 days faculty development program titled **"Building a sustainable future:The role of renewable energy in EV Revolution"** from 23-12-2024 to 28-12-2024.

Dr.C.Anuradha and Dr.S.Vijayalakshmi attended a 6 days faculty development program titled **"Embedded systems"** from 02-12-2024 to 07-12-2024.

Dr.R.Senthil Kumar attended a 6 days faculty development program titled **"Emerging IoTtechnologies and Secure Application in Smart Systems and E - Healthcare"** from 21-12-2024 to 26-12-2024.

Dr.P.U.Poornima attended a 2 days International conference titled **"International Conference on Power Electronics and Renewable Energy System"** from 20-12-2024 to 21-12-2024.

Dr.R.Palanisamy attended a 6 days FDP titled **"Next generation smart grid for sustainable power systems: The path from industry 4.0 to 5.0"** from 02-12-2024 to 07-12-2024.

ONLINE COURSE

Dr.C.Anuradha completed 12 week NPTEL course titled "**Educational Leadership**" from 01-07-2024 to 31-10-2024.

Dr.R.Ramya, Dr.A.Geetha, Dr.S.Usha, Dr.T.M.Thamizh Thentral, Dr.D.Anitha, Dr.Uthra.R, Dr.N.Kalaiarasi, Dr.D.Selvabharathi, Dr.K.Selvakumar, Dr.R.Palanisamy, Dr.D.Karthikeyan, Dr.D.Suchitra, Dr.A.Sureshkumar, Dr.V.Pradeep and Dr.R.Rajarajeswari completed 12 week NPTEL course titled "**Psychology of Learning**" from 01-07-2024 to 31-10-2024.

Dr.D.Anitha and Dr.N.Kalaiarasi completed 12 week NPTEL course titled "**Design of photovoltaic systems**" from 01-07-2024 to 31-10-2024.

Dr.D.Selvabharathi, Dr.K.Selvakumar, Dr.R.Palanisamy, Dr.T.M.Thamizh Thentral and Dr.D.Karthikeyan completed 12 week NPTEL course titled "**Introduction to Internet of Things**" from 01-07-2024 to 31-10-2024.

Dr.A.Geetha, Dr.S.Usha, Dr.T.M.Thamizh Thentral, Dr.Selvabharathi.D, Dr.K.Selvakumar, Dr.R.Palanisamy, Dr.D.Karthikeyan, Dr.A.Sureshkumar and Dr.V.Pradeep completed 12 week NPTEL course titled "**Industrial Safety Engineering**" from 01-07-2024 to 31-10-2024.

Dr.D.Suchitra completed 12 week NPTEL course titled "**Introduction to Machine Learning**" from 01-07-2024 to 31-10-2024.

Dr.R.Senthil Kumar completed 12 week NPTEL course titled "**Computer Architecture**" from 01-07-2024 to 31-10-2024.

Dr.R.Senthil Kumar completed 12 week NPTEL course titled "**Control Systems**" from 01-07-2024 to 31-10-2024.

 <p>NPTEL-AICTE Faculty Development Programme (Funded by the MoE, Govt. of India)</p> <p>This certificate is awarded to D SUCHITRA for successfully completing the course Introduction to Machine Learning with a consolidated score of 70 %</p> <p> Prof. Andrew Thangaraj NPTEL Coordinator IIT Madras</p> <p> (Jul-Oct 2024)</p> <p>Roll No: NPTEL24CS10151352503806 Duration of NPTEL course : 12 Weeks</p> <p><small>The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 18th Nov, 2023, similar to other refresher / orientation courses. E No. AICTE / RFP / FDP through MOOCs / 2023</small></p>	 <p>NPTEL-AICTE Faculty Development Programme (Funded by the MoE, Govt. of India)</p> <p>This certificate is awarded to GEETHA A for successfully completing the course Industrial Safety Engineering with a consolidated score of 83 %</p> <p> Prof. Andrew Thangaraj NPTEL Coordinator IIT Madras</p> <p> (Jul-Oct 2024)</p> <p>Roll No: NPTEL24MG1105852511273 Duration of NPTEL course : 12 Weeks</p> <p><small>The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 18th Nov, 2023, similar to other refresher / orientation courses. E No. AICTE / RFP / FDP through MOOCs / 2023</small></p>
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Value Education Competitions



The EEE Department at SRMIST, in association with Universal Human Values, organized competitions on the Importance of Value Education for school students on October 21, 2024. The event encouraged creativity, critical thinking, and communication skills through essay writing, speech, drawing, and fashion design competitions. The essay writing competition enhanced students' writing skills and expression, with winners receiving certificates and publication opportunities.

The speech competition developed public speaking confidence, judged on content, delivery, and body language. The drawing competition allowed students to visually express ideas, judged on creativity and technique, with winning artworks displayed. The Fashion Forward competition showcased students' fashion design skills, judged on originality and presentation. Winners across all competitions were honored with trophies, medals, and certificates in the presence of students, parents, and teachers. Dr.A. Geetha and Dr. S. Usha were appreciated for their coordination and efforts. The event successfully reinforced value education while nurturing essential skills for students' future endeavors.

OUTREACH PROGRAM

School Outreach program for computer basics

The SRM-MTS Student Chapter conducted a series of interactive sessions at Ninnakarai PUM School, aiming to introduce government school students to the basics of computers, Microsoft PowerPoint, and MS Word. The initiative focused on enhancing digital literacy and communication skills. On the first day, students were introduced to computers, their uses, and basic English communication.

They learned the fundamentals of PowerPoint, including slide creation and presentation techniques. With no computer facilities at the school, SRM-MTS students provided five laptops and divided the class into groups, allowing hands-on learning. Day two built upon this foundation, introducing MS Word and essential keyboard shortcuts. Students created reports and summarized passages, gaining practical experience. The session concluded with an introduction to Google Docs and Google Slides, highlighting collaborative features. Selected students were given a holiday assignment to create a team-based PowerPoint presentation using Google Slides. This initiative not only empowered school students with essential computer skills but also provided a valuable teaching experience for SRM-MTS Student Chapter members.



Independent Living for Visually Impaired



The EEE Counselling Cell conducted an Outreach Program titled "Independent Living for Visually Impaired" on November 13, 2024. This offline initiative aimed to empower visually impaired individuals by fostering independent living skills. A total of 21 participants took part in this impactful visit to the Lotus Blind Welfare Trust of India, Chennai.

During the visit, the team engaged with visually impaired students to understand their

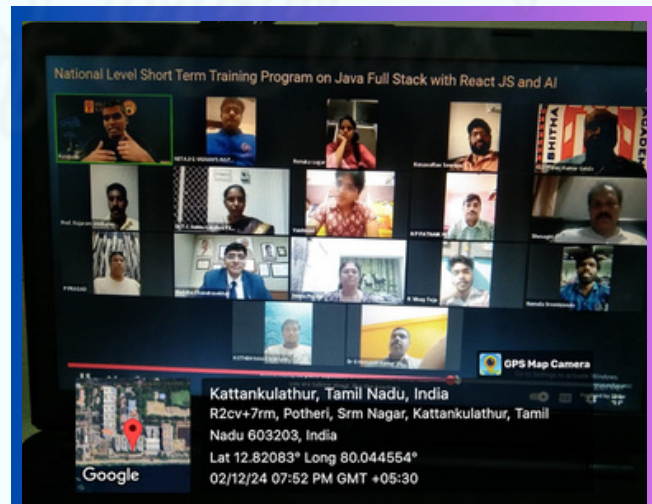
challenges, focusing on enhancing reading and communication skills. Meaningful interactions with the school coordinator provided insights into the students' educational and vocational training needs. Discussions emphasized the importance of Braille materials, technology-based learning aids, and tailored resources to enhance confidence and self-sufficiency.

To strengthen support, the team pledged assistance through reading support, communication workshops, and fostering an inclusive learning environment. The coordinators for this event is Dr.S.Usha, Dr.A.Geetha, Dr.D.Karthikeyan, Dr.R.Palanisamy.

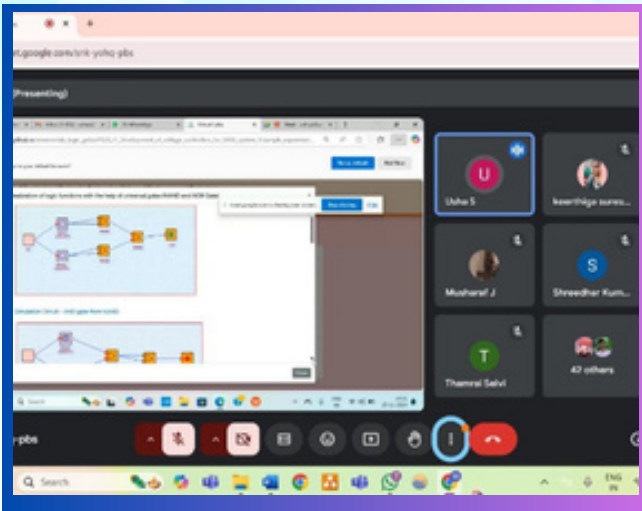
OUTREACH PROGRAM

JAVA Full Stack with React.js and AI

The Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, in association with AICTE & Brainovision Solutions India Pvt. Ltd., is organizing a National Level Short-Term Training Program (STTP) on Java Full Stack Development, React.js, and Artificial Intelligence (AI) from December 2 to December 22, 2024. This virtual training aims to enhance participants' employability and technical expertise through a comprehensive curriculum covering Java Full Stack Development, React.js, and AI integration. Live sessions will be conducted on weekdays from 7:00 PM to 8:30 PM, covering key modules such as Java basics, Spring Boot, REST APIs, AI fundamentals, and the integration of AI in React.js, culminating in the deployment of a full-stack AI-powered application. Led by Dr. K. Vijayakumar (Professor and Dean i/c SoEE), Dr. R. Sridhar (Professor and Head, Department of EEE), and Dr. R. Femi (Assistant Professor, Department of EEE, Co-convener & Coordinator), the STTP ensures industry-relevant training by experts with over 12 years of experience.



Digital Electronics Simulation and Design



The Department of Electrical and Electronics Engineering at SRMIST successfully conducted a Value-Added Program on Virtual Lab Experiments in Digital Electronics for 31 second-year EEE students from Karpaga Vinayaga College of Engineering and Technology, Chennai. Led by Dr. S. Usha and Dr. A. Geetha, the program aimed to enhance students' practical knowledge through online seminars and assessments. Over five days, students participated in

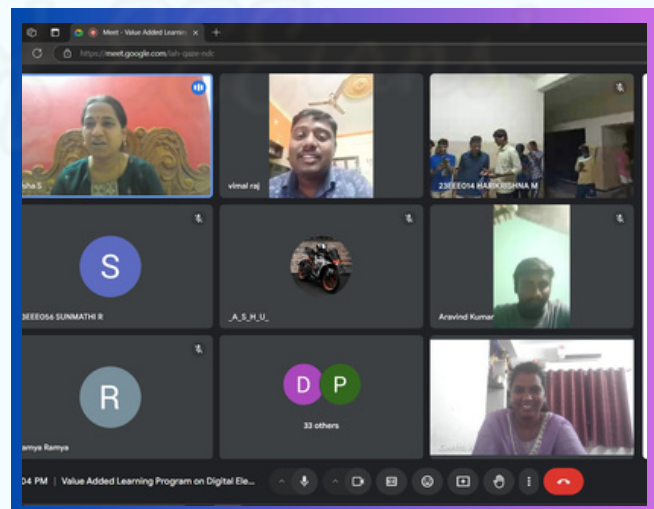
classes covering virtual laboratory applications in digital systems, gaining hands-on experience with SRM Kattankulathur virtual lab facilities. Students accessed the SRM EEE Virtual Lab for practical experimentation, executed assigned experiments using the Digital Simulator tab, documented results, and provided feedback on every experiment conducted. The program provided an enriching learning experience, equipping students with essential digital electronics skills and practical exposure to virtual lab applications, reinforcing SRMIST's commitment to innovative education and technological advancement.

VALUE ADDED PROGRAM

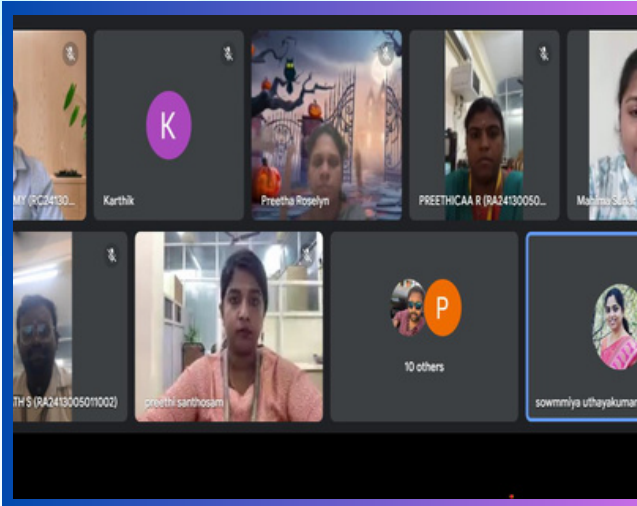
The Department of Electrical and Electronics Engineering at SRMIST, in association with Builders Engineering College, Kangeyam, successfully conducted an Online Value-Added Learning Program on "Digital Electronics Simulation and Design" from November 4 to November 30, 2024. A total of 55 second-year EEE students participated in the program, which was led by Dr. S. Usha and Dr. A. Geetha.

The initiative aimed to enhance students' understanding of virtual lab experiments in

digital electronics through a structured approach, including five days of online classes, hands-on experience with SRM Virtual Lab, student reflections, and evaluations through digital design problem-solving tasks. Participants accessed the SRM EEE Virtual Lab platform to perform experiments using the Digital Simulator tab, documented their work, and submitted feedback. Each student compiled a comprehensive report containing logical expressions, logic diagrams, truth tables, and screenshots of completed circuits, which were submitted via a designated Google Form. The program provided an enriching learning experience, equipping students with essential digital electronics skills and reinforcing SRMIST's commitment to technological advancement and experiential learning.



Real Time Controllers for Electrical Engineering Application



The Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, in association with SRM - IAEMP Students Chapter & SRM - MTS Students Chapter, successfully conducted a Faculty Development Program (FDP) on Real-Time Controllers for Electrical Engineering Applications from November 4 to November 8, 2024. The event, coordinated by Dr. U. Sowmmiya and Dr. J. Preetha Roselyn,

provided insights into real-time controllers such as Opal RT, dSPACE, FPGA, NI DAQ, and cRIO for hardware deployment of control schemes. The FDP featured 10 expert-led sessions over five days, covering EMI/EMC interference, control algorithm deployment, sensor integration, IoT interfaces, and AI-based automation. Esteemed speakers from academia and industry shared their expertise, equipping 26 participants with practical knowledge and hands-on experience. The event concluded with a valedictory session, reaffirming SRMIST's commitment to advancing engineering education through cutting-edge technology and research-oriented learning.

WORKSHOP

Vehicle Diagnostics in Practice

The School of Electrical and Electronics Engineering and the Automobile Engineering Department of SRM Institute of Science and Technology, organized a two-day Industrial Expert Talk on "Vehicle Diagnostics in Practice" on October 7th & 8th, 2024. This event, in association with Volvo, Bangalore, focused on real-world applications such as vehicle diagnostics, troubleshooting, maintenance, and repair strategies to enhance vehicle performance.



The program covered several important topics including Introduction to Diagnostic Systems, On-board Diagnostics, Diagnostics Protocols, and Diagnostics Monitors for ABS, ESP, and TCS. Additionally, the event delved into ECU Hardware Testing, Diagnostic Devices (Onboard / Offboard), Engine Management, Fuel and Chassis System Diagnostics, and Advanced Vehicle Systems Diagnostics.

Mrs. Chaithra KN, Product Manager at VOLVO, Bangalore, and Mr. Rohan M Patil, Senior Application Engineer at VOLVO, Bangalore, who were the chief guests and session speakers. Dr. M. Sangeeth, Head of the Department of ECE, delivered the welcome address, marking the beginning of this insightful and enriching event for all participants.

Leveraging EdTech for OBE Tools and Techniques



A workshop titled "Leveraging EdTech for OBE Tools and Techniques" was held on December 11th, 2024, at SRMIST under the AICTE Margdarshan Program. The event, attended by 35 participants from mentee institutes, aimed to enhance faculty understanding of Outcome-Based Education tools and modern teaching methods. The sessions included Dr.J.Divya's insights on effective lesson planning and assessment methodologies, Dr. A. Lavanya's discussion on modern teaching

pedagogy, and a session on Intellectual Property Rights and patents. Dr. Ramya and Dr.S.Palaniswamy provided an overview of OBE and practical tips on course file preparation. The workshop received positive feedback for its practical approach, equipping participants with strategies to implement OBE and modern teaching techniques. The organizers thank AICTE Margdarshan Scheme, the speakers, and the participants for their contributions to the event's success.

WORKSHOP

Power converters, Charging circuits, and Controllers design for Electric Vehicles Charger

A SPARC-supported hands-on workshop on electric vehicle (EV) charging systems was held from December 12 to 14, 2024, at SRM Institute of Science and Technology (SRMIST), Kattankulathur. Organized by the Department of Electrical and Electronics Engineering and the Center for Electric Mobility (CEM), the workshop focused on power converters, charging circuits, and controllers for EV chargers.

Participants gained practical experience using tools like Altair PSIM, OPAL-RT, and ANSYS Maxwell, and explored FPGA programming for power electronics. The event was inaugurated by Dr. Sridhar R, Head of the Department, SRMIST, with Dr. C. Bharatiraja providing an overview and Dr. P. Sanjeevikumar from the University of South-Eastern Norway delivering the chief guest address. Topics covered included wireless charging, fast-charging solutions, AI-based controllers, bi-directional converters, and the design of wireless power transfer coils.

On the final day, hands-on FPGA programming sessions were conducted by experts from JSK Lab Instruments, while advanced topics like power electronics converters and soft switching techniques were also explored.



Explore Excellence: A Guided Campus Tour



The "Explore Excellence: A Guided Campus Tour" was held on December 12, 2024, at SRMIST, Kattankulathur, under the AICTE-Margdarshan Scheme for Mentee Beneficiary Institutes. The event showcased SRMIST's research facilities, innovation strategies, and technological applications. Dr. K. Vijayakumar, Dean of the School of Electrical and Electronics Engineering, SRMIST, inaugurated the program, highlighting the importance of exposure to cutting-edge research.

The event featured sessions on SRMIST's research facilities by Dr. J. Divya Navamani, fostering startups by Mr. Ramesh from the Innovation and Incubation Center, and a visit to the FAB Lab. Dr. A. Lavanya and Dr. R. Ramya also discussed the significance of patents in India. The event concluded with a feedback session, and certificates were awarded to participants. The workshop received positive feedback for its informative content and practical exposure, with participants finding the sessions highly beneficial.

WORKSHOP

Exploring Sensors in Electric Vehicle Applications

A one-day skill development workshop on "Exploring Sensors in Electric Vehicle Applications" was held on October 28, 2024, at the Conference Hall of the EEE Department, SRMIST, under the Divisional Board of Electrical Engineering of the Institution of Engineers (India), Kattankulathur Local Centre. The workshop aimed to provide participants with a comprehensive understanding of the role, function, and application of sensors in EVs.

The event was inaugurated by Dr. R. Senthil, Honorary Secretary of KTRLC, IE(I), who highlighted the benefits of organizing such events through the Institution and motivated students to become active members. The technical sessions included invited lectures and presentations by industry experts, including Mr. B. Suresh from Valeo India, who discussed the overview and types of sensors used in EVs, and Mr. R. Venkatesan, who emphasized the importance and challenges of sensors in EV applications. Dr. A. Dominic Savio and Dr. C. Balaji from SRMIST conducted a hands-on session on sensor integration and calibration.



Circuit Crafter: Design To Hardware Challenge



The "Circuit Crafter: Design to Hardware Challenge," organized by the EEE Association was a successful hackathon that provided participants with a hands-on approach to circuit design and hardware implementation. The event aimed to bridge theoretical knowledge with practical application, fostering collaboration, innovation, and problem-solving skills among students. The hackathon was structured in multiple phases, beginning with an introduction and rules briefing, where participants were informed

about the guidelines, including the use of only library resources and the formation of teams of three. Teams were then assigned random topics based on basic circuit principles. In the design phase, participants spent 2-3 hours creating detailed circuit designs, including component specifications and calculations. The hardware implementation phase followed, where teams received components to assemble and test their circuits, emphasizing practical skills in construction and troubleshooting. This event was organised by Dr.T.M.Thamizh Thentral and Dr.V.Pradeep.

WORKSHOP

Solar Ambassador Workshop 2024

The Solar Ambassador Workshop 2024, held at SRMIST on October 2, Gandhi Jayanti, focused on promoting solar energy and sustainability. Organized in collaboration with Unnat Bharat Abhiyan (UBA) and the Energy Swaraj Foundation, the event aimed to empower participants as ambassadors of renewable energy, in line with Mahatma Gandhi's principles of self-reliance.



The event began with a ceremonial garlanding of Gandhi's statue, followed by a Swachhata Pledge. Vice Chancellor Dr. C. Muthamichelvan inaugurated the workshop with a keynote on SRMIST's commitment to sustainability. Participants received solar instruments, and Dr.R.Sridhar, HOD of EEE, gave a lecture on solar energy fundamentals. A video message from Prof. Chetan Singh Solanki further inspired the attendees. The afternoon session included a hands-on training on installing solar study lights, where participants learned practical skills in wiring and soldering. The workshop concluded with participants proudly posing with their installed lights, reaffirming SRMIST's dedication to renewable energy and environmental responsibility.

Role of Thirukural in Value Education



The Department of Electrical and Electronics Engineering (EEE), in collaboration with the Universal Human Values (UHV) Cell at SRMIST, hosted an enriching session on the Role of Thirukural in Value Education, led by Dr. T. Thangamani, Director and Founder of the Institute of Thirukural Science (ITS).

Dr. Thangamani, an expert in Thirukural, emphasized its relevance in today's educational landscape and its potential to instill moral values. He shared insights on integrating Thirukural's wisdom into

education, using real-life examples to promote ethical behavior. The session also focused on the role of educators in shaping students' moral compasses and how Thirukural can guide value-based teaching.

An interactive discussion followed, where faculty members explored practical ways to incorporate Thirukural into the curriculum. Dr. Thangamani also introduced ITS's initiatives, such as workshops and research, aimed at promoting Thirukural's teachings in modern education. This event was organised by Dr.R.Sridhar and Dr.S.Shanmugapriya.

GUEST LECTURE

Building a Healthy Lifestyle with Human Values

The Department of Electrical and Electronics Engineering, in collaboration with the Universal Human Values (UHV) Cell of SRMIST, organized a session titled "Building a Healthy Lifestyle with Human Values" for second-year EEE students. The session aimed to inspire students to integrate health and human values into their daily lives for overall well-being.



Dr. R. Sridhar, Head of EEE, emphasized the importance of maintaining good health for academic success, while Dr. S. Shanmugapriya, subject coordinator, highlighted the relevance of human values in managing academic pressures. Dr. Mirunalini G, Associate Professor of Anaesthesiology at SRM Medical College, delivered the session, discussing the importance of health, healthy routines, and a holistic approach to well-being. She emphasized how human values like compassion and integrity contribute to a balanced life. The session saw active student participation, and many expressed their intention to adopt healthier habits.

From Ideas To Impact: The Role Of Design Thinking In Social Energy Innovations And Entrepreneurship



On October 24, 2024, the Department of Electrical and Electronics Engineering at SRMIST hosted a session titled "From Ideas to Impact: The Role of Design Thinking in Social Energy Innovations and Entrepreneurship." Dr. Naveen C, Assistant Professor at SRMIST and a certified design thinking instructor, led the session. With expertise in renewable energy, artificial intelligence, and energy management, Dr. Naveen introduced

participants to the design thinking process, emphasizing empathy, and prototyping. The event engaged 50 students and 3 staff members in hands-on workshops aimed at developing energy solutions for underserved communities. They pitched their innovative ideas to a panel, receiving valuable feedback on scalability, and business models. The session inspired participants to continue pursuing socially impactful energy solutions, fostering a sustainable and community-centered approach to entrepreneurship. This event was coordinated by Dr. Pradeep V and Dr. Sowmmiya U.

GUEST LECTURE

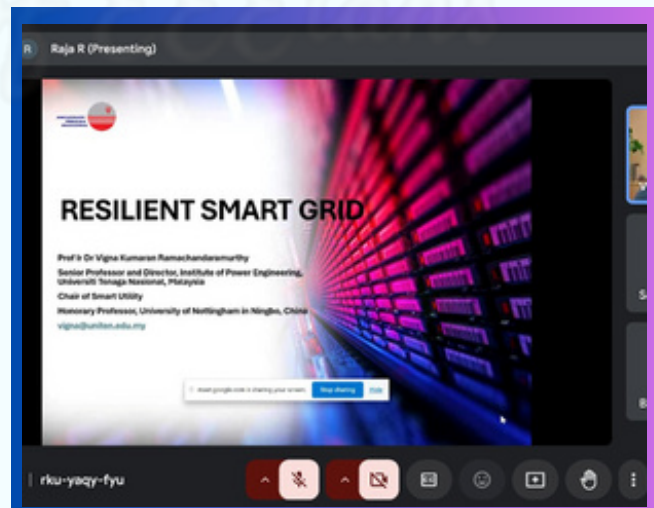
Resilient Smart Grid

On October 25, 2024, the Department of Electrical and Electronics Engineering, in collaboration with the IPowerE Student Chapter, organized a webinar on "Resilient Smart Grid" in observance of World Sustainability Day. The event, attended by over 100 participants, was coordinated by Dr. R. Rajarajeswari and Dr. D. Anitha, Assistant Professors of EEE at SRMIST.

The session was inaugurated by

Dr. K. Vijayakumar, Dean of the School of Electrical and Electronics Engineering and Chair of the IPowerE Student Chapter. He provided an insightful overview of the chapter's efforts in promoting global sustainability. Dr. R. Sridhar, HOD of EEE, also highlighted the significance of the Sustainable Development Goals (SDGs) in shaping modern industries.

The keynote address was delivered by Dr. Vigna Kumaran Ramachandaramurthy, Professor, Department of EEE at Universiti Tenaga Nasional, Malaysia. Dr. Ramachandaramurthy shared his expertise on the latest advancements in smart grid resilience, emphasizing innovative approaches to enhance grid stability in the face of challenges.



Alumni Day 2024



The Department of Electrical and Electronics Engineering (EEE) at SRM Institute of Science and Technology (SRMIST) hosted Alumni Day 2024 on December 21, 2024, with 15 distinguished alumni in attendance. The event commenced with a welcome address by the HOD and a speech by the Dean of SOEE, followed by alumni sharing their professional journeys and providing feedback. The EEE Association organized fun activities, and the department's newsletter was shared. Alumni discussed industry trends, the importance of

bridging the academic-industrial gap, and mentoring current students. They also explored opportunities for future collaborations, such as guest lectures, internships, and research partnerships. The event concluded with the distribution of alumni gifts and a group discussion, reinforcing the strong connection between the alumni and the department. The event successfully strengthened the bond between the alumni and the department, laying the foundation for future collaborations and continued growth for both students and alumni. This event was coordinated by Alumni coordinators Dr.R.Narayanamoorthi, Dr.V.Pradeep

ALUMNI ACTIVITY

Design of Power Train

On 23rd October 2024, the Department of Electrical and Electronics Engineering (EEE) at SRM Institute of Science and Technology (SRMIST) organized an alumni talk on "Design of Powertrain" for B.Tech and M.Tech students. The speaker, Mr. Prakash Suman, Co-founder of Sri Vidhyut Eco Tech India Pvt Ltd, Chennai, and an alumnus of the B.Tech EEE (2017-2021) batch, shared his expertise on the latest advancements in Electric vehicle



electric vehicle (EV) technology and powertrain design. The session covered crucial aspects of powertrain design, including engine, transmission, drivetrain, and hybrid systems, with a focus on enhancing vehicle performance, efficiency, and sustainability. Mr. Suman elaborated on the ongoing shift towards electrification, energy storage systems, and the role of renewable energy in reducing carbon footprints. The talk provided students valuable insights into the evolving automotive industry, encouraging them to explore multidisciplinary engineering roles and contribute to future innovations in automotive technology. This event was arranged by Dr. S. Usha and Dr. A. Geetha.

International Conference - ICSDG2024



The Two-Day Holistic Training Workshop on Energy Monitoring and Management was organized by the Department of Electrical and Electronics Engineering, SRMIST, on 4th and 5th December 2024, to enhance energy efficiency skills among engineers and technical staff. The workshop, inaugurated at the Drives Lab, SRMIST, saw participation from 20 non-teaching faculty members and an external attendee. Dr. D. Ravichandran and Dr. P. Kanagraj led sessions on energy monitoring, measurement techniques, and power quality analysis, followed by a hands-

on session at the HVAC chiller plant of SRM Medical Campus, where participants used a Fluke Power Quality Meter for real-time energy analysis. On the second day, Mr. S. Stalin, an expert in solar PV systems, discussed rooftop solar PV configurations and maintenance best practices. The workshop provided valuable practical insights into energy management, reinforcing SRMIST's commitment to sustainability and clean energy solutions. This event was organised by Dr. C. NAVEEN and Dr.R.Sridhar

PROGRAM

Standard Club Activity

The BIS Standards Club at SRMIST, Kattankulathur, has been actively promoting awareness of BIS certifications and quality standards. In October, the club welcomed 123 members and formed a core committee of six dedicated students from EEE.

To expand outreach, the club launched its Instagram page (@standardsclub_eeesrmktr), kicking off with the "Questandard" competition poster and promoting the "Smile4Quality" contest, where students shared selfies with BIS-certified products.

During the EEE Freshers Event 2024, the club was officially introduced, with a group photo featuring faculty and students alongside BIS-certified products. Additionally, awareness sessions were conducted on verifying BIS certifications using mobile devices.

With an active social media presence and student engagement, the BIS Standards Club continues its mission to promote quality standards and consumer awareness.



Faculty Articles

Harmony in the Family – Basic Unit of Human Interaction

The family is the basic unit or building block of human organisation. The major issue in the family is fulfilment in relationship. To live in relationship and for fulfilment in relationship, it is essential to understand relationship. Without understanding relationship, it isn't possible to fulfil relationship. **Right understanding about relationship is necessary for fulfillment in relationship.** (Ref., UHV content AICTE)

We had also explored "**the unhappiness in our families is more due to lack of physical facility or more due to lack of fulfillment in relationship**".

The major issue in family is that of relationship. Physical facility (and body) is used as a means. As long as we consider human being to be a body, it is not possible to understand relationship; and without understanding relationship, it is not possible to fulfill relationship, even though we do want to fulfill relationship.

We are trying to assume relationship on the basis of body and trying to fulfill relationship on the basis of body, and it does not work, inspite of all good intentions.

These are the four aspects to understand about relationship

- a. Relationship is – between one self (I1) and another self (I2)
- b. There are feelings in relationship – in one self (I1) for the other self (I2)
- c. These feelings can be recognized – they are definite (9 Feelings)
- d. Their fulfilment, evaluation leads to mutual happiness

Nine Feelings are:

- Trust
- Respect
- Affection
- Care
- Guidance
- Reverence
- Glory
- Gratitude
- Love

Stay tuned as we continue to explore these feelings in depth, uncovering the wisdom necessary for building truly fulfilling relationships.

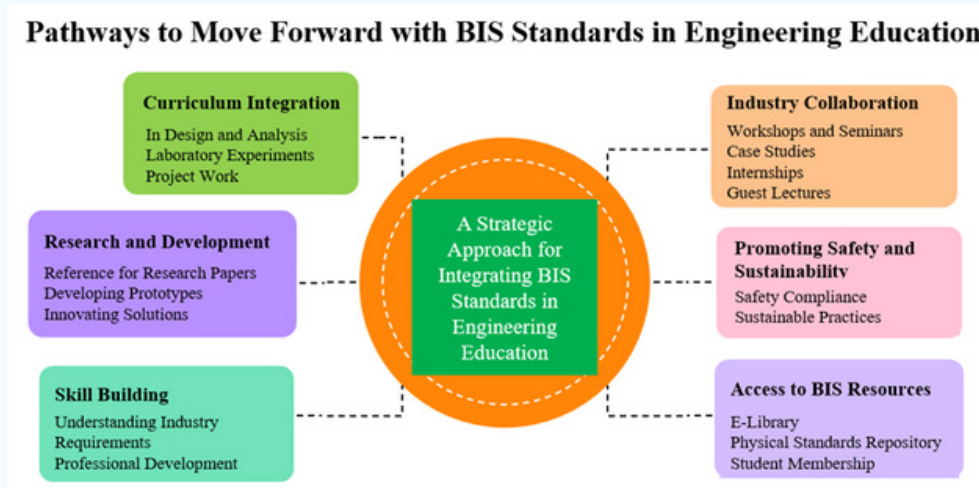
To Be Continued ...
Dr.S.Shanmugapriya
Assistant professor

Standards Awareness

-The Compass for Your Path to Excellence

Integrating BIS Standards in Engineering Education

The systematic integration of BIS standards into teaching, research, and practical applications enables academicians and students in Engineering Education to align their knowledge and skills with national and international benchmarks. This approach not only enhances the quality of education but also equips students to meet industry requirements, fostering competence and readiness for professional challenges.

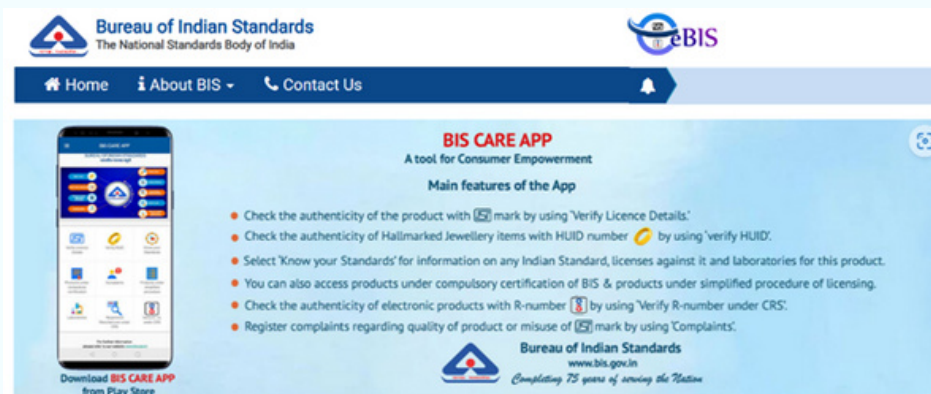


Methods to Access BIS Standards

Method 1: Register in the below link using SRM Mail Id and Login to view the standards details.

[Indian standards - BIS Connect](#)

Method 2: Download BIS CARE app and login using SRM Mail Id.



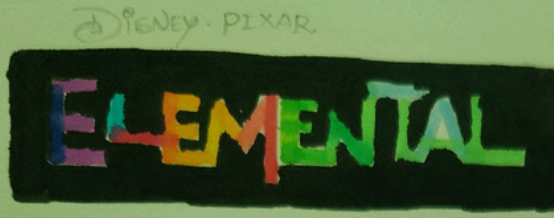
Dr.R.Ramya
Assistant professor
Faculty Mentor
BIS Standards Club



Hema Varshini Vidyasagar



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உடுக்கை இழந்தவன் கைபோல ஆங்கே
இடுக்கண் களைவதாம் நட்பு.

Swift as the hand seizing a slipping garment, Friendship
acts to assuage a friend in distress.

– Thirukkural (788)

For Feedback, Copyright and Suggestions :
eeeassociation@srmist.edu.in



A++



Category I
with 12B Status



(2024)
12th Ranked University



(2025) World Ranking
one among 46 Indian Universities



(2024) World Ranking
one among 91 Indian Universities



VERY GOOD
QS 4 Star Rated Globally



(2024) World Ranking
Ranked 5-7 in Indian Universities



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