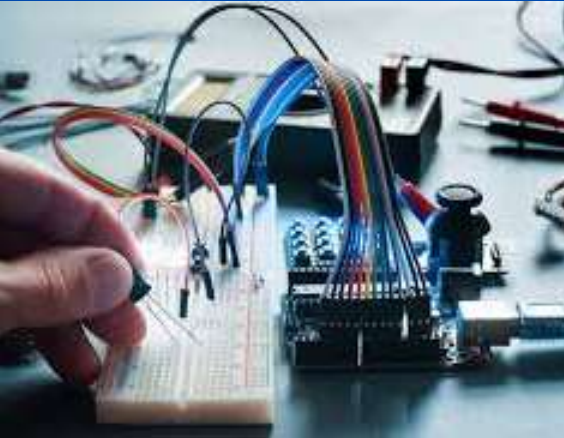
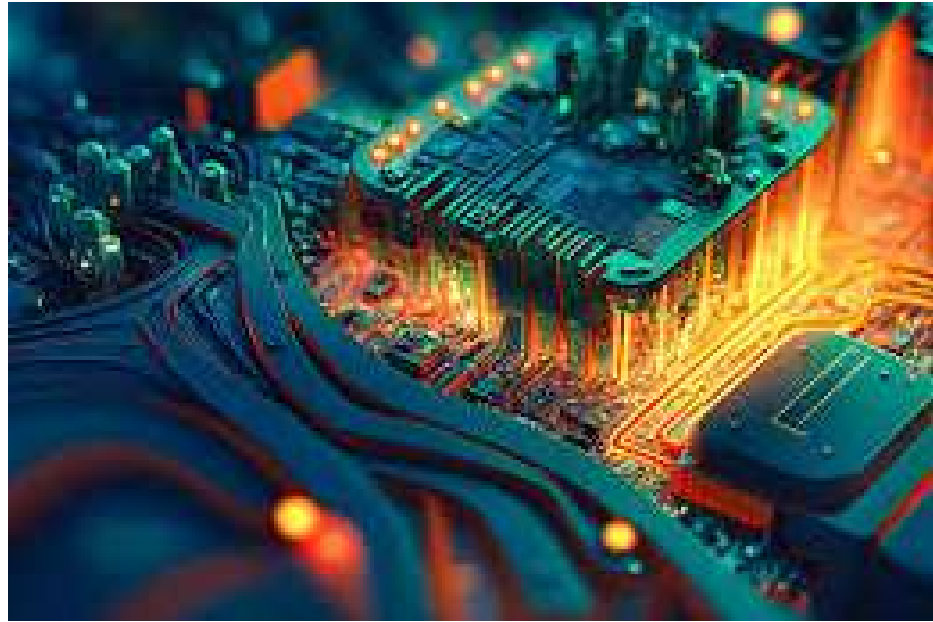




CIRCUIT TIMES

INSIGHTS

- Faculty Article
- Faculty Participation
- Faculty Achievements
- Faculty Publication
- Faculty Proposal Submission
- Student Participation
- Student Achievements
- NPTEL Participation
- Academic Events
- Internships/In plant training
- Industry Institute Interaction
- Placement Activities
- Alumni Activities
- Alumni Testimonial



VISION OF DEPARTMENT

To excel in offering value based quality education in the field of Electronics and Communication Engineering, keeping in pace with the latest developments in technology through exemplary research, to raise the intellectual competence to match global standards and to make significant contributions to the society.

MISSION OF DEPARTMENT

To provide the best pedagogical atmosphere of highest quality through modern infrastructure, latest knowledge and cutting edge skills.

To fulfill the research interests of faculty and students by promoting and sustaining in house research facilities so as to obtain the reputed publications and patents.

To educate our students, the ethical and moral values, integrity, leadership and other quality aspects to cater to the growing need for values in the society.

FACULTY ARTICLE

ORGANIC ELECTRONICS

Mr.P.Arul, M.E., (Ph.D),

Assistant Professor, Department of Electronics and Communication Engineering,
Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur

INTRODUCTION:

The foundation of the semiconductor industry has been inorganic silicon and gallium arsenide semiconductors, silicon dioxide insulators, and metals like copper and aluminium over the past 40 years. To increase the semiconducting, conducting, and light-emitting qualities of organics (polymers, oligomers) and hybrids (organic-inorganic composites) by innovative synthesis and self-assembly processes, there has been an increasing amount of research focused on "organic electronics." Performance gains combined with the capacity to process these "active" materials over large areas at low temperatures on materials like paper or plastic may lead to the development of novel technologies as well as new applications and form factors that can be used to meet the expanding demands for improved connectivity and pervasive computing.

Organic electronics (OE) is a branch of electronics that uses organic (carbon-based) materials for electronic applications, unlike traditional electronics, which typically rely on inorganic materials like silicon, organic electronics leverage organic compounds to create devices. These materials can be plastics, small molecules, or polymers.

1. Historical Background:

The field of organic electronics has evolved significantly over the past few decades.

During 1970s: The foundational work began with the discovery of organic semiconductors. Notable breakthroughs include the discovery of the conductive properties of organic polymers like polyacetylene by Hideki Shirakawa, Alan J. Heeger, and Alan G. MacDiarmid, which earned them the Nobel Prize in Chemistry in 2000.

Between 1980s-1990s: The invention of the organic light-emitting diode (OLED) by Ching W. Tang and Steven Van Slyke at Kodak marked a significant milestone. OLED technology became the basis for many modern display technologies.

1990s: Advances in organic semiconductors led to the development of organic field-effect transistors (OFETs) and the first organic photovoltaic cells (OPVs).

From 2000s to 2010: The commercialization of OLED displays for consumer electronics, such as smartphones and televisions, marked a major success. Research also expanded into organic light-emitting transistors (OLETs) and flexible electronics.

From 2010s to at Present: Continued advancements in OEs have focused on improving the performance, stability, and scalability of organic materials. The development of flexible, printable electronics and new types of organic solar cells has demonstrated the growing potential of this technology. Organic electronics represent a dynamic and innovative area of research and application that contrasts with traditional inorganic electronics, offering unique benefits and challenges which we will discuss in this article.

2. Key Differences from Traditional Inorganic Electronics:

The comparative study on OE can be well understood from the following table

S.No	Aspects	Organic Electronics	Traditional Inorganic Electronics
1	Materials	Utilize carbon-based compounds, including polymers (e.g., poly(3-hexylthiophene), P3HT) and small molecules (e.g., pentacene)	Depend on inorganic materials like silicon, gallium arsenide, and metals
2	Manufacturing	Often involve solution-based processes, such as inkjet printing or roll-to-roll techniques, allowing for large-area and flexible device fabrication	Typically require high-precision deposition techniques like chemical vapor deposition (CVD) or photolithography on rigid substrates
3	Flexibility and Form Factor	Can be deposited on flexible substrates, enabling the creation of bendable and lightweight devices	Generally fabricated on rigid substrates, which limits their flexibility
4	Performance	Although advancements are continually improving performance, organic materials often have lower charge carrier mobility and stability compared to inorganic materials	Generally offer higher performance, stability, and efficiency but at the cost of flexibility and manufacturing complexity
5	Applications	Include OLED displays, organic photovoltaic cells (OPVs), organic light-emitting transistors (OLETs), and flexible electronics	Include most conventional electronics such as silicon-based processors, memory chips, and rigid display technologies

3. Key Materials and Technologies in Organic Electronics

Organic Semiconductors are central to the functionality of organic electronic devices. They are carbon-based materials that can conduct electricity, bridging the gap between insulating and metallic behavior.

1. Organic Polymers:

- a. **Poly(3-hexylthiophene) (P3HT):** Widely used in organic solar cells and organic field-effect transistors (OFETs). It offers good charge transport properties and is relatively easy to process.
- b. **Poly(phenylene vinylene) (PPV):** Used in OLEDs and as a material in organic light-emitting devices due to its high luminescence efficiency.

2. Small Molecules:

- a. **Pentacene:** A small molecule with high charge carrier mobility, used in OFETs and organic photovoltaic cells.
- b. **C60 Fullerene:** Used as an electron acceptor in organic solar cells to enhance charge separation and transport.

Technologies:

3.1 Organic Light-Emitting Diodes (OLEDs)

OLEDs are a prominent application of organic electronics, utilizing organic materials to produce light in response to an electric current. Unlike LEDs, which are small-point light sources, OLEDs are made in sheets that are diffuse-area light sources. OLED technology is developing rapidly, and there are a handful of product offerings with efficacy, lifetime, and color quality specs that are comparable to their LED counterparts.

Applications:

Displays: OLEDs are used in various display technologies due to their high color accuracy, contrast ratio, and flexibility. They are found in smartphones, televisions and monitors.



Figure 1 Organic Light-Emitting Diodes (OLEDs)

Lighting: OLEDs can be used for innovative lighting solutions, offering uniform light distribution and the possibility of flexible and thin light panels.

Future Trends: Ongoing research aims to improve the efficiency, longevity, and cost-effectiveness of OLEDs, with potential applications extending to wearable devices, automotive displays and more.

3.2 Organic Photovoltaics (OPVs)

Organic Photovoltaics (OPVs) use organic materials to convert sunlight into electricity. They offer a promising alternative to traditional silicon-based solar cells.

3.2.1. Technology:

- **Structure:** OPVs consist of layers of organic semiconductors arranged to form a junction where light absorption and charge separation occur. Common structures include bulk heterojunction and dye-sensitized solar cells.
- **Materials:** Materials used in OPVs include conjugated polymers (e.g., P3HT) and small molecules (e.g., C60 fullerene). These materials absorb light and generate charge carriers that are then collected to produce electricity.

3.2.2. Applications:

- **Solar Panels:** OPVs are used in lightweight, flexible solar panels for applications where traditional solar panels are impractical, such as portable chargers or solar-powered wearables.
- **Building-Integrated Photovoltaics (BIPV):** Flexible OPV panels can be integrated into building materials like windows and facades, contributing to building energy efficiency without compromising aesthetics.

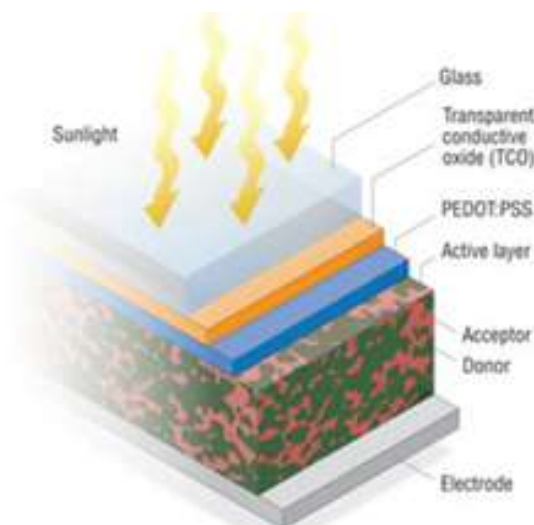


Figure 2 Organic Photovoltaics (OPVs)

3.3 Organic Thin-Film Transistors (OTFTs)

Organic Thin-Film Transistors (OTFTs) are used to create flexible and low-cost transistors that can be integrated into various electronic devices.

3.3.1. Technology:

- **Structure:** OTFTs use organic semiconductors deposited in thin films. The key layers include the source and drain electrodes, a gate electrode, and an organic semiconductor layer.
- **Performance:** OTFTs typically have lower charge carrier mobility compared to traditional silicon transistors but are suitable for applications where flexibility and cost are more critical than high performance.

3.3.2. Applications:

- **Flexible Displays:** OTFTs are used in flexible and foldable displays, where their ability to be deposited on flexible substrates is a key advantage.
- **Sensors:** OTFTs are used in sensor applications, including gas sensors and bio-sensors, due to their ability to be manufactured on flexible or unconventional substrates.
- **Low-Cost Electronics:** They are employed in inexpensive electronic devices where flexibility and cost outweigh the need for high-speed performance.

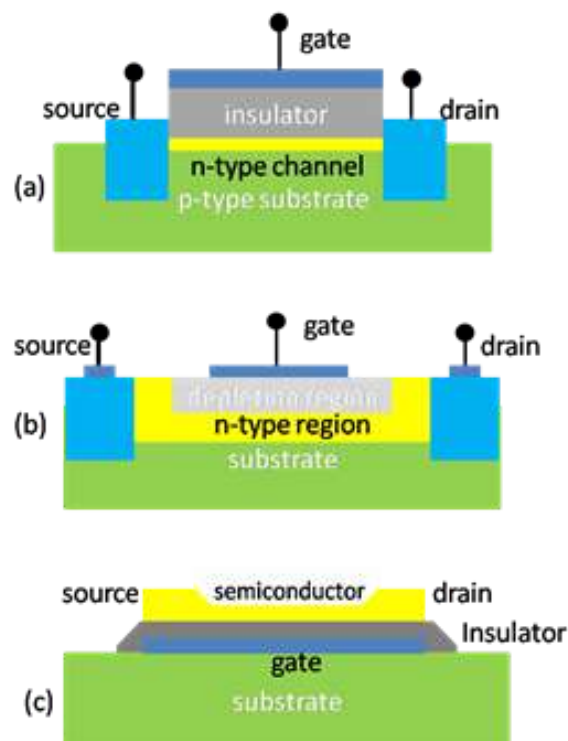


Figure 3 Schematic of three kinds of field-effect transistor (FET): (a) metal-insulator-semiconductor FET (MISFET), (b) metal-semiconductor FET (MESFET), (c) thin-film transistor (TFT).

3.4 Organic Sensors

Organic Sensors utilize organic materials to detect various physical or chemical changes and are used in a range of applications.

3.4.1. Technology:

- **Types:** Organic sensors can detect changes in light, pressure, temperature, chemical composition, and biological activity. They often use organic semiconductors or polymers that change their electrical properties in response to stimuli.
- **Materials:** Common materials include conjugated polymers and small molecules that exhibit changes in conductivity or other properties when exposed to environmental changes.

3.4.2. Applications:

- **Medical Diagnostics:** Organic sensors can be used for detecting biomarkers in bodily fluids, offering potential for point-of-care diagnostics and wearable health monitors.
- **Environmental Monitoring:** They can detect pollutants, gases, or changes in environmental conditions, contributing to more efficient and widespread environmental monitoring.
- **Consumer Electronics:** Organic sensors are integrated into devices like smartphones for touch-sensitive screens or gesture recognition.

In summary, the applications of organic electronics span a diverse range of fields including flexible and wearable electronics, renewable energy through OPVs, and advanced sensor technologies. Each application leverages the unique properties of organic materials to enable innovative solutions and enhance functionality across various devices and systems.

4. Recent Advances and Research in Organic Electronics

The field of organic electronics is rapidly evolving, with significant breakthroughs and innovations enhancing the performance, functionality, and integration of organic electronic devices. Recent discoveries in material science have a profound impact on organic semiconductors and their performance in electronic devices.

4.1 Enhanced Organic Semiconductors:

- **High-Mobility Polymers:** Recent developments have led to the creation of high-mobility conjugated polymers, such as those based on new donor-acceptor polymer systems. These materials exhibit significantly improved charge carrier mobilities, making them competitive with traditional inorganic semiconductors.

For example, polymers like PBTTT (poly(bis(4-(2-ethylhexyl)thiophen-2-yl)thiophene)) have achieved record mobilities in organic thin-film transistors (OTFTs).

- **Novel Small Molecules:** Advances in small molecule semiconductors have introduced materials with enhanced charge transport properties and stability. For instance, new organic semiconductors such as those based on diketopyrrolopyrrole (DPP) derivatives show high charge mobilities and improved environmental stability, benefiting applications in both OTFTs and organic photovoltaics (OPVs).

4.2 Stability and Durability:

- **Improved Encapsulation Techniques:** Research into new encapsulation materials and methods has addressed issues related to the environmental stability of organic electronics. Techniques like atomic layer deposition (ALD) and the development of new barrier films help protect organic devices from moisture and oxygen, thereby extending their operational lifetimes.
- **Stable Organic Materials:** Innovations in material formulations have led to more stable organic semiconductors. For example, the development of robust polymer and small molecule blends has improved the longevity and performance of organic light-emitting diodes (OLEDs) and OPVs.

4.3 Sustainable Materials:

- **Biodegradable Polymers:** There is increasing interest in biodegradable and bio-based organic semiconductors to address environmental concerns. Research is focusing on polymers derived from renewable resources that can decompose safely without leaving harmful residues.

4.4 Integration with Other Technologies:

The integration of organic electronics with emerging technologies is opening up new possibilities and applications.

a. Internet of Things (IoT):

- **Smart Sensors:** Organic sensors are being integrated into IoT networks to provide real-time data on environmental conditions, health metrics, and more. Their flexibility and low-cost production make them ideal for embedding into a wide range of objects.
- **Wearable Technology:** Organic electronics are central to the development of smart wearables that monitor health and environmental conditions. These devices can interface with IoT systems to provide comprehensive data and insights.

b. Artificial Intelligence (AI):

- **AI-Enhanced Devices:** Organic electronic devices are being integrated with AI algorithms to enable more intelligent functionalities. For instance, wearable health monitors can use AI to analyze data and provide personalized health recommendations.
- **Neuromorphic Computing:** Research is exploring the use of organic materials in neuromorphic computing systems that mimic the human brain's processing capabilities. Organic materials could potentially be used to create flexible, low-power neuromorphic circuits.

c. Energy Harvesting and Storage:

- **Flexible Energy Harvesters:** Organic photovoltaics and organic thermoelectric materials are being integrated into energy-harvesting systems to power IoT devices and wearable electronics. These systems can convert ambient energy into electrical power.
- **Organic Batteries and Supercapacitors:** Advances in organic materials are leading to the development of flexible and lightweight batteries and supercapacitors. These energy storage devices are important for powering portable and wearable electronics.

5. Future Directions and Impact of Organic Electronics

- **E-Textiles:** E-textiles or electronic textiles, integrate electronic components into fabrics, enabling garments and textiles to have interactive and functional properties.
- **Smart Packaging:** Smart packaging incorporates electronic features into packaging materials to provide additional functionality beyond traditional packaging.
- **Bioelectronics:** Bioelectronics combines biological and electronic systems to create devices that interact with biological systems.

The future of organic electronics is bright, with emerging applications in e-textiles, smart packaging, and bioelectronics offering exciting new possibilities. The role of organic electronics in promoting sustainability is becoming increasingly important, with efforts focused on reducing environmental impact and supporting a circular economy. Commercialization efforts are driving the growth of the industry, leading to economic benefits and new consumer products. As research and development continue, organic electronics are poised to play a significant role in shaping the future of technology.

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FACULTY PARTICIPATION

(SEMINAR/FDP/STTP/WORKSHOP/ONLINE COURSE/CONFERENCE)

- **Dr.D.Menaka, Mrs.S.Radhika, Mrs.S.M.Mehzabeen and Mrs.S.Mary Cynthia** successfully completed **Six Days physical mode Anna University sponsored FDTP** on **“CCS355-Neural Networks and Deep Learning”** organized by the Department of Information Technology, Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur from 01.07.2024 to 06.07.2024
- **Dr.T.J.Jeyaprabha** has participated in **Five Days Faculty Development Programme** on **“Effective Proposal Writing for Extramural Funding & Patentability of Ideas and Design”** organized by IQAC, Department of Research & Consultancy and IPR Cell from 02.07.2024 to 06.07.2024



- **Mr.L.K.Balaji Vignesh** has attended the **Guest Lecture** on the topic of **“High Efficiency Power Amplifier Design using GaN transistors”** organized by National Institute of Technology, Meghalaya on 05.07.2024



FACULTY PARTICIPATION

(SEMINAR/FDP/STTP/WORKSHOP/ONLINE COURSE/CONFERENCE)

- **Dr.T.J.Jeyaprabha** has undergone **Innovation Ambassador (IA) Training “Advanced Level”** conducted in online mode by **MoE Innovation’s Cell** and **AICTE** during the **IIC** calendar year on **06.07.2024**



- **Mrs.K.Bhuvaneshwari** has participated in **Five Days Professional Development Programme** on **“Cyber Security”** organized by **National Institute of Technical Teachers Training and Research (NITTTR), Chennai** from **08.07.2024** to **12.07.2024**

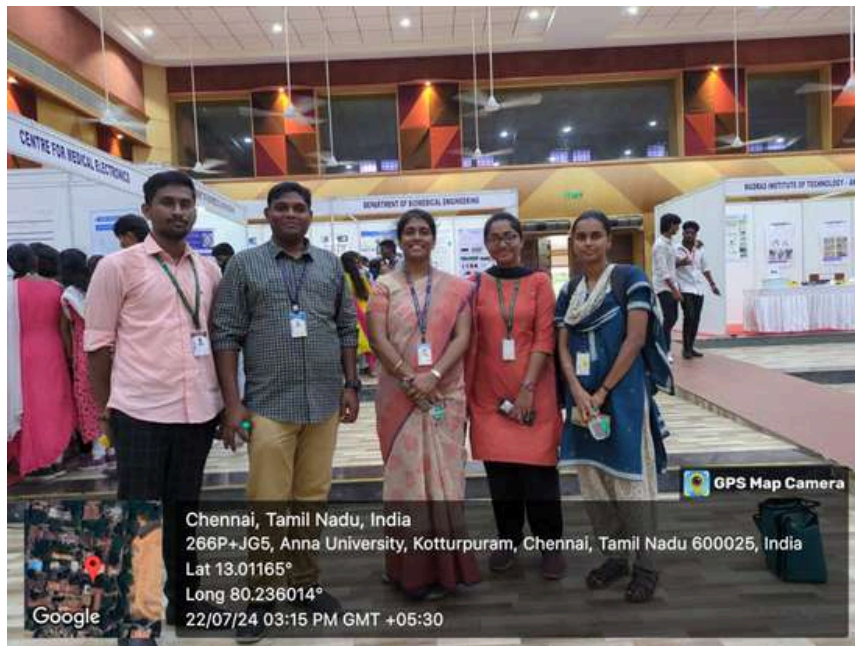


- **Mr.L.K.Balaji Vignesh** has participated in **Two Weeks Days Faculty Development Programme** on **“Computer Vision and Gen-AI Tools”** organized by **Ramco Institute of Technology, Rajapalayam** from **15.07.2024** to **27.07.2024**

FACULTY PARTICIPATION

(SEMINAR/FDP/STTP/WORKSHOP/ONLINE COURSE/CONFERENCE)

- **Mrs.L.Anju, Dr.A.Ramya and Mr.S.Elangovan** attended an **exhibition** on the topic of **“Indigenous Biomedical Device Development and Commercialization”** organized by the Department of Biomedical Engineering at the College of Engineering, Guindy (CEG) on 22.07.2024



- **Mr.L.K.Balaji Vignesh** has participated in **Five Days Faculty Development Programme** on **“Design and Development of Biomedical Antennas”** organized by KIET Group of Institutions, Ghaziabad, Uttarpradesh from 22.07.2024 to 26.07.2024



FACULTY PARTICIPATION

(SEMINAR/FDP/STTP/WORKSHOP/ONLINE COURSE/CONFERENCE)

- **Mrs.S.Mary Cynthia** has participated in **Five Days Faculty Development Programme** on “**Future-Proofing Engineering Education: Emerging Trends and Technologies**” organized by VINS Christian College of Engineering, Nagercoil from 23.07.2024 to 27.07.2024
- **Mrs.S.M.Mehzabeen** has participated in **One week Industry collaborated Certificate course** on “**BASIC PNEUMATIC SYSTEMS, PLC & HMI PROGRAMMING**” in association with M/S.Controlsoft Engineering India Private Limited, Chennai organized by Department of Electrical and Electronics Engineering, Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur from 24.07.2024 to 29.07.2024



FACULTY ACHIEVEMENTS

- **Mrs.R.Kousalya** has presented the paper on the topic of “**Development of Light Weight Encryption Scheme for Resource Constrained Devices**” and secured **first prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024
- **Mrs.G.Akila** has presented the paper on the topic of “**Efficient Bilinear pooling for remote sensing image categorization**” and secured **first prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024



- **Mrs.K.Srividhya** has presented the paper on the topic of “**Compact common radiator MIMO Antenna for UWB Applications**” and secured **second prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024
- **Mrs.S.Radhika** has presented the paper on the topic of “**Analysis of Feature Selection Algorithms for Speech Emotion Recognition**” and secured **second prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024

FACULTY ACHIEVEMENTS

- **Mr.N.Sathish** has presented the paper on the topic of “**Localization of Underwater Sensor Networks (UWSN)**” and secured **third prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024
- **Mr. L K Balaji Vignesh** has presented the paper on the topic of “**Design and Development of Sierpinski Carpet Square Fractal Antenna for Wide Band Applications**” and secured **third prize** in **Faculty Research Day 2024 (FRD-2024)** organized by the Department of Electronics and Communication Engineering held at Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur on 05.07.2024



CERTIFICATE OF APPRECIATION

This is to certify that **Dr./Prof./Mr./Ms. L.K. BALAJI VIGNESH**
Department of **Electronics & Communication Engineering**
has presented a paper titled **Design and development of sierpinski carpet square fractal antenna for wide band applications.**
and secured the **I / II / III** prize in the Faculty Research Day 2024.

[Signature]

[Signature]

- **Mrs.S.M.Mehzabeen** and **Mrs.K.Bhuvaneshwari** acted as **Reviewer** for **Third IEEE International Conference on “Smart Technologies and systems for Next Generation Computing (ICSTSN 2024)”** organized by IFET college of Engineering (Autonomous), Villupuram from 18.07.2024 to 19.07.2024



FACULTY ACHIEVEMENTS

- **Mr.L.K.Balaji Vignesh** has reviewed the paper on the topic of “**Smart Management EV Charging Station using AI Chatbot and TOM API**” in **STM Journals (Journal of Energy Environment and Carbon Credits)** on 24.07.2024
- **Mr.L.K.Balaji Vignesh** has reviewed the paper on the topic of “**Detection of Indian fake currency using image processing**” in **STM Journals (Current Trends in Signal Processing)** on 24.07.2024
- **Mr.L.K.Balaji Vignesh** has reviewed the paper on the topic of “**Low-Cost Vehicle Data Acquisition System**” in **STM Journals (Journal of Microwave Engineering and Technologies)** on 24.07.2024



FACULTY ACHIEVEMENTS

- **Dr.T.J.Jeyaprabha** received **“BEST ISF Coordinator Award”** for the year **2022-23** from IETE Chennai Center during IETE Zonal Seminar and ISF Congress held at Sri Sairam Engineering College (Autonomous), Chennai from 26.07.2024 to 27.07.2024

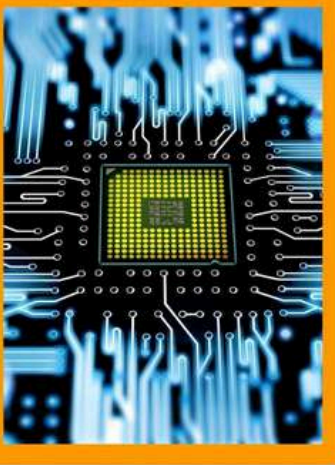



- **Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur** received **“BEST IETE Students Forum Award”** for the year **2022-23** from IETE Chennai Center during IETE Zonal Seminar and ISF Congress held at Sri Sairam Engineering College (Autonomous), Chennai from 26.07.2024 to 27.07.2024 (Award collected by **Dr.G.A.Sathish Kumar, Professor/ECE & Dr.T.J.Jeyaparabha, Associate Professor/ECE**)



FACULTY PUBLICATION


- **Mr.D.Silambarasan** published a journal entitled “**Area-efficient low-power image watermarking architecture using faithful approximation and reversible logic**” in **Journal of Multimedia Tools and Applications-Springer** indexed in **SCIE** under **Quartile (Q) 1**.






Sri Venkateswara
College of
Engineering

Area-efficient
low-power image
watermarking
architecture using
faithful
approximation and
reversible logic




Mr. D. SILAMBARASAN
Assistant Professor
Electronics and Communication Engineering



Journal Name: “Multimedia Tools and Applications-Springer” indexed in SCIE under Quartile (Q1)

DOI: <https://doi.org/10.1007/s11042-024-19702-x>



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- **Mrs. S. Mary Cynthia** has presented a paper in the title of “**Efficient Image Denoising Using Deep Learning-Based Autoencoders**” in the **Tenth Contemporary Academic Meet–CAM 2024** (Scientific Conference ISBN: 978–81–969897–8–1) organized by the **Centre for Learning Network of Venus International Foundation** at Green Park Chennai, India on 20.07.2024



VENUS INTERNATIONAL FOUNDATION

[Regd. Trust in India dated 20 January 2015 | GSTIN: 33AABTV9686L1ZN | ISO 9001:2008 Certified]
No.1, Ganesh Nagar Main Road, Adambakkam, Chennai – 600088, Tamilnadu, India
Phone: 044 – 22531502 | Web: www.venusinfo.org | Email: contact@venusinfo.org

CENTRE FOR LEARNING NETWORK

This is to certify that **Mrs. S. Mary Cynthia**, Sri Venkateswara College of Engineering, Sriperumbudur Tk, Tamil Nadu, India has presented a paper in the title of “**Efficient Image Denoising Using Deep Learning-Based Autoencoders**” in the 10th Contemporary Academic Meet – CAM 2024 (Scientific Conference ISBN: 978–81–969897–8–1) organized by the Centre for Learning Network of Venus International Foundation on Saturday 20th of July 2024 at Green Park Chennai, India.



M.S. Subbaraj

Director

Further information: <https://venusinfo.org/learning/2024/cam.html>

FACULTY PATENT PUBLICATION

- Mrs.R.Kousalya along with Final Year ECE students (2020-24 Batch) and Dr.C.Gopinath, Professor/EEE, filed an Indian patent titled “AN ACCESSIBLE SYSTEM AND METHOD FOR WATER DISPENSING TO INDIVIDUALS WITH VISUAL IMPAIRMENTS” with Application No.:202441051943A and the same was published in the Patent Office Journal No. 28/2024 on 12.07.2024.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202441051943 A

(19) INDIA

(22) Date of filing of Application :07/07/2024

(43) Publication Date : 12/07/2024

(54) Title of the invention : AN ACCESSIBLE SYSTEM AND METHOD FOR WATER DISPENSING TO INDIVIDUALS WITH VISUAL IMPAIRMENTS

<p>(51) International classification :G09B002100000, A61H0003060000, G10L0015220000, B66F0009060000, A47J0031440000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Dr.C.Gopinath Address of Applicant :Professor Department of Electrical and Electronics Engineering Sri Venkateswara College of Engineering (Autonomous) -----</p> <p>2)K. Raja Pandi 3)K. Vaduganathan 4)M. Vikashkrishna 5)R. Kousalya Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr.C.Gopinath Address of Applicant :Professor Department of Electrical and Electronics Engineering Sri Venkateswara College of Engineering (Autonomous) -----</p> <p>2)K. Raja Pandi Address of Applicant :Final year UG Student, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Pennalur, Sriperumbudur Sriperumbudur -----</p> <p>3)K. Vaduganathan Address of Applicant :Final year UG Student, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Pennalur, Sriperumbudur Sriperumbudur -----</p> <p>4)M. Vikashkrishna Address of Applicant :Final year UG Student, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Pennalur, Sriperumbudur Sriperumbudur -----</p> <p>5)R. Kousalya Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Pennalur, Sriperumbudur Sriperumbudur -----</p>
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(57) Abstract :
 This invention relates to a smart water dispenser designed to enhance accessibility for visually impaired individuals. The dispenser comprises features such as container detection, container fill detection, water level monitoring, speech commands, and automated port control. The container detection system ensures the presence of a container before dispensing water, incorporating LED feedback for the hearing impaired to minimize wastage. The container fill detection system utilizes buzzers and LEDs to prevent overflow, while low water levels are indicated by red LEDs and buzzers. The speech interface aids users in locating the dispenser and managing power usage by controlling the LEDs. Automated port control facilitates easy access by automating the opening and closing of ports, thereby reducing water wastage. The integration of LEDs and buzzers enhances overall accessibility for individuals with impairments and absent-minded users, promoting independence and inclusivity in water access for visually impaired individuals.

FACULTY PROPOSAL SUBMISSION

- **Dr.M.Bindhu, Mrs.K.S.Subhashini and Mr.L.K.Balaji Vignesh** submitted a project proposal titled **“ETD 0135-To define environmental friendliness rating for electrotechnical products”** for the BIS R&D Project Proposal-Phase III.
- **Dr.R.Gayathri, Dr.A.Ramya, Mrs.S.M.Mehzabeen and Mrs.S.Mary Cynthia** submitted a project proposal titled **“ETD 0088-Study of Lightning accidents and Early warning systems in India to assess Lightning Safety Measures”** for the BIS R&D Project Proposal-Phase III.



- **Dr.D.Menaka, Mrs.K.S.Subhashini, Mrs.S.Kalyani and Mrs.L.Anju** submitted a project proposal titled **“ETD 0047-Study the Performance requirements of Hair Dryers”** for the BIS R&D Project Proposal-Phase III.
- **Dr.R.Gayathri, Dr.A.Ramya, Mrs.S.M.Mehzabeen and Mrs.S.Mary Cynthia** submitted a project proposal titled **“LITD 0265-Repository of Brain Computer Interfaces (BCI)-Use Cases”** for the BIS R&D Project Proposal-Phase III.

STUDENT PARTICIPATION

(Co-curricular Activities/Extra-curricular Activities)

- Ms.P.C.Dhanshrepriya and Mr.Umesh Anandh (IV Year ECE) attended an **exhibition** on the topic of **“Indigenous Biomedical Device Development and Commercialization”** organized by the Department of Biomedical Engineering at the College of Engineering, Guindy (CEG) on 22.07.2024
- **07 Teams (ECE Department Students)** participated and presented their **project work** at **ISF Zonal Seminar and Congress** organized by **IETE Chennai Center** on 24.07.2024
- Ms.V.T.Harinee, Mr.G.S.Haresh Krishna and Ms.B.Balasaraswathy (II Year ECE) has been shortlisted for **paper presentation** held at Sri Sairam Engineering College, Chennai on 26.07.2024 (Mentored by Dr.T.J.Jeyaprabha, ASP/ECE)



- Ms.A.Deepa and Ms.Hemasri (II Year ECE) has participated in **One week Industry collaborated Certificate course** on **“BASIC PNEUMATIC SYSTEMS, PLC & HMI PROGRAMMING”** in association with **M/S.Controlsoft Engineering India Private Limited, Chennai** organized by Department of Electrical and Electronics Engineering, Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur from 24.07.2024 to 29.07.2024



STUDENT ACHIEVEMENTS

(Co-curricular Activities/Extra-curricular Activities)

- Mr.G.Sathyajith (III year ECE) participated in **Badminton (Men) team** and secured **third position** in **Buck Memorial Sports Festival 2024** organized by YMCA College of Physical Education, Chennai from 24.07.2024 to 25.07.2024



- Mr.S.Balaji, Ms.R.Bawadharani Sree and Mr.K.Arjun shathish (II Year ECE) has been shortlisted for **paper presentation** and secured **second place** with **cash award of Rs.1500** held at Sri Sairam Engineering College, Chennai on 26.07.2024 (Mentored by Mrs.S.Mary Cynthia, AP/ECE)



- Ms.K.Tanushri successfully completed and received **passing grade** in online courses **“Introduction to cloud”** and **“Python 101 for Data science”** through Cognitive class.ai powered by **IBM developers skills network**.

NPTEL PARTICIPATION

- **Around 74 Students (IV Year: 49 Students & III Year: 25 Students)** have participated in various courses and received NPTEL Certification during **January to April 2024**



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)




This certificate is awarded to
KRTIN SRINIVAS GANESH
for successfully completing the course

Introduction to Internet of Things

with a consolidated score of **82** %

Online Assignments	25/25	Proctored Exam	57/75
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Total number of candidates certified in this course:32882

Jan-Apr 2024
(12 week course)


Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS35S653401550

To verify the certificate 

No. of credits recommended: 3 or 4



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)




This certificate is awarded to
LAKSIYA A
for successfully completing the course

Introduction to Internet of Things

with a consolidated score of **80** %

Online Assignments	24.78/25	Proctored Exam	55.5/75
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Total number of candidates certified in this course:32882

Jan-Apr 2024
(12 week course)


Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS35S653404943

To verify the certificate 

No. of credits recommended: 3 or 4

EVENTS ORGANIZED

- The **EOMS awareness programme on Quality Policy and Objectives** for the **new version ISO 21001:2018** was conducted on 09.07.2024 between 11.00 am-12.00 pm in the **Digital Signal Processing Laboratory**. The programme focussed on Revised Quality Objectives and the requirements to meet various objectives. All the department objective leaders and ISO Coordinators elaborated on the revised EOMS policies and the Quality Objectives. The **Stage 2 Audit for ISO 21001:2018** was conducted on 11.07.2024 and the “**certificate of approval**” was given by the external auditor for the institution.
- The **Department of ECE** organized **Guest Lecture cum Hands on Training on “Bio-Signal Processing”** for final year students on 25.07.2024. **Dr.K.Baskaran, Bio-Medical Engineer and Regional Manager, BIOPAC Systems Inc., GenTech Pvt. Ltd., New Delhi, India,** acted as the resource person for this event.



EVENTS ORGANIZED

- IIC SVCE Sriperumbudur conducted the Ministry of Education (MoE) Innovation cell Sponsored Mentor-Mentee Mentoring Session (Online) on **“Angel Investment/VC Funding Opportunities for Early-Stage Entrepreneurs”** (Quarter-IV IIC Calendar Activity) on 22.07.2024.
- Institution Innovation Council of SVCE (IIC SVCE Sriperumbudur) Organized Seminar on **“Relevance of National Educational Policy (NEP) in Today's Engineering Education”** (Quarter-IV IIC Celebration Activity) by Dr.T.Murugavel, Professor & HOD-HSS Dept. & Innovation Ambassador, SVCE on 29.07.2024.
- The Institution Innovation Council of SVCE (IIC SVCE Sriperumbudur) organized MoE Innovation Cell Live Session **“Strengthening IIC Linkages with ATLS and SICs in Schools and Framework for providing Mentorship Guidance”** (Quarter-IV MIC Calendar Activity) on 31.07.2024.

INTERNSHIP/IN-PLANT TRAINING

- A total of 107 students completed their internships during 2023-24 even semester vacation at various organizations like DRDO, Salcomp Technologies India Private Limited, SPEL Semiconductor Limited, CMRL, BSNL, Sanmina Tech Services India Pvt. Ltd., and Samsung.



INDUSTRY INSTITUTE INTERACTION

- Industry Institute Interaction Meeting at the department level was held on 05.07.2024 during 10.30 AM to 12.00 Noon and discussed the following point.
- **Vision, Mission of our Institution and Department, Salient features of our revised Curriculum (R22) under Autonomous Stream, SAP (Semester Abroad Programme)/SIP (Semester Industry Programme), Appropriate Value-added courses, Certificate courses** to meet the industry requirements, Students Internship/Industrial Training, Project Work at Industries.

Meeting Agenda / Discussion Points

- Vision, Mission of our Institution and Department
- Salient features of our revised Curriculum (R22) under Autonomous Stream
- SAP (Semester Abroad Programme) / SIP (Semester Industry Programme)
- Appropriate value-added courses, certificate courses to meet the industry requirements
- Students Internship/Industrial Training, Project Work at Industries
- 5G, VLSI, Embedded IOT based labs
- Center of excellence; Industry sponsored lab
- Professor of Practice / Partial delivery of specific subjects/courses
- R & D / Consultancy



- **5G/VLSI/Embedded IOT based laboratory, Center of Excellence, Industry sponsored laboratory, Professor of Practice/Partial delivery of specific subjects/courses, R&D/Consultancy** were considered and discussed during the meeting.
- **Industry experts from various core industries located in Chennai, Hyderabad, Bangalore** participated in the meeting and gave their suggestions, ideas and feedback. The members also assured us to collaborate with our department to mutually do various activities.


PROFESSIONAL ELECTIVE COURSES- VERTICALS

Vertical 1 Wireless Systems Engineering	Vertical 2 Antennas and Microwave Technology	Vertical 3 VLSI	Vertical 4 Signal Processing and Data Science	Vertical 5 Embedded System Design and IoT	Vertical 6 Networking and Security
Cognitive Radio	Antenna Theory and Design	Antilog IC Design	Adaptive Signal Processing	Industry 4.0 and IIoT (Connection to EC, ME and MNO)	Blockchain and Smart Contract
Emerging Wireless Technologies	Antennas for Wireless Communication Systems	ASIC and FPGA Design	Artificial Intelligence for Signal Processing	IoT Based System Design	Cryptography and Network Security
Free Space Optical Communication	Computerized Electromagnetics with EM Simulators	CAD for VLSI Circuits	Biomedical Signal Processing	IoT for Real Time Applications	IoT Security
Intelligent Communication Networks	EM/EMC for Compliance Testing	Low Power IC Design	Biometric Systems	IIoT Solutions for Smart Cities	SDN and NFV in IoT
Mobile Technologies	RADAR and Microwave Engineering	Mixed Signal IC Design and Testing	Data Science and its Applications	Real Time Operating Systems	SDN and NFV Architectures
Millimeter Communication Systems	MIC and RF System Design	SoC Design	Deep Learning for Computer Vision	Robotics and Automation (Connection to EC and ESD)	Wireless Broadband Networks
Radio over Fiber Systems	Millimeter Wave Antenna Technology	Testing of VLSI Circuits	Image Analysis and Machine Vision	Vehicle Localization and Connected Vehicles	Wireless Networks
Satellite Communication Systems	Smart Antenna Systems and Technology	VLSI for Wireless Communication	Self-Organizing Techniques and its Applications	Wearable Devices for Healthcare Applications	Wireless Sensor Networks
Mini Project	Mini Project	Mini Project	Mini Project	Mini Project	Mini Project




PLACEMENT ACTIVITIES

- Ms.P.C.Dhanshrepriya (IV Year ECE) received a offer from M/s.Multicoreware company as position of Software Engineer on 12.07.2024
- The Training and Placement Cell jointly with M/s Springboards (Unit of Valingro Pvt. Ltd.) conducted the “Soft skill Training Program” for IV year from 15.07.2024 to 20.07.2024, The trainers came from M/s Springboards and trained the students in various topics like Verbal, Quantitative and Reasoning.



Sri Venkateswara College of Engineering



DEPARTMENT OF TRAINING AND PLACEMENT

09th July 2024

CIRCULAR

SUB: Soft skill Training Program for Final Year Students – reg.

A soft skills training program for 36 hours (SIX DAYS) is organized by our college for the VII semester students to enhance their verbal, quantitative, analytical, logical and reasoning skills and in the process better their performance in the Campus interview.

All the VII semester students are asked to attend the training without fail.

M/s Springboards (Unit of Valingro Private Limited) will conduct the program.

The details are as follows:

Branches	Dates
All Branches VII Semester	15/07/2024, 16/07/2024, 17/07/2024, 18/07/2024, 19/07/2024, 20/07/2024

Room Allotment: Class Room Block III


Time : 8:30 AM to 3:30 PM

[Signature]
PRINCIPAL




PLACEMENT ACTIVITIES

- The Training and Placement Cell jointly with M/s Springboards (Unit of Valingro Pvt. Ltd.) conducted the “Soft skill Training Program” for III year from 22.07.2024 to 27.07.2024, The trainers came from M/s Springboards and trained the students in various topics like Verbal, Quantitative and Reasoning.



**Sri Venkateswara
College of
Engineering**



DEPARTMENT OF TRAINING AND PLACEMENT

09th July 2024

CIRCULAR

SUB: Soft skill Training Program for Third Year Students – reg.

A soft skills training program for 36 hours (SIX DAYS) is organized by our college for the V semester students to enhance their verbal, quantitative, analytical, logical and reasoning skills and in the process better their performance in the Campus interview.

All the V semester students are asked to attend the training without fail.

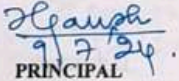
M/s Springboards (Unit of Valingro Private Limited) will conduct the program.

The details are as follows:

Branches	Dates
All Branches V Semester	22/07/2024, 23/07/2024, 24/07/2024, 25/07/2024, 26/07/2024, 27/07/2024

Room Allotment: Class Room Block III


Time : 8:30 AM to 3:30 PM


PRINCIPAL




PLACEMENT ACTIVITIES

- The Training and Placement Cell jointly with M/s Springboards (Unit of Valingro Pvt. Ltd.) conducted the “Soft skill Training Program” for II year from 29.07.2024 to 03.08.2024, The trainers came from M/s Springboards and trained the students in various topics like Verbal, Quantitative and Reasoning.



Sri Venkateswara College of Engineering

DEPARTMENT OF TRAINING AND PLACEMENT



09th July 2024

CIRCULAR

SUB: Soft skill Training Program for Second Year Students – reg.

A soft skills training program for 36 hours (SIX DAYS) is organized by our college for the III semester students to enhance their verbal, quantitative, analytical, logical and reasoning skills and in the process better their performance in the Campus interview.

All the III semester students are asked to attend the training without fail.

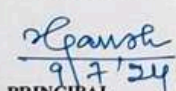
M/s Springboards (Unit of Valingro Private Limited) will conduct the program.

The details are as follows:

Branches	Dates
All Branches III Semester	29/07/2024, 30/07/2024, 31/07/2024, 01/08/2024, 02/08/2024, 03/08/2024

Room Allotment: Class Room Block III

Time : 8:30 AM to 3:30 PM


PRINCIPAL



ALUMNI ACTIVITIES

Alumni Reunion 1995-1999 Batch

- The **1995-1999 Batch** alumni reunion was conducted on 27.07.2024 at SVCE campus. The alumni had a great memorable time in the college and interacted with all the faculty whom they taught. The alumni members visited the ECE department laboratories and took photos in the laboratories. **Dr.N.Kumaratharan, Assistant HoD** and **Dr.D.Menaka, Alumni coordinator** requested all the alumni to provide valuable contributions to the college in terms of offering Placements, Internships, Seminars and awareness programmes on latest technologies and conducting motivational programmes for students to face the job interviews and to become successful entrepreneurs.



ALUMNI ACTIVITIES

Annual General Meeting 2024 (Alumni Association)

- **Dr.D.Menaka, Associate Professor and Alumni coordinator** attended the Annual General meeting 2024 organized by the SVCE alumni association at **IITM research park, Tharamani** on 28.07.2024. She interacted with many alumni across the departments and gave valuable suggestions during the Annual General Meeting.



Guest Lecture Program

- The Department of **Electronics and Communication Engineering and Mechanical Engineering** organized a guest lecture on “**Doctor, when can I go back to Play?**” by **Dr.Murali Murugavel, (SVCE Mechanical alumnus 1995-1999 batch)** Neuroscience Researcher on 31.07.2024 at 10:00AM in the library seminar hall. The talk showcases the intersection of neuroscience, sport, computing and applied quantum physics. The event is coordinated by **Dr.D.Menaka and Ms.S.Kalyani, Alumni coordinators.**



ALUMNI TESTIMONIAL



Mr.L.Vaaibhav
Senior Manager Strategic Forecasting,
Merck Sharp and Dohme, Pune

“Enthusiastic professors and a serene campus which is conducive to learning and experimenting, is the hallmark of SVCE. Based on experience, I have seen that the environment at SVCE will naturally amplify the curious mind (towards research) as well as support analytical minds to bag desirable companies to grow professionally.-

Mr.L.Vaaibhav, (Batch 2010-2014)

PROGRAM OUTCOMES

PO1: Engineering Knowledge: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design / Development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PROGRAM OUTCOMES

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

PROGRAM OUTCOMES

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: Create value to organizations as an EMPLOYEE at various levels, by improving the systems and processes using appropriate methods and tools learnt from the programme.

PEO2: Run an organization successfully with good social responsibility as an ENTREPRENEUR, making use of the knowledge and skills acquired from the programme.

PEO3: Contribute to the future by fostering research in the chosen area as an ERUDITE SCHOLAR, based on the motivation derived from the programme.

PROGRAM SPECIFIC OUTCOMES

PSO-1: An ability to apply the concepts of Electronics, Communications, Signal processing, VLSI, Control systems etc., in the design and implementation of application oriented engineering systems.

PSO-2: An ability to solve complex Electronics and communication Engineering problems, using latest hardware and software tools, along with analytical and managerial skills to arrive appropriate solutions, either independently or in team.

PROGRAM OFFERED BY THE DEPARTMENT

- **B.E. in Electronics and Communication Engineering**
- **M.E. in Communication Systems**
- **Ph.D / MS (by Research)**

EDITORIAL BOARD

CHIEF EDITOR

Dr.G.A.Sathish Kumar
Professor & Head
Department of ECE

CO-EDITORS

Mr.L.K.Balaji Vignesh
AP/ECE

Dr.G.Ayappan
AP/ECE



ELECTRONICS AND COMMUNICATION ENGINEERING

ABOUT THE DEPARTMENT

The Department of ECE was started in the year 1985 and is presently accredited by the NBA. The postgraduate program (M.E) in Communication Systems was started in 2002. There are about 38 faculty members in the department and 14 of them are doctorates. The department is well equipped with lab facilities and software tools like IE3D, ADS, CST Studio, Lab View, Tanner Tools, Cadence, MATLAB, and Prototype Machine.



SALIENT FEATURES OF ECE

- The Program has been accredited by the NBA since April 2002.
- Recognized by Anna University, Chennai as an approved research centre for Ph.D. and MS (by Research) with effect from May 2009.
- The major thrust areas of research are RF and Microwave Engineering, Wireless Networks, Network Security, VLSI, Cognitive Radio, Image & Signal Processing, Neural Networks & Soft Computing, Embedded Systems & IoT, Machine Learning, Nano Technology, Robotics, and Artificial Intelligence.
- The department is doing a good number of consultancy work in the field of PCB Prototyping and RF measurements using a Network Analyzer.
- On average over 75 companies visit our department for campus placements External Research grant of Rs 48.26 Lakhs received from ISRO and Cognizant Technology Solutions in the last five years for carrying out various projects.
- Students actively participate in research projects related to Wireless Communications, Networking, Embedded Systems & IoT, Virtual Reality, Robotics, Drones etc.
- Student Counselling Service at SVCE is committed one to promote the mental health and well-being of our students by providing accessible, quality mental health services.
- Student counsellors are available on campus for confidential counselling to all students.
- The department has signed over 12 MOUs with reputed companies to ensure the Industry Institute Interaction.
- Training programs are being conducted to enhance the employability skills of the students and also to achieve good placement in various Industries.

MESSAGE FROM HoD's DESK

The Department of ECE consistently does a commendable job in disseminating the latest knowledge and inviting specialists from diverse domains for discussions on the most recent advancement and trends besides conducting regular classes. We hope every student who visits our department has an engaging, motivating and positive experience. We consistently strive to ensure that instructors and other staff personnel possess the necessary abilities and knowledge to stimulate their students' intellectual curiosity, creativity and critical thinking. I hope you enjoy your time here and thoroughly use our amenities for promising career development



Dr. G.A. SATHISH KUMAR HoD/ECE

VISIT WWW.SVCE.AC.IN

Contact US

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admissionenquiry@svce.ac.in

SCAN &



CHOOSING SVCE: A PATHWAY TO SUCCESS AND GROWTH

- One of the prestigious and top ranked Autonomous engineering institution affiliated to Anna University, Chennai.
- Accredited by NAAC and NBA.
- Over 28 % of the alumni work abroad.
- Highest placement offers of Rs.25 LPA and 20 LPA in PayPal and Amazon.
- Highly qualified faculty and staff with an average experience of over 20 years.
- World class Laboratories to foster innovation and research.
- Alumni working in fortune 500 companies like Google, Microsoft, Facebook, Mercedes Benz, INTEL, etc.,
- State-of-the-art-campus with modern amenities in the industrial corridor of Chennai.



A Bachelor's Degree in Electronics and Communication Engineering with expertise in one of the following specializations

HONOURS SPECIALIZATION



Wireless Communication Systems



VLSI



Antenna and Microwave Technology



Signal Processing and Data Science



IoT Systems and Networking and Security Applications



Our Recruiting Companies



MINORS



Artificial Intelligence and Machine Learning



Data Science and Analytics



Robotics



Semiconductors



Advanced Communications



Bio-medical Signal Processing

Top Universities where our students are pursuing Higher Education



And Many More....



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

M.E COMMUNICATION SYSTEMS

ADMISSIONS OPEN FOR THE ACADEMIC YEAR 2024-25

SVCE started the Department of Electronics and Communication Engineering in the year 1985. The Department offers B.E. in Electronics and Communication Engineering and M.E. in Communication Systems. It is also approved as a Research Centre in Ph.D and MS (by Research) programmes by Anna University, Chennai.



ABOUT SVCE

Sri Venkateswara College of Engineering (Autonomous) is a premier self-financing institution started in the year 1985. The college offers 10 B.E/B.Tech Programmes and 10 M.E/M.Tech Programmes in Engineering and Technology. The Programs are approved by AICTE and the college is affiliated to Anna University, Chennai. The college is also accredited by National Assessment and Accreditation Council (NAAC). Many programs are accredited by National Board of Accreditation (NBA). The college is also certified by ISO 9001:2015. The institution received the autonomous status in the year 2016. Our Vision is to be a leader in Higher Technical Education and Research by providing state-of-the-art facilities to transform the learners into global contributors and achievers.

ADMISSION INFORMATION

A pass in a recognized Bachelor's degree or equivalent in the relevant field and should have obtained atleast 50% in the qualifying degree examination. Admissions are through Tamil Nadu Common Entrance Test (TANCET) conducted by Anna University or GATE

RESEARCH GRANTS

Our faculty members have received major external research grants from prestigious organizations such as ISRO, AICTE, DRDO, and TNSCST, etc., to the tune of ₹56.26 Lakhs in the last three years for doing various funded projects.

SCHOLARSHIPS FOR PG STUDENTS

- Tution fee (Rs. 50,000/year) waiver for 30% of the students of sanctioned class strength on merit basis, as applicable.
- Management Scholarship for tution fees and assistance for books and instruments.
- GATE Scholarship of Rs. 12,400 per month for students having valid GATE Score. Sponsorships for students to attend conferences.
- Intramural M.E/M.Tech Student Research Grant to carry out innovative projects.

RESEARCH AREAS

Join the Revolution: Transform Communication Systems with SVCE

- Biomedical Instrumentation
- Computer Networks & Network Security
- Digital Signal Processing & Image Processing
- Embedded Systems
- Fiber Optic Communication
- IoT (Internet of Things)
- Nano Electronics
- RF & Microwave Engineering
- Robotics & Artificial Intelligence
- VLSI & Microelectronics
- Wireless Communication Networks

MAJOR RECRUITERS

