

You Choose, We Do It

St. JOSEPH'S COLLEGE OF ENGINEERING (An Autonomous Institution)

St. Joseph's Group of Institutions

OMR, Chennai - 119



OCTOBER 2024

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

S.No.	Title of the Events and Photographs	Details of the Event
1.	STUDENT ACHIEVEMENTS/COMPETITION ATTENDED BY STUDENTS	A Team of Third Year Students from the Department of Artificial Intelligence and Data Science and Second Year Student from the Department of Master of Business Administration have won the First Prize with cash reward of Rs. 10000 in Internal Software Hackathon - Innothon '24.



Team Name: Billiance Team Members:

Ms. Hamsa Vardhini - III ADS, Mr. Jude Allen -III ADS,

Ms. Dharunika - III ADS,

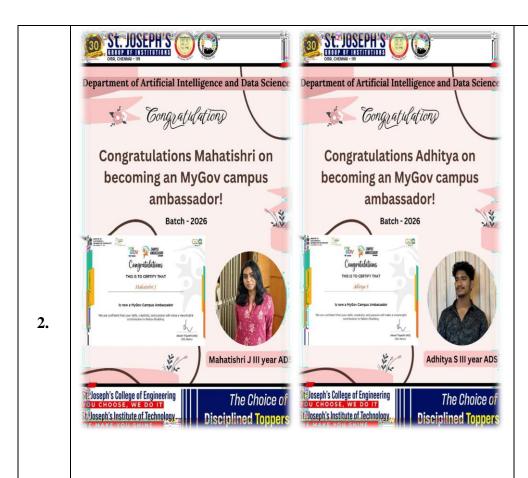
Mr. Vaikunda Mani - II Year MBA Integrated.

Mentors:

Dr.R Pugalenthi, Professor and Head (ADS),

Dr.K.Jawahar Rani, Professor (MBA).

Problem Statement: AI Powered Shoplift Detection and Alert System.



MyGov Campus Ambassadors

Our Third Year Students Ms. Mahatishri J and Mr. Adhitya S have been chosen as Campus Ambassadors for the MyGov Campus Ambassador Program.

Oracle Certified Foundation AI Associate

Our Second Year student Mr. Keshav Srinivas M, has became an Oracle Certified Foundation AI Associate.



Microsoft Azure Certified

Ms Jeevitha M, Ms Sharmila L, Ms. Jenina Angelin D, Ms. Kasey Ann Britto, Mr. Dhanush Kumar R, Mr. Harisudhan S, Ms. Varnikaa D T, Ms. Atchaya S, Mr. Vishal G B and Mr. Dhaksin S, Final and Third Year Students from the Department of Artificial Intelligence and Data Science have successfully passed all requirements for Microsoft Certified: Azure AI Fundamentals



Guest Speaker at a Azure Community event in Microsoft Campus

Our Final Year Student, Mr. Dhanush Kumar R, has served as a Guest Speaker at a Azure Community event in Microsoft Campus, Chennai.

	Google Developer Groups Our Final Year Student Ms Jenina Angelin, has been the part of Google Developer
	Groups – as an Organizer.









Department of Artificial Intelligence and Data Science

SPEAKER AT MICROSOFT CAMPUS, CHENNAI



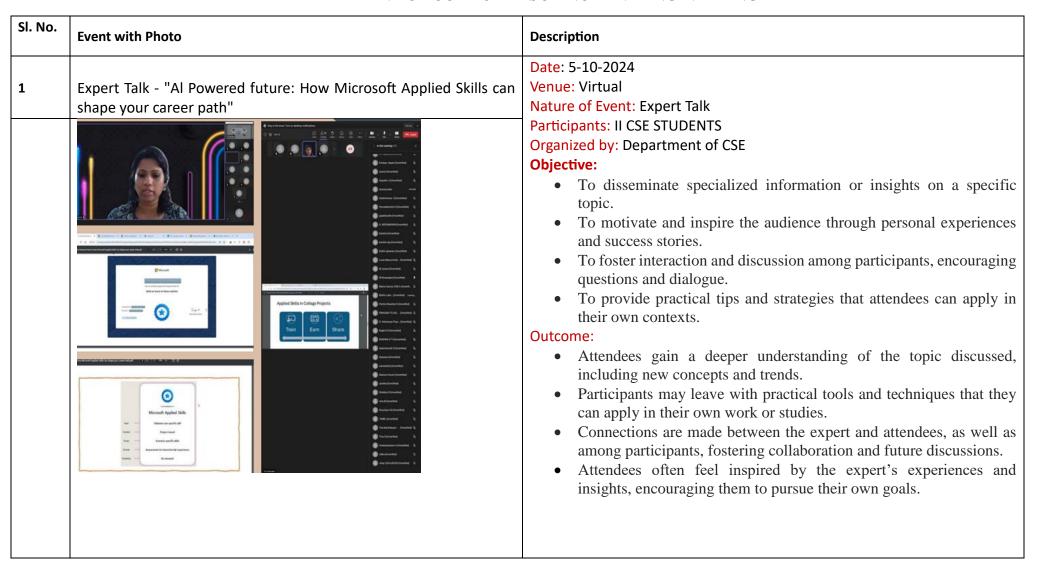
Dhanushkumar R, a Microsoft Learn Student Ambassador from the Artificial Intelligence and Data Science department, recently served as a guest speaker at a Azure Community event in Microsoft Campus, Chennai.



The Choice of Disciplined Toppers



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



Alumni talk - "Mr.Hemachandran S.N" from batch 2010-2014



Date: 10-6-2024 **Venue:** Virtual

Nature of Event: Alumni talk Participant: IV-year Students Organized by: Department of CSE

Objective:

- Alumni talks often aim to provide current students with valuable insights into various career paths, industries, and professional experiences.
- Alumni may share their career journeys, lessons learned and advice for navigating the job market.
- Alumni talks can facilitate networking opportunities between current students and alumni.

Outcome:

- Alumni talks create opportunities for attendees to connect with alumni who may serve as valuable mentors, advisors, or contacts in their desired field.
- Building relationships with alumni can lead to internships, job opportunities, and professional connections that can benefit attendees throughout their careers.







Date: Model 2 examination

Venue: CSE LAB

Nature of Event: Career development Training

Participant: II-year Students
Organized by: Department of CSE

Objective:

- To equip participants with specific skills relevant to their desired career paths, enhancing their employability.
- To provide insights into industry trends, standards, and expectations, helping participants understand the job market better.
- To foster personal development, including soft skills like communication, teamwork, and leadership.
- To assist individuals in identifying career goals and developing a roadmap to achieve them.

Outcome:

- Participants become more attractive to employers by acquiring relevant skills and knowledge.
- Individuals gain proficiency in specific technical or soft skills, making them more competent in their roles.
- Training often boosts participants' confidence in their abilities, which can improve their performance in job interviews and workplace settings.
- Many individuals experience improved job prospects, promotions, or transitions to more fulfilling career paths as a result of their training.

4 CAREER GUIDANCE MEETING - III YEAR



Date: 14-10-2024 Venue: CSE LAB

Nature of Event: Career Guidance Meeting

Participant: III-year Students
Organized by: Department of CSE

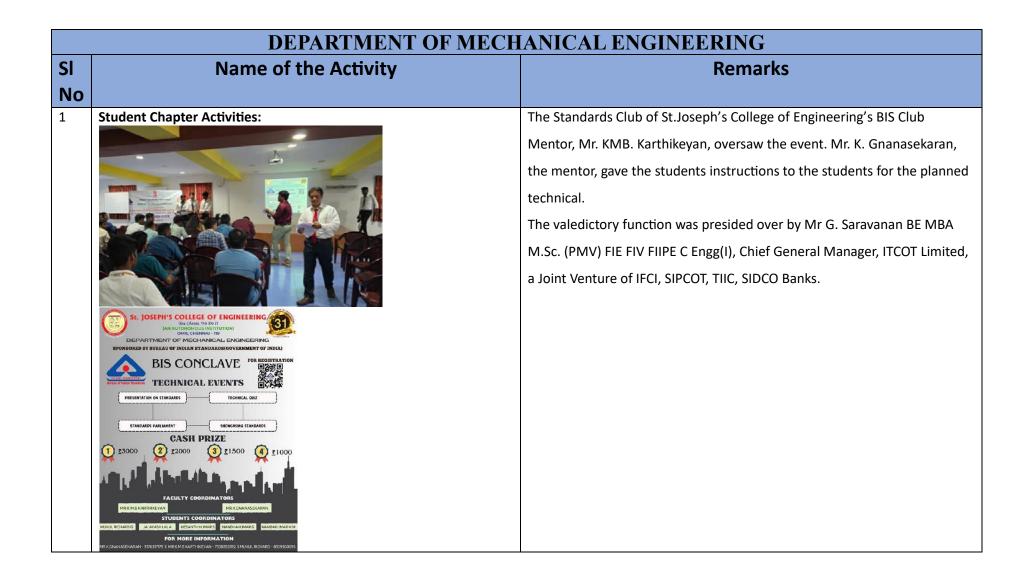
Objective:

- To help individuals assess their skills, interests, values, and personality traits, facilitating greater self-awareness.
- To provide information about various career paths, industries, and job roles that align with the individual's profile.
- To assist participants in defining short-term and long-term career goals, creating a clear direction for their professional journey.
- To evaluate current skills and identify areas for development, ensuring participants are equipped for their desired careers.

Outcome:

- Participants gain a better understanding of their interests, strengths, and values, helping them identify suitable career paths.
- Individuals receive information about various careers, job markets, and educational opportunities, enabling them to make informed choices.
- Attendees often leave with clear, achievable career goals and a roadmap for how to reach them.
- Participants can identify skills they need to develop or enhance for their desired career, leading to targeted training or education.

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2



Department of Mechanical engineering organized a technical Event sponsored by Bureau of Indian Standard(BIS). A Govt of India Initiative on 14th October 2024, four event were conducted and four positions were felicitated with cash prizes. The event was inaugurated by Dr. N. Arunkumar, Dean of IC&IQAC, andDr. L. Balamurugan, Head of the Mechanical Department.

3

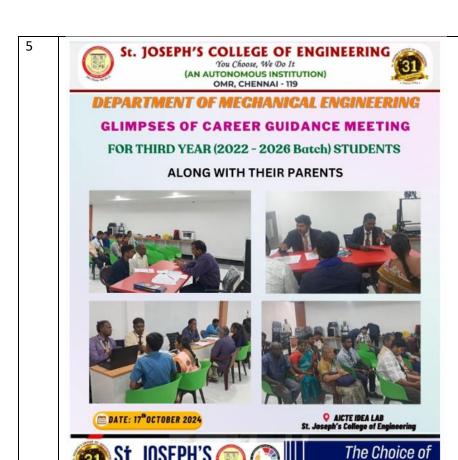


Department of Mechanical Engineering & Indian institute of Welding (IIW) Jointly organized a Inter chapter Technical Fest & Competition 2024 on 21st October 2024. Dr. V. Balasubramanian, Director, CEMAJOR, Annamalai University, Chairman IIW Chennai Chapter, Felicitated the program and quiz and technical presentation was conducted and nearly 60 students participated in the event and first three positions were felicitated with certificate and cash prize sponsored by Meera Laser Solutions.

4



Department of Mechanical Engineering, Organized a Workshop on 09th October 2024 in the topic Drone Design, Development and Assembly in partnering with Deca Drives Pvt Ltd. This comprehensive program aimed to bridge the gap between theoretical knowledge and practical application, providing students with hands-on experience in drone technology. A total of 50 Students from Second, third and Final year students got benefited using this program



On 17th October 2024, Department of Mechanical Engineering, Organized a career guidance meeting for third-year students with their parents.

During the meeting the progress and steps to be taken to enhance the individual students discussed.

6		Mr. M. Ganesh, Assistant Professor from Department of Mechanical Engineering, Completed his Viva Voce on 21st October 2024 and received his degree on 27/10/2024 on the topic "Investigation on Deep Hole Drilling under Cryogenic Cooling Environment" Under the Guidance of Dr. N.Arunkumar.		
7	Faculty Acheivements:	Dr. N. Arunkumar, Professor & Dean, Mr. M. Ganesh & Mr. M. Siva,		
		Assistant Professors, Dr. G.M. Lionus Leo, Associate Professor from		
		the Department of Mechanical Engineering Published an article		
		titled "Experimental investigation on sustainable machining of		
		Monel using vegetable oils as cutting fluids and machine learning-		
		based surface roughness prediction" in "Engineering Research		
		Express".		
		Mr. G. Ashwin Prabhu, Assistant Professor from the Department of		
		Mechanical Engineering has Successfully Published a Patent titled		
		"Experimental Investigation of Mechanical Properties of Sisal and		
		Jute Fiber Reinforced 202441071443 Composites" on 04/10/2024.		
		Mr.J.Vijayanand & Mr. G. Ashwin Prabhu, Assistant Professor from		
		the Department of Mechanical Engineering has Successfully		
		Published a Patent titled "Experimental Investigation of Tamarind		
		Seed Powder and Glass Fiber Reinforced Composites" on		
		04/10/2024. Application No: 202441070196		

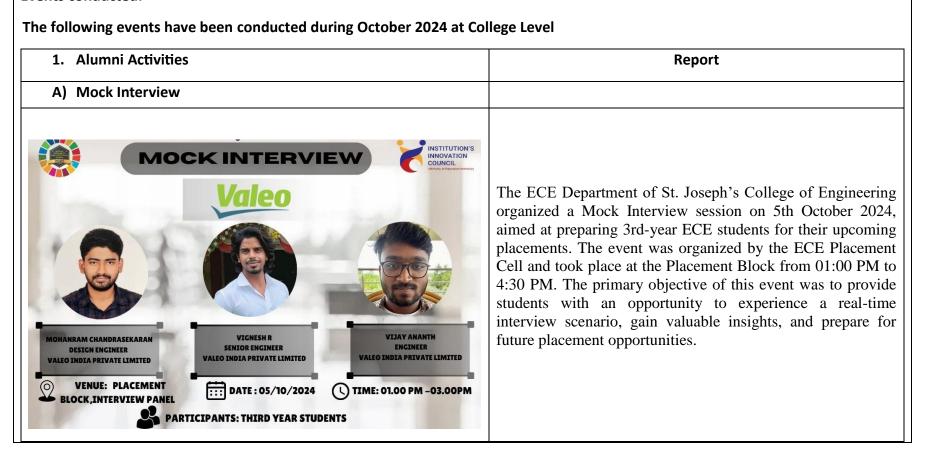
- Mr. T. Balasubramanian, Assistant Professor from Mechanical Department Secured Elite Silver Certificate in Product Design and Development in Association with IIT Roorkee.
- Mr. K. Pravinkumar, Assistant Professor from Mechanical Department secured Elite certificate in the Welding Application Technology in NPTEL exam in association with IIT Guwahati.
- Mr.K.Gnanasekaran, Assistant Professor from the Department of Mechanical Engineering Published a Text Book titled "Renewable Energy Systems" in Quill Tech Publication, ISBN 978-93-6786-963 5 •
- ➤ K. Gnanasekaran, Assistant Professor from the Department of Mechanical Engineering published a patent titled "Design and fabrication on bench test of electric two wheeler". Application Number .Application no: 202441071428 •
- K. Gnanasekaran, Assistant Professor from the Department of Mechanical Engineering published a blade grass cutter" patenttitled "Solar powered three Application Number .202441071427
- ➤ Mr. K. M. B. Karthikeyan and Mr. K. Gnanasekaran, Assistant Professor, Department of Mechanical Engineering received a grant fund of Rs. 60,000/- for conducting technical events in Bureau of indian standards BIS (Students professional activities)

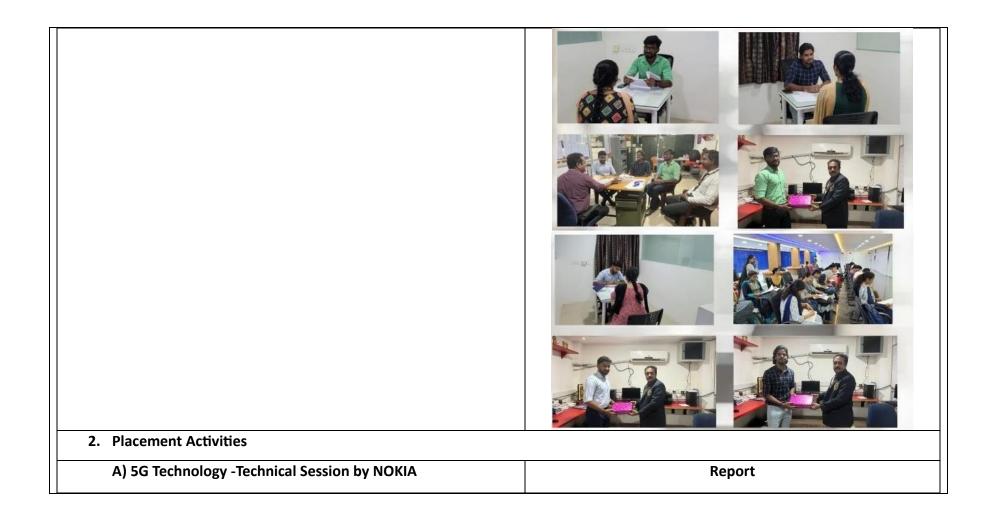
- Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering Published an article titled "Advanced Robotics in Manufacturing: Engineering Innovations and Management Implications" in Scopus Indexed Journal "Nanotechnology Perceptions" Vol.20, S11 (2024) 633-646 (ISSN 1660-6795) on September 14, 2024.
- Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering Published a Text Book titled "Strength of Materials" in Alpha International Publication, ISBN 978-93-5762-775-7.
- ▶ Dr. M. Arun & Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering has Successfully Published a Patent titled "Enhancing Polymer Composites with Recycled Jute Fibers from Carpet Waste: Transforming Jute Fibers into High Performance Natural Fiber Composites" on 18/10/2024.Application No: 202441075589
- Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering has presented paper entitled "A Fusion of SVR and Fully Connected Networks for Improved RUL Prediction of Lithium Ion Batteries" in 2024, 2nd Global Conference on Information Technologies and Communications (GCITC) during 25th and 26th of October 2024



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Events conducted:





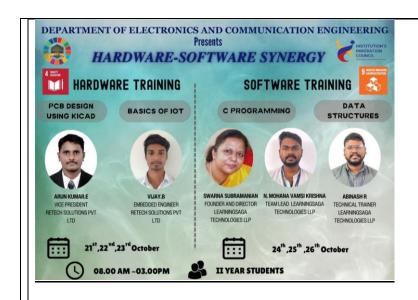


Technical Session was hosted by ECE department to 5G students session handled by Mr.Veera and Poonam from Nokia. The workshop provided an overview of 5G and Multi-access Edge Computing (MEC) technologies. It discussed the shift from monolithic implementations to virtualized systems, highlighting the role of hypervisors and virtualization in optimizing resource utilization. The workshop also explored the benefits of MEC in reducing latency for real-time applications.



B) Retech Techno Solutions and Learning Saga LLP

Report





A six-day placement training program was conducted in ECE Department from 21st to 26th October 2024 by Retech Techno Solutions and Learning Saga LLP for 121 second-year ECE students with a CGPA of 7.5 and above. The program aimed to enhance students' technical skills in hardware and software domains. Hardware training focused on PCB design and IoT fundamentals, while software training covered C programming and data structures. This comprehensive training equipped students with practical skills, problem-

solving abilities, and industry-relevant knowledge, preparing them for academic and professional challenges.

C) Syasan Empowers ECE Students with Future-Ready Skills

Report





Third and final-year ECE students at recently underwent intensive training in UI/UX design, RDBMS & SQL, and ReactJS, conducted by Syasan's Career Analytics Technology Solutions. This initiative aims to equip students with essential software skills, making them more competitive in today's tech-driven job market. As the demand for user-centric and data-driven solutions grows, these skills are becoming increasingly important for ECE engineers. By mastering UI/UX, RDBMS & SQL, and ReactJS, students can contribute to the development

3. SEERA	of innovative IoT devices, smart electronics, and web applications.			
A) SEERA Activity - 1	Report			
	Student Employability Enhancement & Research Activity (SEERA) event on October 18,2024 aims to equip students with essential skills for a successful career path. The event			

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING





STUDENT EMPLOYABILITY ENHANCEMENT & RESEARCH ACTIVITY





COMMUNICATION

Communication Excellence in Engineering



Staff Co-ordinator

Mrs. Madhumitha.R Asst.Prof., Mrs.Jasmine Mystica.K Asst.Prof.,

SKILL RACK

SKILL RACK Practice

Dr.BalaMurugan.A.M Asso.Prof.,

Room No:123

PLACEMENT

Effective Strategies for Placement



EDITH PRAISELIEN . P

Staff Co-ordinator

Mrs. Kayavizhi.K.R Asst.Prof.,

Room No:122

HIGHER PACKAGE PLACEMENT The Road to Six Figure Salaries



Staff Co-ordinator

Mrs. Angelin Ponrani.M Asst.Prof.,

Room No:121

SLOW LEARNERS

Signals & Systems

Dr.Ramachandra Reddy.K Asst. Prof.,.

HIGHER STUDIES

Pathway to Higher Education





MOHANRAJ, P

Staff Co-ordinator

Mrs.Anitha.G Asst. Prof., Mr.Lingeshwaran.M Asst. Prof.,

Smart Classroom



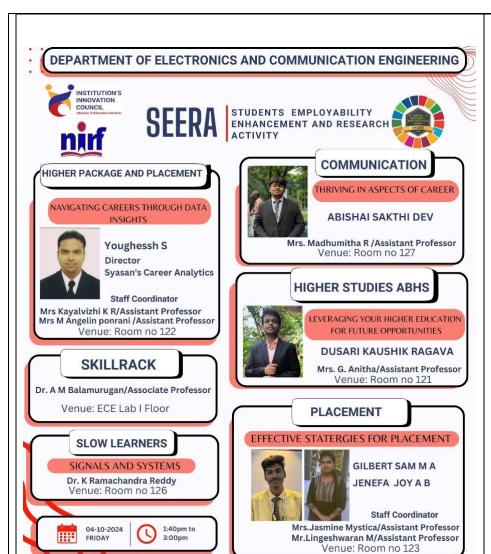




includes a session on "Communication Excellence in Engineering," coordinated by Santhosh R., which focus on effective communication skills critical for engineers in technical and professional environments. The "Higher Package Placement" session, titled "The Road to Six-Figure Salaries" and coordinated by Benita Jael J., provided the guidance on securing high-paying job offers, including resume building, interview preparation, and industry trends. Edith Praiselien P., lead a session on "Effective Strategies for Placement," offering students practical insights on job search strategies, networking, and industry expectations. For those aiming for advanced studies, the "Higher Studies" session, titled "Pathway to Higher Education," coordinated by Yuthika A. and Mohanraj P., covered the opportunities for further studies, including application processes, scholarships, and course selection.

B) SEERA Activity - 2

Report









On October 4, 2024, held a SEERA session focused on enhancing students' professional and technical skills for improved employability. The program included insightful sessions on data-driven career navigation, personal branding, networking, and leveraging emotional intelligence for career growth. Students explored the value of higher education in aligning with industry trends, learned effective strategies for placement preparation, and gained practical insights into building personalized resumes, optimizing LinkedIn profiles, and mastering interview techniques. Technical sessions covered core concepts in "Signals and Systems," emphasizing their importance for technical roles, along with Skill Rack

exercises to improve coding skills in C, Python, and Java. The event empowered students with key industry competencies, highlighted pathways for further education, and provided a structured approach to career advancement.

4. Seminar Organised

Report





The seminar "Innovate with Intelligence: The Rise of Generative AI and its Future Scope" was hosted by the Department of Electronics & Communication Engineering, featured Samuel Tensinigh from the University of Sydney, who discussed the potential of generative AI, particularly in the context of VLSI and semiconductors.

5. Workshop Organised

a) CAREER COMPASS Report



A two-day workshop was conducted by ECE department on October 9th and 10th, 2024, to equip third and final-year students with essential career skills. Day one focused on resume building, where students learned how to craft professional resumes that stand out to potential employers. Expert guidance from Mrs. Nithya Priya and Mr. Gokula Krishnan helped students understand key components of effective resumes, including structure, content, and formatting. On day two, a mock interview session provided students with a realistic experience of job interviews. Industry professionals conducted one-on-one interviews, offering valuable feedback on communication, problem-solving, and overall performance.

6. AICTE Sponsored ATAL

Report	ocking the Potential of AI: Journey from Transformer Models to AI, Applications from Industry to Space, and the Evolving Threat dscape













The Department of Electronics and Communication Engineering hosted a two-week AICTE Sponsored ATAL Advanced Faculty Development Programme on "Unlocking the Potential of AI: Journey from Transformer Models to Gen AI, Applications from Industry to Space, and the Evolving Threat Landscape." The programme delved into the latest advancements in Artificial Intelligence, focusing on transformer models and generative AI, while exploring their broad applications across various industries, including space, and addressing the emerging AI-driven threat landscape. Esteemed chief guests, Dr. P. Vanaja Ranjan, Director of the Centre for Faculty Development and Professor in the Dept of EEE at Anna University, along with Dr. Vandita Srivastava, Scientist SG, Head of the Dept of Geo Informatics at ISRO, IIRS, Dehradun, Uttarakhand, led the event on 14th October 2024.

7)NEXTRONIX' 24	Report

















Department of Electronics and communication has recently hosted a 24- hour Internal Hardware Hackathon, Nextronix'24, on October 18th and 19th, 2024. This event was a platform for students from all years of St. Joseph's Group of Institutions to showcase their innovative hardware projects, fostering experiential learning and leadership development. Forty teams from various departments participated, competing for a cash prize of Rs. 20,000. The hackathon aimed to inspire students to address real-world challenges and gain valuable practical experience, ultimately boosting their confidence and preparing them for future endeavors. By providing an opportunity to apply their classroom knowledge

to real-world problems, the event encouraged creativity, teamwork, and problem-solving skills among the participants.

8) NPTEL Achievers:

- Mrs. G. Anitha have achieved an ELITE position in the NPTEL Python for Data Science course
- GD Vignesh has successfully completed 4 weeks NPTEL course on Basics of SDR and its Applications.
- Mrs. M. Angelin Ponrani have achieved an ELITE position in the NPTEL Python for Data Science course

9) Patent Published

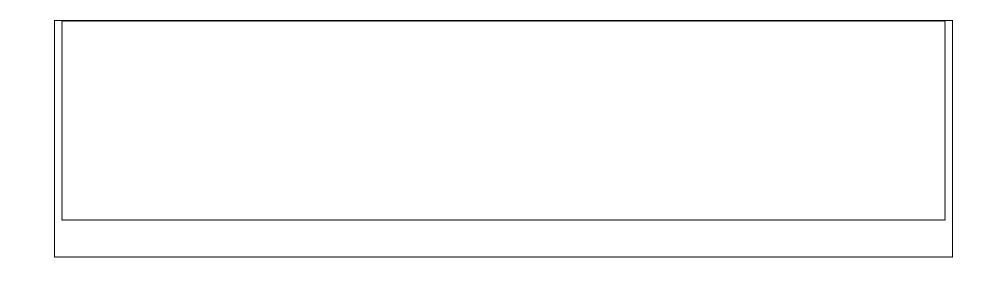
The following faculty members have published patent during the month of October 2024.

Date Country and Date of Date of Name of the of Name the **Application Patent Title** S. No. Filing **Publication** Grant **Applicants Patentee** No. R.Madhumitha R.Madhumitha Wearable IOT 20244107560 3 A for Bands stress regulation with 1. Adaptive machine learning techniques 07/10/2024 18/10/2024 20244107227 Mrs.S.Devipriya Mrs.S.Devipriya SYSTEM AND 24/09/202 10/10/202 2.

				METHODFOR BLOCK-CHAIN BASED CREDIBILITY VERIFICATION OF INTERNET OF THINGS (IOT) ENTITIES			
3.	20244107105 5	Mrs P.Elaveni	Mrs P.Elaveni	EDGE COMPUTING PLATFORM FOR LOW- LATENCY IOT APPLICATIONS	20/09/202	10/10/202	-
4.	20244108001 7 A	Mrs.G.Anitha	Mrs.G.Anitha	"Enhancing mathematical reasoning and self-efficacy with problem based learning, contextual teaching and machine learning integration	21/10/202 4	25/10/202 4	-

10) FDP/Workshop:

The following staff member have participated in various FDP/Workshop conducted by other institutions during the month of October at National/International level.



S.NO	Name of the Faculty	Title of the professional development program	National / Internation al	Works hop/ FDP/C onfere nce/ST P	Date and Duration (from – to)	No. of Days	Place of the Program/ Conducted by
1.	Dr. B Victoria Jancee	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape		FDP	14/10/2024 to 26/10/2024		St. Joseph's college of engineering
2.	Dr.S.Aghalya	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape		FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
3.	Dr.P.Ezhilarasi	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to		FDP	14/10/2024 to 26/10/2024		St. Joseph's college of engineering

		Space, and the Evolving Threat Landscape				
4.	Dr.S.Vinayagapriya	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
5.	Mrs.R. Madhumitha	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	-	St. Joseph's college of engineering
6.	Mrs.S.Devipriya	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024		St. Joseph's college of engineering

7.	Mr.G.D.Vignesh	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
8.	Mrs.M.Angelin Ponrani	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
9.	Dr.M.Suresh	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
10.	Dr.D.Sumithra Sofia	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering

		GenAl, Applications from Industry to Space, and the Evolving Threat Landscape				
11.	Dr.A.Simon Prabhu	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape	FDP	14/10/2024 to 26/10/2024	,	St. Joseph's college of engineering
12.	Dr. D. Sumithra Sofia	Future Ready Antenna Design-cutting Edge solution for 5G-mm wave and beyond	FDP	14.10.2024 -18.10.2024	,	St. Joseph's college of engineering

11.Publications

The following staff member have published the research papers in Journal/Conferences organized during the month of October at International/National Level.

1.S.Aghalya," Cloud based prediction of epileptic seizures using real-time electroencephalograms analysis" International Journal of Electrical and Computer Engineering, vol 14, no.5, pp. 6047–6056

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SI. No.	Photographs Captured During Events	Corresponding remarks (Minimum 300 words)
1.	Student workshop FIC: EVENT PHOTO	Design and Develop smart Analog battery charger using proteus and easy eda Software was held on 03.10.24 & 04.10.24. Student Workshop on "Design and Develop smart Analog battery charger using proteus and easy eda Software" was conducted in the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering. In the first day of the session, the students were provided with basic knowledge on Proteus software and its applications. The next day hands on training on design and Develop smart Analog battery charger using proteus has been taught to the students.

2. Student workshop





PIC: EVENT PHOTO

Trends and Opportunities in Solar PV Technology" held on 03/10/2024 & 04/10/2024

Student Workshop on "Trends and Opportunities in Solar PV Technology" was conducted in the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering by TIAS Pvt Ltd.

In the first session of the workshop, the students were provided with recent trends in Solar PV Technology and its applications. The next day Opportunities in Solar PV Technology and hands on training has been provided.

3. Student workshop

Student Workshop on "Interior Lighting design using Dialux evo software" was conducted in the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering by Unique MEP Pvt Ltd. In the first session of the workshop, the students were provided with basic knowledge on Interior Lighting design. The next day hands on training has been provided using Dialux evo software.





PIC: EVENT PHOTO

4. Student workshop

Student Workshop on "Introduction to PCB software: Altium" was conducted in the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering by TATA. In the first session of the workshop, the students were provided with introduction to PCB software. The next day hands on training has been provided with Altium.





PIC: EVENT PHOTO

5. Student workshop

Student Workshop on "Hands- on Machine learning using python" was conducted in the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering by Build Innovative Technologies Pvt.Ltd. In the first session of the workshop, the students were provided basics of Python. The next day hands on training have been provided on Machine learning using python.





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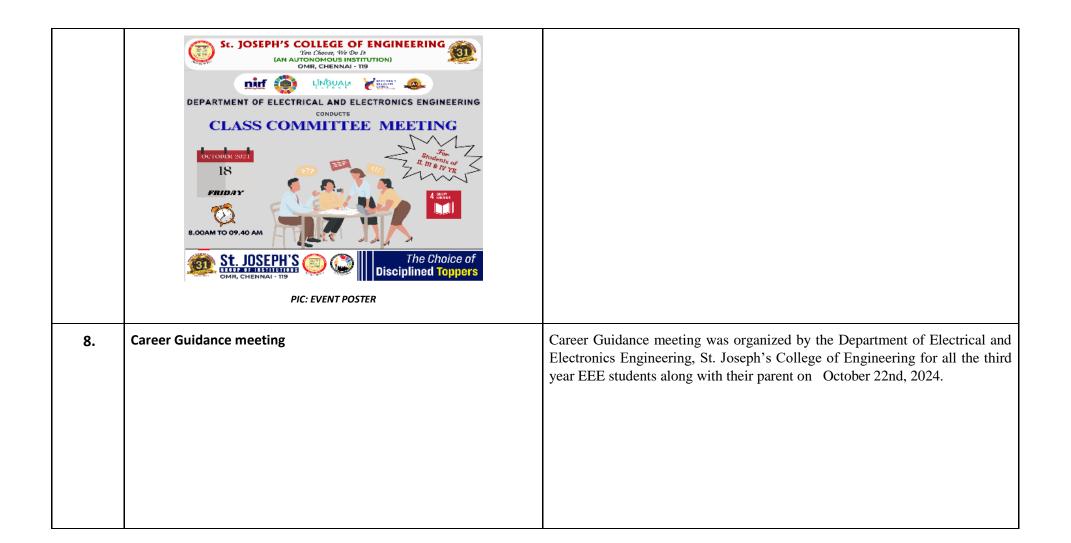
6. Mentor Meeting

Mentor meeting was organized by the Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering for all the second, third and final year EEE students on **October 18, 2024**. Students were encouraged to perform well in Model exam and End semester lab exams. They were motivated to focus on enhancing core, technical and soft skills to prepare for multidisciplinary challenges in engineering.



7. Class Committe Meeting

During CCM meeting on 18th October 2024 the following points were discussed: Model-1 exam comparative Analysis between 3 sections, Prize winner/participation in Different Events in top colleges in each section, NPTEL Exam Preparation Methods, Skillrack Performance, Preparation for both model-3 & End semester exam (Lab & Theory), How to increase the number of students score above 9 CGPA. For final year students, given guidance for Paper and Patent Publication.











PIC: EVENT PHOTO

9. IEEE activities

On **7**th **October 2024**, the IEEE St. Joseph's College of Engineering Student Branch Chapter (SBC60101) hosted the **Happy Volunteering** event in celebration of IEEE Day 2024. This event was held to honor and recognize the unwavering dedication of the student branch's volunteers, who have significantly contributed to the success of various IEEE initiatives throughout the year.

During the event, over 280+ volunteers were awarded Certificates of Appreciation for their outstanding service and commitment to the IEEE student branch activities. The event served as a heartfelt expression of gratitude to all those who generously gave their time, energy, and skills to help organize and manage IEEE events, workshops, and seminars.

The program emphasized the importance of volunteering and the impact it has on both the individual and the community.



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10.

IEEE activities



On 10th October 2024, the IEEE SJCE Student Branch Chapter celebrated IEEE Day 2024 with a cake-cutting ceremony, attended by nearly 60 students. The event brought together both new and existing members to commemorate IEEE's legacy and achievements. During the celebration, the history and accomplishments of IEEE SJCE SBC were introduced to the newly joined members, inspiring them to actively participate.

PIC: EVENT PHOTO

11.

IEEE activities



On **15th October 2024**, the IEEE SJCE Student Branch Chapter celebrated IEEE Day 2024 with great enthusiasm, participating actively in the **IEEE Day Photo Contest** across categories like Technovathion, Social Category, and Raise Your Flag. All members participated eagerly in the contest, showcasing their creativity and passion. Additionally, more than 100 students benefited from various events such as a poster competition, a Tech Trivia Quiz, a volunteering appreciation program, workshops, and expert talks featuring IEEE alumni, fostering a strong sense of unity and learning within the IEEE community.

PIC: EVENT POSTER On 5th October 2024, the IEEE St. Joseph's College of Engineering Student 12. **IEEE activities** Branch Chapter (SBC60101) successfully conducted the Tech Trivia event in celebration of IEEE Day 2024. The quiz featured several rounds that tested Which IEEE society focuses on robotics automation technologies? participants expertise across a range of subjects, including emerging technologies and real-world applications through Mentimeter platform. This interactive format encouraged healthy competition while promoting peer learning. H PIC: EVENT POSTER & PHOTO



On 5th October 2024, the IEEE St. Joseph's College of Engineering Student Branch Chapter (SBC60101) successfully hosted a Poster Design Competition in celebration of IEEE Day 2024. The event ran from 4th October to 5th October 2024, with a submission deadline of 6:00 PM on the final day.

The winners were selected based on creativity, relevance to the theme, and overall impact of the poster. All participants received E-certificates as a token of appreciation for their efforts and contributions.

14. IEEE activities

On IEEE day on 29th September 2024, IEEE SJCE SB successfully conducted the first session of the EXPERT TALKS series, titled "RECREATING RENAISSANCE." The session featured Mr. Arisudan T H, recognized for his contributions as the Immediate Past Chair of IEEE SJCE SIGHT AG and as the recipient of the IEEE Best Volunteer Award in 2023, provided valuable perspectives on Electrical and Electronics Engineering and the broader IEEE society.

The event facilitated meaningful interactions between the speaker and the participants, allowing for an exchange of knowledge and ideas. Around 30 Attendees left the session feeling motivated and equipped with new perspectives for their academic and professional endeavour.



15. | IEEE activities

On 05th October 2024, We the IEEE St. Joseph's College of Engineering Student Branch Chapter successfully conducted the second session of the EXPEXT TALKS- RECREATING RENAISSANCE series. The Session featured Mr. HARESH R, recognized for his contribution Immediate Lead Publicity and Special Day Team Graphic Designer, IEEE Madras Section, GET, Vehicle Electrical Process (VEP), RNAIPAL, provided valuable perspective on Electrical and Electronics Engineering and the boarder IEEE Society. Around 30 attendees left the session feeling motivated and equipped with new perspectives for their academic professional endeavours.



PIC: EVENT POSTER & PHOTO

16. IEEE activities

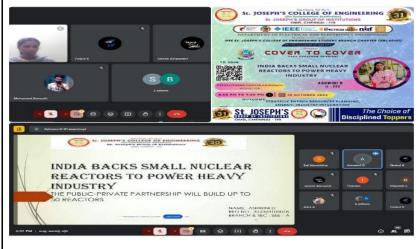
On 15th October 2024, We the IEEE St. Joseph's College of Engineering Student Branch Chapter successfully conducted the fourth session of the EXPERT TALKS- RECREATING RENAISSANCE series. The Session featured Mr. Harry Jakin IEEE Education Society Project Coordinator (Madras Section), IEEE Madras Section Student Coordination Team provided valuable perspective on Electrical and Electronics Engineering and the boarder IEEE Society. The event facilitated meaningful interaction between the speaker and the participants, allowing for an exchange of knowledge and ideas. Around 30 attendees left the session feeling motivated and equipped with new perspectives for their academic professional endeavours.



17. IEEE activities

On IEEE Day 2024, the IEEE St. Joseph's College of Engineering Student Branch Chapter (SBC60101) successfully hosted the Cover to Cover (IEEE Spectrum Reading) event on 5th October 2024. The event featured a detailed discussion on the topic "India Backs Small Nuclear Reactors to Power Heavy Industry" presented by Ashwini D, a second-year EEE student.

The session explored the growing potential of small nuclear reactors in India's energy landscape, with a focus on their application in powering heavy industry. Ashwini provided in-depth insights into how this technology can promote energy efficiency and sustainability, sparking engaging discussions among attendees about the future of nuclear energy in industrial applications.



PIC: EVENT POSTER & PHOTO

18.

IEEE activities



PIC: EVENT POSTER & PHOTO

On IEEE Day 2024, the IEEE St. Joseph's College of Engineering Student Branch Chapter (SBC60101) successfully hosted the Cover to Cover (IEEE Spectrum Reading) event on 12th October 2024. The event featured an engaging talk by Arjun P, a second-year EEE student, on the topic "The Incredible Story Behind the First Transistor Radio" Arjun delved into the fascinating history of how the first transistor radio revolutionized the electronics industry. He explained the pivotal role that this invention played in shaping modern communication, highlighting key breakthroughs and the contributions of notable engineers.

The presentation sparked thought-provoking discussions among attendees, as Arjun illustrated how the development of the transistor radio laid the foundation for many of today's portable electronic devices.



IEEE PES SJCE SB AND IEEE SMART CITIES- in association with IEEE St. Joseph's College of Engineering Student chapter conducted a Workshop "HANDS ON WORKSHOP" on 17/10/2024 from second year of the Department of Electrical and Electronics Engineering participated. The MATLAB Hands-on Workshop was conducted for second-year students, providing them with a valuable learning experience. This workshop primarily focused on introducing students to MATLAB, a high-level programming environment used widely in Engineering. Simulink, a graphical environment for simulation and model-based design. The workshop began by explaining the basics of MATLAB, helping students to understand how to future project

20. IEEE activities

The IEEE Standards Workshop and Hackathon, held on September 18, 2024, at the Robotic and Process Automation Lab (PEP CENTRE) of St. Joseph's College of Engineering, Chennai, was a significant event, with the college being selected from across the southern zone to host it. The inauguration featured notable speakers, including Mr. Shone Jose, Vice Chair of IEEE India Council for Young Professionals, and Mr. A. Sadeeshkumar, Assistant Professor at St. Joseph's College of Engineering.

The technical sessions were led by Mr. Anand Raje, Co-Founder and CTO of IIFON, and other experts like Ms. T R Ramya from CeWIT and Dr. Sudha Bhuvaneshwari, President of ISOC Chennai. With active participation from 31 external students representing various colleges, the event successfully emphasized fostering innovation through the application of global technology standards.



PIC: EVENT POSTER & PHOTO

21.

IEEE activities



PIC: EVENT PHOTO

TECH X SJCE'24, The program featured numerous expert-led seminars on practical tasks, lectures, professional networking opportunities, and mentorship sessions covering a variety of contemporary fields. During the three intense days, the participants received a comprehensive set of tools and fresh knowledge about emerging technologies, positioning them to be the forefront of technology for their future endeavors.

- I. ROBOTICS WORKSHOP
- II. ELECTRIC VEHICLE WORKSHOP
- III. WEB DEVELOPMENT WORKSHOP
- IV. CLOUD COMPUTING WORKSHOP
- V. DRONE WORKSHOP

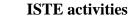
VI. QUANTUM COMPUTING AND CYBER SECURITY WORKSHOP

VII. ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

VIII. RENEWABLE ENERGY WORKSHOP

IX. IOT/EMBEDDED SYSTEMS

22.





PIC: EVENT POSTER & PHOTO

St. Joseph's College of Engineering (Electrical & Electronics Engineering) in association ISTE STUDENT CHAPTER organized a technical event called "CALL FOR POSTER INNOVATIONS" on 10/10/2024. This exclusive event started at 1:40 pm with all the members of our club and society. The event started exploring the hidden talent of our students. Abiding the famous quote "Everyone has talent. What's rare is the courage to follow it to the dark places where it leads." the event started exploring the hidden talent of our students which were kept hidden through this event.

OUTCOME:

Innovating communication improves clarity and effectiveness in conveying ideas to diverse audiences.

It encourages engagement and inspires creators to adopt new techniques. This initiative fosters a culture of innovation, enhancing information visibility and impact.

St. JOSEPH'S COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRORAL AND ELECTRORICS ENGINEERING DEPARTMENT OF ELECTRORICS ENGINEERING DUCCOUNT OF THE PROPERTY OF THE

PIC: EVENT POSTER & PHOTO

St. Joseph's College of Engineering, (Electrical & Electronics Engineering) ROBOTICS CLUB in association with IEEE ROBOTICS AND AUTOMATION SOCIETY organized a technical event "BOT BUILDERS SUMMIT" on 08/10/2024. This exclusive event started at 1:40 pm with all the members of our club and society. The event started exploring the hidden talent of our Students. Abiding the famous quote "Everyone has talent. What's rare is the courage to follow it to the dark places where it leads." the event started exploring the hidden talent of our students through this event.

OUTCOME

Participants gained deeper insights and improved their problem-solving abilities through challenges.

Categories could include power management, signal processing, or renewable energy solutions.

24. Club activities

St. Joseph's College of Engineering, (Electrical & Electronics Engineering) ELECTRICAL CLUB organized a technical event "TECH CONNECT EXPO" on 09/10/2024. This exclusive event started at 9:30AM with all the members of our club and society. The event started exploring the hidden talent of our Students. Abiding the famous quote "Everyone has talent. What's rare is the courage to follow it to the dark places where it leads." the event started exploring the hidden talent of our students through this event.

OUTCOME

Participants gained deeper insights and improved their problem-solving abilities through challenges.

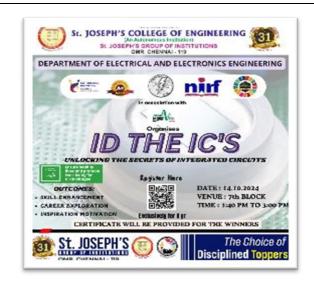
Categories could include mastering the art of wiring and circuiting.



25. Club activities

"ID THE IC'S" organized by the very vibrant technical event of the Choppers Club of St. Joseph's College of Engineering, on October 14, 2024 at 1:40 p.m was an event with full participation of club members. It has taken out a great opportunity for students to discover and bring out their own specialties regarding ICs. This endeavor focused on experience-based learning and teamwork by consolidating the basic principles of Electrical and Electronics Engineering in a fun interactive environment.

TECHQUEST: A series of quiz rounds tested participants' knowledge about ICs, their applications, and basic electronics principles. This competitive element added excitement and motivation.



26. Placement club activities

The Department of EEE has conducted the SEERA training program for SECOND year students through Lingual Club and Bright Byte Coders Club on 4/10/24. The speakers of the event are also from second year students Laura J on the topic INTRODUCTION TO SQL, SARANYA M the topic PROFIT AND LOSS, SOUNDARYA M on the topic CHOICES AND CHANCES FOR YOUR CAREER & GOKULARAMAN S R on the topic HOW TO ENTER A JOB ON YOUR OWN INTEREST. The program is organized to enrich the skills on various topics on aptitude for the students and provides the placement drive procedures for various companies.



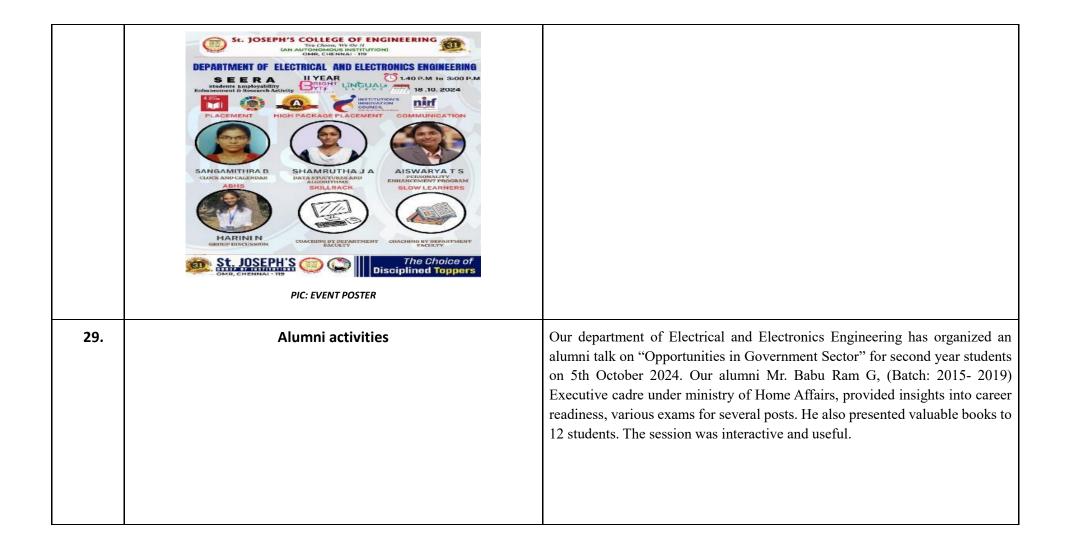
27. Placement club activities

The Department of EEE has conducted the SEERA training program for SECOND year students through Lingual Club on 09/10/24. The speakers of the event are also from second year, Pre-final year and Final year students SARANYA D on the topic PROBLEMS ON TRAIN, SHERIL J on the topic PROBABILITY, VAISHALINI R on the topic HOW TO OVERCOME STAGE FEAR & OVIYAVARSHINI R on the topic TIME AND SPEED. The program is organized to enrich the skills on various topics on aptitude for the students and provides the placement drive procedures for various companies.



28. Placement club activities

The Department of EEE has conducted the SEERA training program for SECOND year students through Lingual Club on 18/10/24. The speakers of the event are also from second year, Pre-final year and Final year students SANGAMITHRA B on the topic CLOCK AND CALENDAR, SHAMRUTHA J A on the topic DATA STRUCTURES AND ALGORITHM, AISWARYA T S on the topic PERSONALITY ENHANCEMENT PROGRAM & HARINI N on the topic GROUP DISCUSSION. The program is organized to enrich the skills on various topics on aptitude for the students and provides the placement drive procedures for various companies.





30. Alumni activities

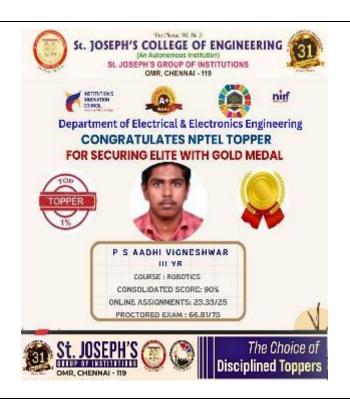


PIC: EVENT POSTER & PHOTO

Department of EEE organized an online event on 21st October 2024 at 7pm for higher studies guidance through Alumnus of 2018-2022 batch, Mr.Sharan R, B.E., (MBA), IIM Nagpur.

The event was organized for students who are preparing for and aspiring to join a management course after graduation. Participants included second, third, and fourth-year students from the Electrical and Electronics Engineering department. The speaker achieved a percentile score of 78.80 in CAT 2023 and is now pursuing an MBA at IIM-Nagpur. During the webinar, he offered valuable insights on CAT exam preparation and explained the application process. He also covered the different sections of the CAT exam and their respective weightages, and provided information about various IIMs in India and their selection process. Attendees had the opportunity to clarify their doubts

		regarding the CAT exam and also about the best B schools in India to join for management course.
31.	NPTEL	the students completed their courses conducted by NPTEL during Jun-Dec 2024 September exams, 65 final year students among which 24 are elite and 4 are elite silver 34 third year students among which 17 elite and 1 elite gold 12 second year students among which 3 are elite.



32. Student achievements



• The following students were finalist in AMRUT -AICTE Millet Recipe Unleashing Talent Grand Finale competition

Team 1: Hariprasath S Rithika R Shamrutha J A Oviyavarshini R

Mentor Name: Dr. Jayarama Pradeep

Team 2: Pradeepa G Pooja V Pradeepa R Kathir D

Mentor Name: Mrs. Vedavalli S P

Team 3: Praveen M Saran P Magalekshmi A Sujitha T



Pic. Students receiving prize

Mentor Name: Mrs. C Rama Devi

• The following students won prizes in the intercollege Competition

	The following students won prizes in the interconege competition								
S. No	Name of the Student	Year	Event Name	Organized by	Prize won				
1	Jemila L	IV	Techno Tangles	Sri Sairam Engineering College	II place Rs. 1500/-				
2	Sandhiya T Saranya M Sarvana kumar R Vijay Vigneswar	II	Treasure Hunt	SRM Valliammai Engineering College	I place Rs. 700/-				
3	Pavithra P Loshini.R Srinalini R Sridhar B	II	Treasure Hunt	SRM Valliammai Engineering College	II place Rs. 500/-				

- our second year students Umamageshwari M, Rakshaya B C, Kanishka S **team** were the winners of **Anna University Zonal Volleyball Tournament** Held At Jerusalem College Of Engineering, Chennai on 01/10/2024.
- Our second year student **Dharani M** was **runner** in **Anna University Inter Zonal Fencing Tournament** Held at Pavai Engineering College, Chennai on 10/10/2024.

Faculty Publication

- Mr.R.Elanthirayan published a paper titled " Economic analysis and effective energy management of fuel cell and battery integrated electric vehicle" in Journal of Energy Storage.
- Dr.A.Jamna published a paper titled "Optimal power quality enhancement of photovoltaic and plug-in electric vehicle for smart grid using HBA-GJO technique" in Journal of Electrical Engineering.

Faculty awards and recognitions



- ➤ Our faculty Mr.S.Nishant had visited Kumara Raja Muthaih school Adayar and Olcott Memorial Higher Secondary School, Besant Nagar and gave a seminar on "The Next Generation of Electrical Engineering: Trends & Career Opportunities" on 14th October 2024.
- ➤ Our faculty **Dr.M.RameshBabu** has reviewed 1 paper for the Springer Nature.
- Our faculty Dr.M.Venmathi has reviewed 1 paper for the Springer Nature.
- Our faculty Mr.C.Venkatesh Kumar has reviewed 1 paper for the Springer Nature
- ➤ Our faculty Mr.R.Sreekanth acted as a resource person in Volunteer Leadership Training Programme and delivered a lecture on the topic "An Interactive Chat with Lieutenant YP" on 19 October 2024 at Grootan Technologies, Prince Infocity Phase 1 Chennai.
- ➤ Our faculty **Dr.Jayarama Pradeep**, **Mr.R. Elanthirayan** participated as faculty guide in the Niral Thiruvizha (Hackathon) Competition.
- ➤ Our faculty **Dr.Jayarama Pradeep** participated in Orientation Programme on "Energy Modelling Tools (OSeMOSYS) organised by the Centre for climate change and Disaster Management, Department of Civil Engineering, Anna University, Chennai in Association with the Climate Compatible Growth, the United Kingdom.
- ➤ Dr.Jayarama Pradeep & Mr. Elanthirayan R participated in Wind Energy conference 2024 on 27.10.2024 along with students of II Year

		held at Nandambakkam Trade Center, Chennai organized by Ministry of Power & Ministry of New and Renewable Energy.
35.	Faculty Development Program	 Dr.C. Venkatesh Kumar: Participated &completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on "RECENT TRENDS IN POWER ENGINEERING AND ELECTRIC VEHICLE TECHNOLOGIES at CHENNAI INSTITUTE OF TECHNOLOGY", from 21/10/2024 to 26/10/2024. Mr.A.Sadeesh Kumar: Participated in Half Day Training Program on Manuals for Energy Efficient Retrofit of Existing Buildings organized by the Bureau Of Energy Efficiency. Dr.A.Jamna: Completed a NPTEL-AICTE FDP "Brief Introduction to Psychology" from July to August 2024.
36.	PLACEMENT DETAILS FOR THE	2021-2025 Batch
	MONTH OF OCTOBER 2024	Total No of students placed = 46 Students
		Total No of Offers = 58 Offers
		Total No of Students (UG) = 194
		Total No of Eligible Students (UG) = 160 (All Clear)
		% of students Placed (UG) = 46/194 = 23.71 %
		No of students having single offers = 36
		No of students having Double offers = 8

DEPARTMENT OF INFORMATION TECHNOLOGY **Photographs Captured During** Corresponding remarks in regarding the status of activity execution Event/Screenshot **Staff Paper Publication** Next-generation energy-efficient optical networking: DQ-RGK algorithm for dynamic quality of service and adaptive Swamidoss M, S Duraimurugan, Gunasekar M. "Next-generation energy-efficient optical networking: DQ-RGK algorithm for dynamic quality of service and adaptive resource allocation" Concurrency and published: 15 May 2024 | https://doi.org/10.1002/cpe.8070 Computat Pract Exper. 2024; e8070. doi: 10.1002/cpe.8070 (Impact Factor: 2.0, Q2, Indexed in SCIE) Summary **Abstract:** In green optical networking, designing an adaptive energy-saving scheme plays a vital role, role, in optimizing energy consumption by dynamically adjusting resources based on network traffic and environmental conditions, to a more sustainable and efficient optical in optimizing energy consumption by dynamically adjusting resources based on network traffic and communication infrastructure. Traditional methods in optical networking face challenge such as static resource allocation, limited adaptability, inefficient power usage, environmental insensitivity, and scalability issues. Therefore this article proposed a novel environmental conditions, to a more sustainable and efficient optical communication infrastructure. nethod named Dynamic Quality of Service based Random update Genghis Khan (DQ-Traditional methods in optical networking face challenges such as static resource allocation, limited adaptability, inefficient power usage, environmental insensitivity, and scalability issues. Therefore this Co-Author article proposed a novel method named Dynamic Quality of Service based Random update Genghis Khan (DQ-RGK) algorithm, the proposed model can tackle the abovementioned complexities. In this study, Dr. S Duraimurugan cluster head dynamic placement is utilized to optimize the network's performance by adapting the Published a paper in SCIE placement of cluster heads to the current topology, load distribution, and energy levels in the network nodes. By dynamically assigning and reallocating resources based on the current demand the algorithm Journal enhances overall network efficiency and reduces energy consumption. Then, this work analyzes the experimental results, where some evaluation measures estimate the DQ-RGK method's performance. Routing efficiency, latency, scalability, spectral efficiency, Packet Delivery Ratio, throughput, network lifetime, energy consumption, jitter, and energy consumption are the measures employed by the DQ-RGK model. In The results, other routing models that do not provide efficiency are utilized, a comparison of these other routing models is represented in results. The overall DQ-RGK model's effectiveness is

represented in the experimental results and its effectiveness is greater among other methods.



Co-Author

Dr. S Duraimurugan

Published a paper in Scopus

Journal

R. Avudaiammal, **S. Duraimurugan**, V. Sivasankaran and P. Jayarajan "Multi-Objective Spider Monkey Optimization for Energy Efficient Clustering and Routing in Wireless Sensor Networks" Ad-Hoc and Sensor Wireless Networks, 2024, 59(1-2), pp. 99–119, DOI: 10.32908/ahswn.v59.11051 (Indexed in Scopus)

In wireless sensor networks (WSN), the gateways far away from the base station (BS) use the gateways nearer to the BS to forward the data. It causes heavy traffic to the gateways in proximity with the BS which in turn causes additional energy consumption and reduction in network lifetime. In order to overcome these issues, multi objective based spider monkey optimization (MOSMO) has been presented to balance the load and to improve the network lifetime through energy efficient routing and clustering. The performance of the proposed scheme is compared with the Particle Swarm Optimization (PSO) and Grey Wolf Optimization (GWO) based scheme in terms of delay, energy consumption, delivery ratio, throughput and network lifetime with various node densities. The results show that the reduction in delay and energy consumption is about 18% and 17% respectively whereas improvement in delivery ratio, throughput and network lifetime is about 15%, 24% and 19% respectively when compared to the existing PSO and GWO methods.

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3

Mr.Abdhur Rahman A
Published an India Patent

Patent Published

Title of the invention: ARTIFICIAL INTELLIGENCE-BASED DATA LEAKAGE PREVENTION SYSTEM FOR ORGANIZATIONS AND INDIVIDUALS USING BLOCK CHAIN AND MACHINE LEARNING ALGORITHMS

Name of Inventor:

- 1. Dr.M. Vikram
- 2. D.Shahi
- 3. Sagar Dilip Patil
- 4. Dr. S. Santiago
- 5. Dr. Surendra Kumar Yadav
- 6. Akella Subhadra
- 7. Dr Hemantkumar B Jadhav



9. Dr. Puneet Banga

10. Deepika R

Patent Application Number: 202441005521 **Date of filing of Application:** 27/01/2024

Publication Date: 09/02/2024



Sample NPTEL Certificate

NPTEL Certification by Faculty

S.	.No	Name of the Staff	Name of the Course	Period	Credit
	1.	DR DURAIMURUGAN S	Foundation of Cloud IoT Edge ML	(8 week course	Elite



Sample FDP Certificate

Seminar/ FDP Attended by Faculty

S.No	Title of the topic	Name of the Staff	Conducted By	Date
1.	AI insights: "Predictive Power of ML, DL & NLP"	Mrs.G.Sathyadevi	Sphoorthy Engineering College	
				18-05-24

DEPARTMENT OF MATHEMATICS AND ENGLISH

Events					Rer	narks		
DP/Workshop/Confe	erence							
		S.No	Name of the staff	FDP Title		Organized by	Date	
FACTATE DEPENDINGUE PROGRAM		1	Dr. P. Jayakumar	Innovations in Sustain Research and Modern Date Approaches		St. Joseph's University	14-10-2024 to 18-10-2024	
the act mate		2	Dr.B. Amudha	Essential Mathematics Machine Learning, Deep L and Cyber Security	earning.	SRMIST, Vadapalani Campus, Chennai	18-10-2024 to 25-10-2024	
FERRE CO					-			
	-	S.No	Name of the staff	FDP Title	Organized by		Date	
2 4	1		Dr. B. Poorani	Graph theory and	Indian Mathematics Professors		22-10-2024 to	1
444				Python		tion & Infinity Research evelopment Institute	28-10-2024	
	Space 2024. 2. Dr Equa indus 3. Dr cogni	es" in Inte V.Vallin tions in N trial appli . N.Jose P tive Maps	rnational Conference of ayagam, Dr. S. Annadu feutrosophic Normed S cations, organized by S arvin Praveena, , Presen	rai, Dr. P. Agilan, , Presented a paces using Hyers- Ulam Meth RM University, from 18th to 19 nted a paper titled "A fuzzy ana erence on progress in Mathema 18th ,OCT 2024.	ards industrated paper title nods" in Interpretation of the point of t	rial applications, organized of "Investigation of the Staternational Conference on p. 024. ppiness among religious in	by SRM University, 18th to bility of Higher order function progress in Mathematics towardividuals using triangular new	19 th ,OC

	1. Pandurangan R., Kannan Suresh., Thabet S. T. M., Vivas-Cortez M., Kedim I., φ(x)-Tribonnaci polynomial, numbers, and its sum. J
	Math Comput SCI-JM. (2025); 37(1):32—44 , SCOPUS
	2. Purushothaman, G. , Thandapani, E., Suresh, K., & Tunc, E. (2024). Existence and bounds for Kneser-type solutions to noncanonical
	third-order neutral differential equations. Electronic Journal of Differential Equations, 2024(01-13), 55.
	https://doi.org/10.58997/ejde.2024.55 SCOPUS
	3. Zhang, X., Prabhu, S., Arulperumjothi, M . et al. Distance based topological characterization, graph energy prediction, and NMR
	patterns of benzene ring embedded in P-type surface in 2D network. Sci Rep 14, 23766 (2024). https://doi.org/10.1038/s41598-
	024-75193-8 SCIE
	4. L. N. Narayanan, S. U. Vasanthakumar, V. Malarvizhi, P. Balaganesan, P. Chellamani, V. Balaji, Skolem Mean Like Labeling of
Publications(only	Connected Seven Star Graphs, Advances in Nonlinear Variational Inequalities, Vol.28, No.1, Page 98-110, SCOPUS
published) details	5. S. Gomathy, A. Rajkumar,* N. Jose Parvin Praveena, Broumi Said, Single valued Neutrosophic soft set for the segregation to elect
	progressive mode of student in the bias of etiquette in Neutrosophic environment, International Journal of Neutrosophic Sciences
	(IJNS), Vol/25, No.2, Page :353-358, SCOPUS
	6. R. Umadevi, D. Arivukkodi , Ilyas Khan, G. Swamy Reddy, Reversible esterification process in Casson nanofluids: A numerical analysis
	of non-newtonian hydromagnetic flow, International Journal of Modern Physics B, Vol. 2025, No. 2540057, Page 1-25, SCIE
	7. P. Agilan , K. Julietraja, Sarah Aljohani, Nabil Mlaiki, Generalised Ulam-Hyers Stability Analysis for System of Additive Functional
	Equation in Fuzzy and Random Normed Spaces: Direct and Fixed Point Approach, International Journal of Analysis and Applications
	Vol. 22. No. 201, Page 1-20, SCOPUS
	8. Gunaseelan Mani, Purushothaman Ganesh , Karnan Chidhambaram, Sarah Aljohani, Nabil Mlaiki, Existence and Uniqueness
	Solutions of Multi-Term Delay Caputo Fractional Differential Equations, Vol.22, No. 171, Page 1-22, SCOPUS
Funded Projects	
Other activities	Dr. P. Agilan published a book "Linear Algebra: Theory and Applications", RK Publications

DEPARTMENT OF MBA

FACULTY PUBLICATION / REVIEW:

Dr.K.Sampath has published a paper titled "Enhancing Team Productivity with Synergistic Work Patterns using Genetic Algorithms" in 2024 International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI 2024), ISBN: 979-8-3503-7281-6, https://doi.org/10.1109/ICoICI62503.2024.10696457

Dr.K.Sampath has published a patent titled "implementation of machine learning approaches for supply chain optimization through hr predictive analytics in e-commerce" on 04.10.2024

FDP / STTP/ WORKSHOP ATTENDED:



Dr. Bharath vajan presented a paper in 3rd International Conference on optimization techniques in the field of engineering at KSR College of Engineering, Namakkal during 22 & 23 October 2024.



Dr.A. Ajit participated in One week STTP on Hands on AI tools for Academic writing: Elevate your Research and publishing impact from 21-26 Oct, 2024.

INDUSRIAL VISITS:



The department of Management studies organized a one-day Industrial Visit to "Aavin Milk Factory" on 28.10.2024 for the I year MBA-A & B students. Our visit included a detailed explanation of the milk collection and processing procedures. We learned about the meticulous separation of milk based on fat content to produce various milk variants. The total numbers of students were 111 accompanied by 4 professors.



Dr.L. Rajeshkumar has given Seminar on Essential key skills and strategies for success in leadership Interviews on 25.10.2024 at Saveetha Engineering College, Chennai

ONLINE COURSE COMPLETION:



Dr. Sampath k has completed the NPTEL Course on Customer Relationship Management and HR Analytics.

DEPARTMENT OF SCIENCE

Sl.	Events	Remarks
No.		
4	FDP/Workshop/Conference	NPTEL FDP
		1. Dr. S. Suresh completed three months NPTEL course / FDP on the title of "Concepts in Magnetism and Superconductivity" conducted by IIT, Koragpur, during the period of August-October 2024.
		FDP / workshops attended:
		1. Dr. S. Suresh attended a National level workshop on "ChatGPT & AI in Microsoft Office" conducted by "Skill Nation, Online Platform", on 16-10-2024.
		2. Dr. K. Dhanaraj attended one week national level Faculty Development program on "Generative AI and Advanced Tool for academic Research" conducted by "Scrollwell online platform" held between 23.09.24 to 29.09.24. (Certificate received on the month of October)
5	Symposium	-
6	STTP	1. Dr. V.N. Nandini Devi, Dr. P. Saravanan, Dr. S. Kiruba, Dr. N. Punitha, Dr. S. Suresh, Dr. A. Arulmozhi, Dr. A. Mahalakshmi, Dr. S. Manikandan, Mr. S. Kaleel Mohamed Ibrahim, Dr. P. Krishnan, Dr. S. Rama, Dr. K. Sathesh Kumar, Dr. G. Senthil Kumar, Dr. K.Dhanaraj, Dr. G. Murugan, Dr. V. Swarnalatha, Dr. A. Uma Devi, Dr. N.R. Rajagopalan, Dr. J. Sharmila, Ms. S. Savitha, Dr. K. Jayamoorthy, Dr. B. Subash, Dr. S.M. Prakash, Dr. C. Chandra Sathish, Dr. A. Dhivya attended six days online Short Term Training Programme on "Hands-On AI Tools for Academic Writing: Elevate Your Research and Publishing" conducted by "The Department of Science, St. Joseph's College of Engineering during 21-10-2024 to 26-10-2024
7	Value added Courses/Courses other than VAC	-
8	Competitions attended by students	-
9	Awards/Prize won by students / Staff	1. Mr. B. Hariharan of I year ADS-B has won II prize in the "Hunt the Bug" event at "National level Symposium" conducted by "Jeppiaar University, Chennai" on 25-10-2024.

10	Industrial Projects done by students	-
11	Publications(only published) details	Journal Publications:
11	Publications(only published) details	Journal Publications: 1. Dr. P. Saravanan published an article titled "Time-Dependent Hydrothermal Synthesis of La2O3 NPs for Effective Catalytic Activity of Ionic Dye" in the journal of "Luminescence: the Journal of Biological and Chemical Luminescence", 39 (2024) e4915 {doi: https://doi.org/10.1002/bio.4915} 2. Dr. P. Saravanan published an article titled "Synthesis of Aluminum Oxide (Al2O3) Nanoparticles Decorated With Polymeric Carbon (Al2O3/AC) Nanocomposites for High Specific Capacitance Value" in the journal of "Polymers for Advanced Technologies", (2024) {doi: https://doi.org/10.1002/pat.6604 } 3. Dr. P. Saravanan published an article titled "Sequential Detection of Hg2+ and TNT Using a Nitrogen-Doped Polymeric Carbon Dots On-Off-On Fluorescence Sensor" in the journal of "Polymers for Advanced Technologies", (2024) {doi: https://doi.org/10.1002/pat.6604 } 4. Dr. V. Swarnalatha published an article titled "Synthesis and studies of manganese mercury thiocyanate glycol mono-methyl ether crystals for structural, electronic, dielectric, sensor and piezoelectric functionalities by theory and practice" in the "Journal of Material Science: Material Electronics" Vol.35, (2024) 1777, { https://doi.org/10.1007/s10854-024-13534-z } 5. Dr. V. Swarnalatha published an article titled "Synthesis, Studies of HDTDHP-µ Crystals from Arundina graminifolia Specimen for Electronic, Photonic, Optical and Electrical Use Correlated with Macro-Crystals for Sensor and Display Uses" in the "ECS Journal of Solid State Science and Technology" Vol.13, (2024) 097005, {DOI: 10.1149/2162-8777/ad7beb } 6. Dr. V. Swarnalatha published an article titled "Growth, Characterizations of
		Aspartame-ASP Crystals for Mechano, Spectral, Photonic, Opto-Electronic and Sensor Applications" in the "ECS Journal of Solid State Science and Technology" Vol.13, (2024) 094004, {DOI: 10.1149/2162-8777/ad7b71}
		7. Dr. S.M. Prakash published an article titled "Microwave assisted synthesis, spectral characterization of novel [N-methyl-3t-alkyl-2r,6c-diarylpiperidin-4-ylidine]-5',5'-dimethylthiazolidine-4-ones for antimicrobial and antimycobacterial activities:

- Docking investigation" in the "Journal of Molecular Structure" Vol.1322, (2024) 140464 {DOI: https://doi.org/10.1016/j.molstruc.2024.140464}
- 8. Dr. K. Dhanaraj published an article titled "Antibacterial and Cell-Viability of HydroxyapatiteDerived from Waste Marine Shell for Biomedical Applications" in the "Asian Journal of Chemistry" Vol.36, (2024) {DOI: https://doi.org/10.14233/ajchem.2024.32287}

Book Chapters

- 1. Dr. N.R. Rajagopalan published a book chapter titled "Enhancing food quality monitoring process through innovative micro-controller based systems" in the book "Edible Electronics for Smart Technology Solutions" IGI global publishers(2024) {DOI: 10.4018/979-8-3693-5573-2.ch003}
- 2. Dr. J. Sharmila published a book chapter titled "Adaptive Strategies in Online Marketing Using Machine Learning Techniques" in the book "Digital Transformation Initiatives for Agile Marketing" IGI global publishers(2024) {DOI: 10.4018/979-8-3693-4466-8.ch004}
- 3. Dr. G. Murugan published a book chapter titled "Emerging startups in the Evolving Industry Landscape by Empowering Entrepreneur Growth: Agile Marketing Practice" in the book "Digital Transformation Initiatives for Agile Marketing" IGI global publishers(2024) {DOI: 10.4018/979-8-3693-4466-8.ch017}
- 4. Dr. S. Kiruba published a book chapter titled "Integrating AI and Machine Learning in Omnichannel Marketing for Superior Customer Experience" in the book "Digital Transformation Initiatives for Agile Marketing" IGI global publishers(2024) {DOI: 10.4018/979-8-3693-4466-8.ch005}

Patents

- 1. Dr. N.R. Rajagopalan published a patent titled "Nanocomposite Engineering: Revolutionary Synthesis Methods for MgO-Carbon-Based Capacitive Electrodes" in the "Official Journal of the Patent Office Journal issue 42/2024 " Application No.202431076904, dated 18-10-2024
- 2. Dr. S.M. Prakash published a patent titled "Real-time battery discharge prediction for

		Electric Vehicles using Machine Learning algorithms" in the "Official Journal of the Patent Office – Journal issue 43/2024 - " – Application No. 202441080058, dated 25-10-2024.
		Reviewer:
		1. Dr. P. Saravanan acted as reviewer for the journal "Environmental Science and Pollution Research- Springer" – October 2024
		2. Dr. N.R. Rajagopalan acted as reviewer for the journal "Physics and Chemistry of the
		Earth - Elsevier" – October 2024
12	Funded Projects	
13	Other activities(if any)	The Department of Science, in association with RSPRC, Coimbatore conducted six days online
		Short Term Training Programme on "Hands-On AI Tools for Academic Writing: Elevate Your
		Research and Publishing" during 21-10-2024 to 26-10-2024.