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INDEX

CRITERION: 3.2.1

Innovation Eco system / 2023-24

Sl.No.	Department	Page No.
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4	Entrepreneurship Development Cell	104

PRINCIPAL
Kings College of Engineering
PUNALKULAM - 613 303.

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CRITERION: 3.2.2

Centre for Promotion of Research (2023-24)

S.No	Date	Details	Page No.
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DRC Convener

10/7/2024.
Principal

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ACCREDITED WITH GRADE B++ NAAC

Report on Webinar: "Paper Writing and Patents"

Name of the Event : Webinar

Title : Paper Writing and Patents

Date & Time : 28.10.2023 & 09.30 a.m. to 10.30 a.m.

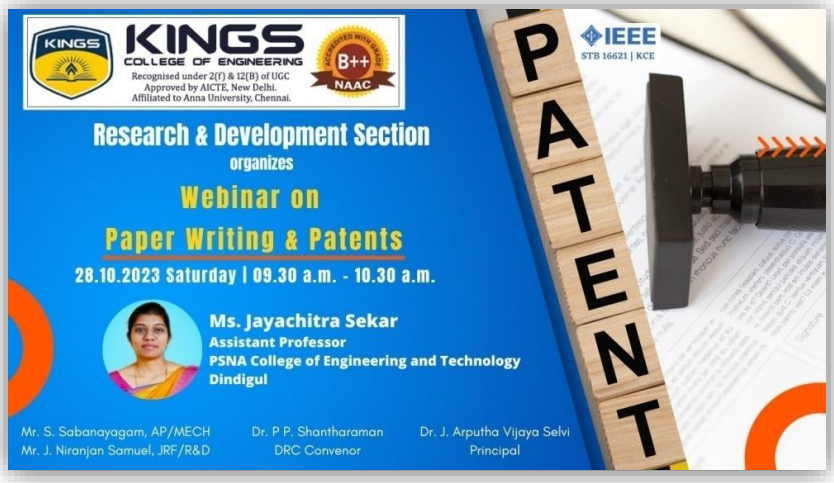
Venue : Smart Classroom (Each Department) & Online

Resource Person : Ms. Jayachitra Sekar,
PSNA College of Engineering and Technology, Dindugal.

On 28.10.2023, a valuable webinar on **"Paper Writing and Patents"** was organized by Research and Development Section, Kings College of Engineering, Punalkulam. The event aimed to provide insights into the world of academic paper writing and the significance of patents. The webinar featured **Ms. Jayachitra Sekar**, a distinguished expert in the field, who is associated with **PSNA College of Engineering and Technology in Dindugal**. The welcome address was delivered by Mr. S. Sabanayagam, an Assistant Professor in the Department of Mechanical Engineering, and the vote of thanks was given by Ms.V.Harinilakshmi, a student in the third year of the Electronics and Communication Engineering department.

Mr. S. Sabanayagam commenced the event by extending a warm welcome to all participants. He emphasized the importance of paper writing and patents in the academic and professional world. He highlighted how these topics are crucial for students and researchers alike. Mr. S. Sabanayagam expressed his gratitude to Ms. Jayachitra Sekar for agreeing to share her knowledge and experience on this subject.

Webinar Content:



Webinar Invitation

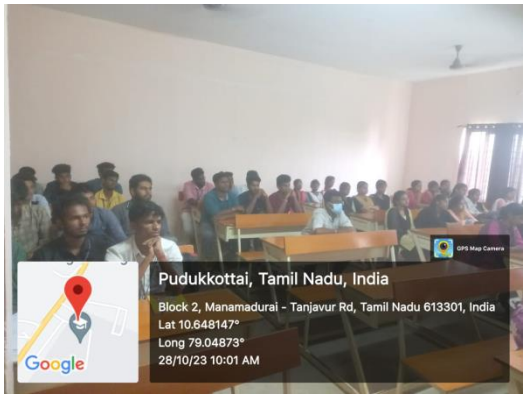
Webinar Objective	Webinar Outcomes
To impart the art of writing technical paper by their project work and for publications.	The final year students can able to prepare the article using the publication ethics with their technical learning for publications.

Ms. Jayachitra Sekar's presentation was insightful and informative. She began by discussing the **fundamentals of academic paper writing, covering the structure, content, and organization of research papers**. She provided practical tips on how to select suitable journals, write an abstract, and format references, among other key elements. Ms. Jayachitra Sekar's expertise in this area was evident, and her guidance was highly valuable to the audience.

Following the discussion on paper writing, Ms. Jayachitra Sekar shifted her focus to patents. She explained the **significance of patents in protecting intellectual property and the innovation process**. Ms. Jayachitra Sekar detailed the patent application process and highlighted its legal and commercial implications. Her comprehensive explanation shed light on the relevance of patents to researchers, inventors, and professionals in various fields.

Glimpses of the Event

CIVIL



CSE

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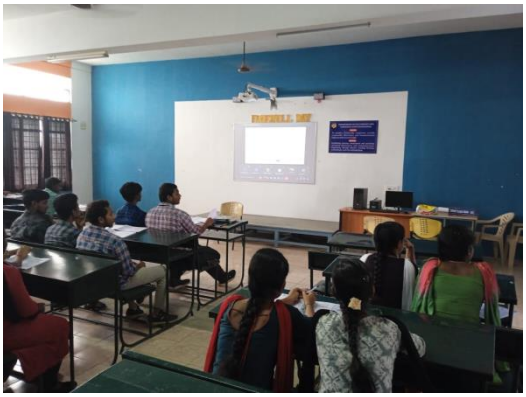
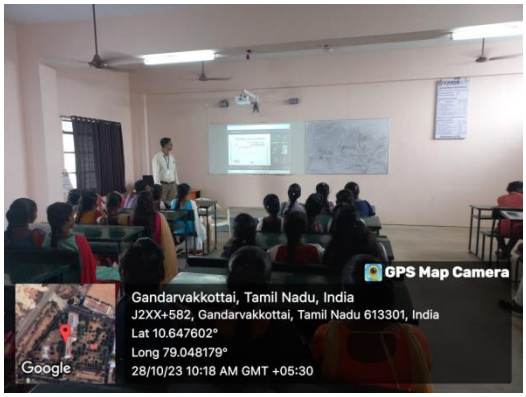
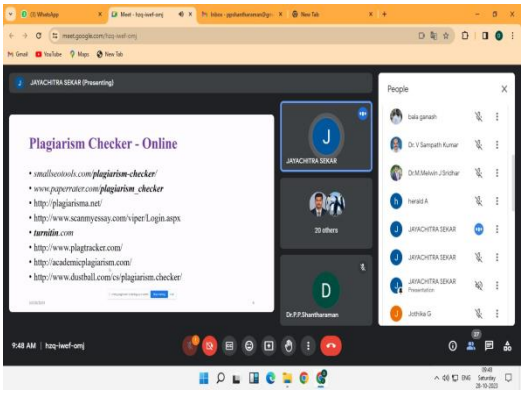
<tr><td>  </td><td> 
</td></tr>
<tr><td>ECE</td><td>EEE</td></tr>
<tr><td>
</td><td> 
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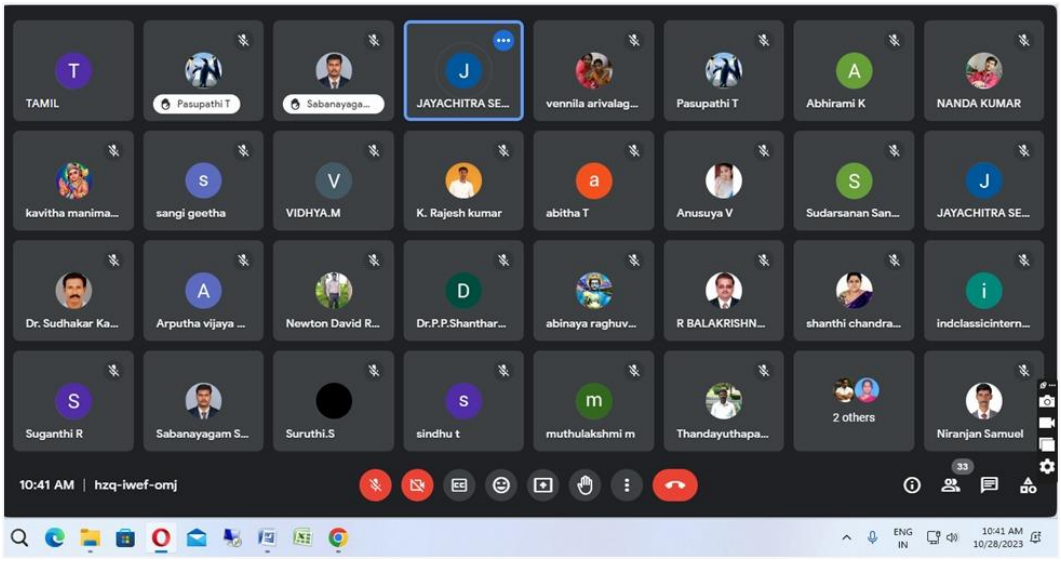
<tr><td>MECH</td><td>Content Delivery</td></tr>
<tr><td colspan="2"> 
</td></tr>
</table>

Vote of Thanks:

Ms.V.Harinilakshmi, a student in the Electronics and Communication Engineering department, delivered a heartfelt vote of thanks. She expressed her gratitude to Ms. Jayachitra Sekar for her enlightening presentation, which benefited both students and professionals. Ms.V.Harinilakshmi also thanked Mr. S. Sabanayagam for his warm welcome and for facilitating the webinar.

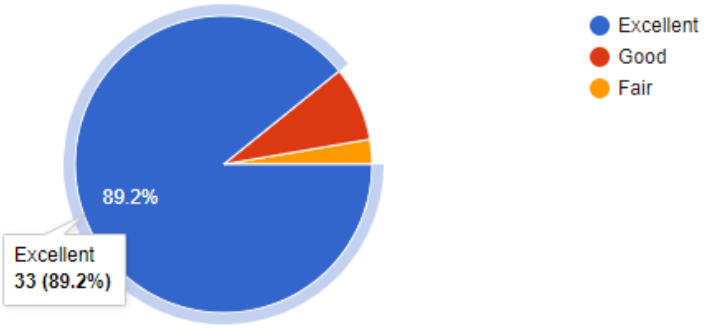
Number of Beneficiaries

S. No	Department	Year / Sec	Beneficiaries Count
1	Civil	IV Year	11
2	CSE		52
3	ECE		38
4	EEE		40
5	MECH		37

Feedback obtained from Google form: https://forms.gle/obsJaA7gHWbvWXx19

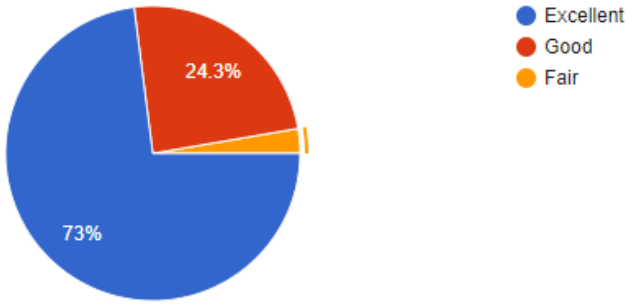
Content of the Program?

37 responses



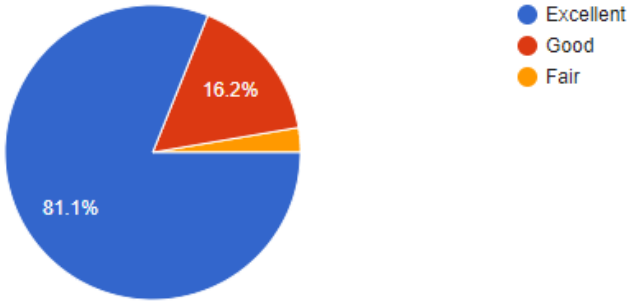
Quality of Audio/Video Streaming?

37 responses



Way of Presentation?

37 responses



28/10/23
Coordinator
(Mr.S.Sabanayagam)

28/10/23
R & D Convener
(Dr.P.P.Shantharaman)

28/10/2023
Principal
(Dr.J.Arputha Vijaya Selvi)

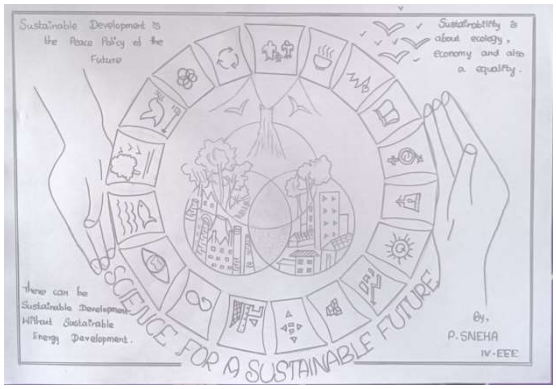
Centre for Promotion of Research

National Science Day Celebrations

In view of National Science Day Celebrations, Poster Design Competition on the theme **"Science for a Sustainable Future"** was organized in online mode from 20.02.2024 to 28.02.2024. 27 entries were received, based on the creativity and relevance to the theme two posters was selected. Ms. P. Sneha of IV EEE bagged the first prize and Mr. S. Lexmadurai of II CSE bagged the second prize. The winners were given shield and certificate of appreciation.

Event Flyer

Sample Poster



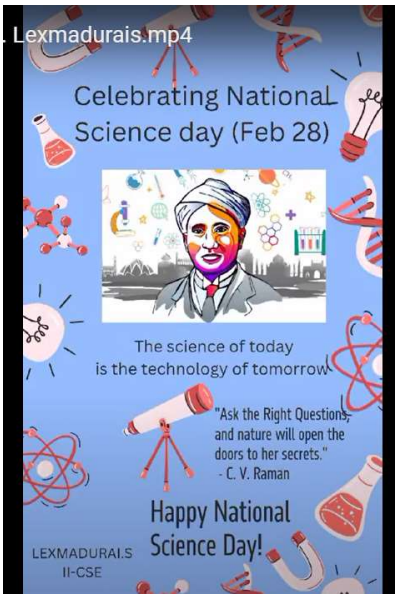


Photo – Winners

First Prize - Ms. P. Sneha / EEE

Second Prize - Mr. S. Lexmadurai / CSE

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Certificate

This is to certify that ~~Mr.~~/Ms. SNEHA P , IV EEE has presented a poster and won First / ~~Second~~ Prize in the National Science Day - 2024 organized by Centre for Promotion of Research & IPR (CPRI), Kings College of Engineering (Autonomous), Punalkulam on 28.02.2024.

Dr. P P Shantharaman
Head / CPRI

Dr. J. Arputha Vijaya Selvi
Principal

Participants List

S. No	Name of the Participant	Year	Dept
1	M. Santhosh	First	MECH
2	Hasidhikshana S	Second	ECE
3	Bhavatharani.V	Fourth	CSE
4	Kiruthika D	Second	ECE
5	Saravanan K	Third	CSE
6	Kishore Kumar	Fourth	MECH
7	S. GOPINATH	Third	EEE
8	R.Reema Jasmine	Second	ECE
9	Dhaslima Shafreen.M	Second	CSE
10	J. Abinayasree	Fourth	EEE
11	Vasudevakrishnan	Third	ECE
12	Aswini.S	Second	CSE
13	Rahul S	Third	CSE
14	G.Rasika	Second	CSE
15	Prithish M	Third	ECE
16	Jegan.k	Fourth	MECH
17	Jegan K	Fourth	MECH

18	Lexmadurai. S	Second	CSE
19	Sneha.P	Fourth	EEE
20	N. Jenova Jasmine	Fourth	Civil
21	Prithish M	Third	ECE
22	H. Maharish	Fourth	Civil
23	Bharath.G	Fourth	Civil
24	Sneha.S	Fourth	Civil
25	Sriram MC	Fourth	Civil
26	D.Maheswaran	Third	ECE
27	Vasikaran	Third	ECE

HEAD/CPR 18/3/24

PRINCIPAL 18/3/2024

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Report on

International Conference on Recent Trends in Engineering and Science (ICRTES 2024) - 02nd & 03rd May, 2024

Organized by

Center for Promotion of Research

Inauguration

ICRTES 2024 commenced with formal registration. Inaugural ceremony was initiated with prayer song. **Dr J. Arputha Vijaya Selvi, Principal and Conference Chair,** welcomed the gathering with the words also she emphasized that, this kind of conference will provide the opportunity for the students community as well as the participants to listen to the talk from eminent speakers followed by lighting of ceremonial lamp by the dignitaries. **Dr. R. Rajendran,** Secretary of the college honored the guests.

Dr. J. Arputha Vijaya Selvi, Principal delivering welcome address

Dignitaries on the Dias

Dignitaries lighting the Lamp

Dr. R. Rajendran, honoring Dr. B. Subramanian

Dr R. Rajendran, Secretary presided over the function and delivered the Presidential Address. In his presidential he described the establishment of department of science and technology to promote innovation in science and engineering.

Dr. R. Rajendran delivering Presidential Address

A View of the participants

Dr. S. Sabanayagam, Prof. / Dept. of Mechanical Engineering introduced **Dr. B. Subramanian.** The Inaugural Address was delivered by **Dr. B. Subramanian,** in his address, he detailed about the Electroplating Technology and its material characterization**.**

Dr. S. Sabanayagam, Prof. / Dept. of Mechanical Engineering introducing the Chief Guest

Dr. B. Subramanian delivering Inaugural Address

Dr. S. Udayakumar, Associate Professor / Dept. of Science and Humanities introduced **Dr. M. Revanasiddappa,** Professor, PES University, Bangaleru. The Special Address was delivered by **Dr. M. Revanasiddappa,** in his address, he detailed about the importance of Science in Engineering**.**

Dr. S. Udayakumar, Assoc. Prof. / Dept. of S & H introducing the Chief Guest

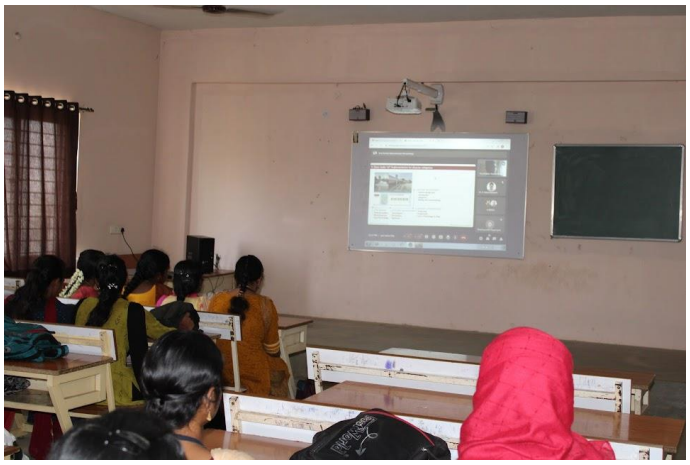
Dr. M. Revanasiddappa delivering Special Address

Hard copy of the Conference Proceedings was released by **Dr. B. Subramanian** and received by **Dr. J. Arputha Vijaya Selvi Principal, Kings College of Engineering.**

Release of Conference Proceedings

The Conference also featured an invited talk by **Dr. M. Revanasiddappa** on the title, **"Recent Innovations in Science and Technology"** and an invited talk by **Dr. Sivakumar Subramanian**, Associate Professor, Electronics Engineering, Universiti Teknikal Malaysia, Melaka on the title, **"IoT Technology for Disaster Mitigation".**

Invited Talk by Dr. M. Revanasiddappa



Invited Talk by Dr. Sivakumar Subramanian

On the day, papers were presented in 6 tracks; Track-1– Civil Engineering was chaired by **Dr. R. Saravanan & Mr.K.Arun**, Track-2 – Computer Science & Engineering was chaired by **Dr. S.M. Uma & Ms.M.Abinaya**, Track-3 – Electronics & Communication Engineering was chaired by Dr. T. Shanthi & Mr.R.Balakrishnan, Track-4 – Electrical & Electronics Engineering was chaired by **Mr.R.Sundaramoorthi & Dr.G.Suganya**. Track-5 – Mechanical Engineering was chaired by **Dr. T. Pushparaj & Mr.H.Agilan** and Track-6 – **Science & Humanities** was chaired by **Dr. V. Sureshkumar & Ms.T.Gananajeya.**

Participant presentation their papers

HoD's distributing certificates to the participants

HoD's distributing certificates to the participants

S. No.	Details		Department						
			CIVIL	CSE	ECE	EEE	MECH	S&H	Total
1	External participants	Research Scholars	01				02		03
2		Offline mode	20		08	03	09	1	41
3		Online mode		38	07	25	06	12	88
4	Internal participants	Students	04	27	20	13	19		83
5		Staffs		11	02				13
		Total Papers	25	76	37	41	36	13	**228**

Out of 283 papers received, 228 papers research articles were presented by the students, research scholars and faculty members from various reputed Institutions across India. In the valedictory function, **Dr. P.P. Shantharaman,** Convenor, presented the Conference Summary to the audience and distributed the Conference Certificates to the delegates. **Ms. S. Abikayil Aarthi,** Asst. Prof. / Department of Computer Science and Engineering, proposed the vote of thanks to all the participants.

Convener 26/7/24

Publication Chair

26/7/2024.
Conference Chair

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Near Thanjavur, Punalkulam, Gandarvakottai Taluk, Pudukkottai Dist. - 613 303.

INTERNATIONAL CONFERENCE ON RECENT TRENDS IN ENGINEERING & SCIENCE (ICRTES-2024)

(Hybrid Mode)

02nd & 03rd May, 2024

Organized by

Centre for Promotion of Research (CPR)

ORGANIZING COMMITTEE

PATRON

Dr. R. Rajendran,
Secretary.

CONFERENCE CHAIR

Dr.J. Arputha Vijaya Selvi,
Principal.

PUBLICATION CHAIR

Dr. S. Sivakumar,
Vice Principal.

CONVENER

Dr. P.P. Shantharaman,
Head /CPR

STEERING COMMITTEE

Dr.R.Saravanan,
Head, Dept. of Civil.
Dr. K. Abhirami,
Head (i/c), Dept. of CSE
Dr. T. Shanthi,
Head, Dept. of ECE
Mr. R. Sundaramoorthi,
Head, Dept. of EEE
Dr. T. Pushparaj,
Head, Dept. of MECH
Dr. V. Suresh Kumar,
Head, Dept. of S&H

COORDINATORS

Mr. D. Nandhakumar,
Dept. of Civil
Ms. S.Abikayil Aarthi,
Dept. of CSE
Mr. A. Herald,
Dept. of ECE
Dr. P. Narasimman,
Dept. of EEE
Dr. S. Sabanayagam,
Dept. of MECH
Dr. S. Udhayakumar,
Dept. of Science & Humanities

About the Conference:

The International Conference on Recent Trends in Engineering and Science (ICRTES-2024), from 02nd May to 03rd May 2024 in KCE, aims to bring together academic communities, researchers and scientists to exchange information, experiences and research results on all aspects of specialized and interdisciplinary areas. The conference provides an opportunity for everyone to network, exchange ideas and present their research to the international community.

Topics (but not limited to)

- Information & Communication Technologies
- Artificial Intelligence and Machine Learning
- Cyber Security
- Data Science & Cloud Computing
- Electronics & IoT
- Power Systems & Power Electronics
- Materials & Manufacturing Processes
- Energy Sources
- Robotics & Mechatronics
- Developments in Civil Engineering
- Sustainable Development in Construction
- Science & Mathematics
- Environmental Sustainability
- Education, Online education – eLearning

Important Dates:		Registration Fee:	
Registration Opens	: 04.03.2024	UG/PG Students	Rs. 750/-
Last Date for Submission	: 19.04.2024	Research Scholar & Faculty / Industrialist	Rs. 1000/-
Last Date of Registration	: 26.04.2024		

Publication

All accepted papers registered for presentation will be published in the conference proceedings with ISBN. Selected Papers will be recommended for publication in Scopus / WoS / UGC journals*

In Association with

IEEE, ISTE, Institution's Innovation Council, IETE, BAI

Address for Communication

Dr. PP. Shantharaman
Professor / Mechanical
ICRTES-2024
Kings College of Engineering
Punalkulam, Near Thanjavur
Pudukkottai Dt - 613 303, India
iconkce2023@gmail.com
www.kingsengg.edu.in
+91 99448 76644
For Registration & Submission

Event Flyer

Event Invitation

Sample Certificate

KINGS PROJECT EXPO'2024

Organized by

Center for Promotion of Research

Center for Promotion of Research in association with IEEE STB 16621 organized KINGS PROJECT EXPO' 2024 on 03.05.2024. This project expo aims to encourage the students' creativity and innovations on Engineering & Technology. Dr.S.Sabanayagam, CPR Member & Associate Professor / Mechanical Engineering, welcomed the gathering. Dr.J.Arputha Vijaya Selvi, Principal, inaugurated the expo and delivered the inaugural address. In her speech, she emphasized the significance of innovations in projects. Mr.J.Niranjan Samuel, JRF/R&D, introduced the chief guest Mr. M. I. Abdul Halik, Secretary of IEEE Madras Young Professionals, Chennai. Mr. M. I. Abdul Halik delivered special address on importance of IEEE membership and his IEEE membership journey. Also he shared his memories as Passion to Progress: My IEEE Member Experience. Dr. S. Sivakumar, Vice Principal, delivered the felicitation address. He insisted the students to enhance their technical knowledge both in software and hardware. The projects of internal and external students were evaluated by senior faculty members of every department nominated as jury's. Totally 70 batches participated in the project expo. Jury's evaluated the projects and gave feedback & valuable comments to the students. Based on the innovation, presentation, implementation and demonstration marks were awarded by the jury's. Two projects were selected for rewards from each department. The valedictory ceremony of the project expo started by 01:30 p.m. at Pallava Hall. Dr.R.Rajendran, Secretary of the college distributed the prizes and certificates to the participants. Project Expo came to an end with vote of thanks by Ms. S. Abikayil Aarthi, AP/CSE cum Event Coordinator – IEEE MAS YP and Secretary – IEEE STB 16621.

Participant Details:

S.No.	Department	Internal Batches	External Batches	Total
1.	CIVIL	04	-	04
2.	CSE	20	-	20
3.	ECE	03	-	03
4.	EEE	11	02	13
5.	MECH	19	-	19
6.	S&H	01	-	01
Total		**58**	**02**	**60**

Details of Prize winners:

S.No	Department	Name of the Participants/College	Title of the project
1.	Civil Engineering	**First Prize** P.Kathireswari J.Kiruthika sri J.Nikesha Kings College of Engineering	Experimental Investigation on Partial Replacement of cement by seashell powder in concrete.
		Second Prize G.Bharath U.Hariharan M.Joshuva N.Krishnakanth Kings College of Engineering	Experimental analysis of recycled construction and demolition waste as partial replacement of coarse aggregates in concrete.
2.	Computer Science & Engineering	**First Prize** S.Mohammed Sameer S.Dinesh S.Sarvesh D.Guhan Kings College of Engineering	Spoton: A Hassle Free Car Parking System for smart cities using block chain technology
		Second Prize K.kayalvizhi S.Keeethiga V.Mahalakshmi Kings College of Engineering	Deep Learning with optimal Hierarchical spiking Neural Network for Medical image classification
3.	Electronics Communication Engineering	**First Prize** Natika K S Nivya P Priyadharshini J Vennila D Kings College of Engineering	Design And Implementation Of Robotic Spray Machine Using Artificial Intelligence
		Second Prize Devadharshini B Dhivya dharshini M Preethi S Swathi shuki M Kings College of Engineering	Design And Implementation Of Iot Based Non-Invasive Blood Pressure Monitoring

4.	Electrical& Electronics Engineering	**First Prize** Akash.A Harikumar.K Mesia Godwin.F Varsha.R Kings College of Engineering	Self generated E-Train modelling for future technology.
		Second Prize Dhivakar.S Morishkumar.S Guruprasath.N Ponnagaraan.M.G Kings College of Engineering	Power generation.
5.	Mechanical Engineering	**First Prize** Prakash K Jegan K Lalithkumar E Mahendran M Kings College of Engineering	Designing a joystick operated tricycle for person with disability.
		Second Prize Eraniyan K Arunkumar M Manoj kumar R Hariharan K Kings College of Engineering	Fabrication of development of a Remote Controlled scrap collecting vehicle for industrial applications.
6.	S&H	**First Prize** Swetha S Ashviniya A Praveen V Vinodhini A	Geothermal power plant

Invitation

Chief guest invitation

Welcome Address by Dr.S.Sabanayagam

Honouring the Chief Guest

Inaugural Address by Dr.J.Arputha Vijaya Selvi, Principal,KCE

Chief Guest Address

Participants demonstrated their projects in front of the jury's

Participants demonstrated their projects

Valedictory Session of Project Expo'24

Certificate Distribution by Dr.R.Rajendran, Secretary, KCE

Outcomes of the Project Expo'24

Experts evaluated the student's projects and gave their valuable remarks and feedback on the topic of the project and interacted with students about how to improve the quality of the work and project at large scale.

Students were able to

- Efficiently present their ideas.
- Design the project with all technical aspects.

D. Nandalal. 10/7/24 10/7/24 **Project Expo Coordinators**

10/7/24 **DRC Convener**

10/7/2024. **Principal**

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INSTITUTIONS INNOVATION COUNCIL (IIC)
ACADEMIC YEAR 2023-2024

S.No	Date	Details	Page No.
1.	29.8.2023	Seminar on Accelerators/Incubation - Opportunities Students &Faculties - Early Stage Entrepreneurs	2
2.	30.8.2023	Workshop on Innovation /Prototype Validation – Converting Innovation to startup	6
3.	18.10.23	Intra Institutional Idea Competition-2023	9
4.	2.11.23	Industry Visit-Siemens Center of Excellence in Manufacturing, NIT, Trichy	11
5.	17.5.2024	MoE's sponsored Impact lecture series on "role of Innovation in startup success and Enforcement of Intellectual property Rights-Patents and Design	15
6.	20.5.2024	Workshop on "Intellectual Property Rights(IPRs) and I.P management for start up	22
7.	23.5.2024	Workshop on "Business model canvas"	25
8.	29.5.2024	Workshop on Entrepreneurship skill, Attitude and Behavior development.	27
9.	31.5.2024	Seminar on "Entrepreneurship Awareness"	29

ACADEMIC YEAR 2023-24 (ODD SEMESTER)
QUARTER-IV-IIC ACTIVITY REPORT

Session Details:	
Title of the Session : Seminar on **"Accelerators/Incubation - Opportunities for Students & Faculties - Early Stage Entrepreneurs "**	
Date : 29.8.2023	Duration : 3 Hour (10 A.M TO 1.00 P.M)
Activity Category :Internal	Nature of the Session : Physical Mode
Facebook link for the event organized	Facebook/Kings College of Engineering
Instagram link for the event organized	Kings College of Engineering
Speaker Details:	
Name:Prof.A.Manikandan	Designation:Head-DOMS
Organization: St.Joesph's College of Engineering and Technology, Thanjavur	

Programme Report:

Objective:

- To provide a brief idea of Incubation opportunities and about it's important in the Industry and other sectors.
- To give Innovative ideas to the students to upgrade and know about the development and Technology.
- To provide a platform for the Teaching faculties and students to upgrade and know about the Innovation and Incubation opportunities.
- In addition, this programme will help to improve the student's ability in carrying out simple innovation and to bring to product through professional discussions.

Institution's Innovation Council (IIC) of Kings College of Engineering organized seminar on "Accelerators/Incubation - Opportunities for Students & Faculties - Early Stage Entrepreneurs"on29.8.2023.The session was started by 10.00 A.M. Vice Principal, Dr.S.Sivakumar delivered presidential address. The event had a whooping number of 75 participants of whom 70 were students and 05 were Faculty. Introduction about the resource person was delivered by Dr.K.Sudhkar,ED Cell Coordinator, Kings College of Engineering.

The following points were discussed during session:

During the session, he started to explain about the role of importance and incubation process and Entrepreneurship skills to be implemented in the Institution levels. Students allow entrepreneurs to preserve capital and gain external support to accelerate their businesses growth. Through business incubation, the Enterprise Center captures each entrepreneur's uniqueness and offers support and customized services to maximize businesses potential. The ultimate goal of incubation is to launch profitable, sustainable entrepreneurial companies. Student entrepreneurship is an important but not well-studied field of research. Student venturing activity is characterized by the lack of experience and expertise among founders, which is a critical barrier in technology-based venturing.

Importance of Entrepreneurship:

Entrepreneurship drives the growth and diversification of the economy and contributes to the creation of wealth. Before we get into the specifics of the role of entrepreneurship in economic development, let's briefly encapsulate its significance. Entrepreneurship's importance lies in the following:

- Drives economic growth and creates new job
- Encourages innovation by bringing new ideas, products, and services to the market
- Contributes to social change by developing products or services that reduce people's dependence on outdated technologies
- Addresses social and economic problems by creating solutions that meet the needs of society
- Enables competition which improves business efficiency and lowers prices for consumers

Economic Independence:

Entrepreneurship can be a path to economic independence for both the country and the entrepreneur. It reduces the nation's dependence on imported goods and services and promotes self-reliance. The manufactured goods and services can also be exported to foreign markets, leading to expansion, self-reliance, currency inflow, and economic independence. Similarly, entrepreneurs get complete control over their financial future. Through their hard work and innovation, they generate income and create wealth, allowing them to achieve economic independence and financial security.

Entrepreneurship promotes economic growth, provides access to goods and services, and improves the overall standard of living. Many entrepreneurs also make a positive impact on their communities and improve their well-being by catering to underserved areas and developing environment-friendly products.

Increases Gross National Product and Per Capita Income:

Entrepreneurship can play a significant role in increasing economic growth and prosperity by increasing Gross National Product (GNP) and Per Capita Income (PCI). GNP measures the total economic output of a country while PCI calculates the average income per person. The increase in GNP can lead to a rise in PCI. Entrepreneurship can contribute to GNP by creating new businesses and industries, which can lead

to job creation, increased consumer spending, and higher tax revenue. The entrepreneurship education programs in which students create their own ventures are commonly referred to as "action-based" entrepreneurship education. Entrepreneurship education has therefore become increasingly popular in technology-focused education such as engineering education and now involve several different designs and methods to achieve problem-based learning and real-life projects in education.

Valedictory Function:

This session proposed a chance to the Undergraduate and Faculty members to spread their skill in the various steps involved in incubation and various processes involved in design & development. The feedbacks from the participants were collected. Mr.G.Bharath, IIC Member delivered the vote of thanks.

Outcome of the activity:

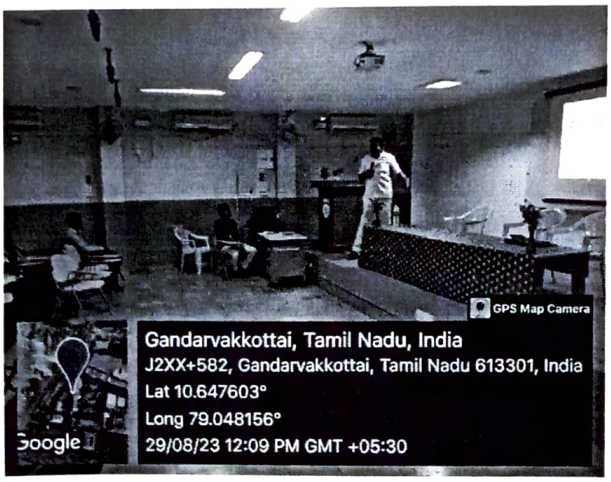
- All the participants have benefitted and gained knowledge about Incubation Process Design and Development.
- Programme helped to adapt new technologies in all the sectors.
- Portrays the accelerated learning curve for students in involving different technologies associated with different Industries and funding Agencies.

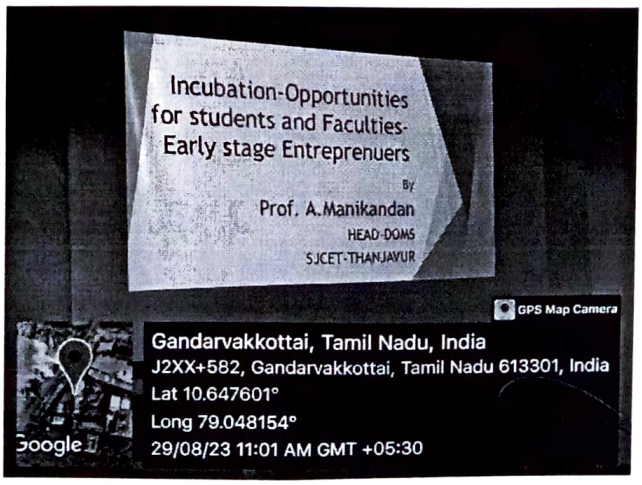
Participants Details:

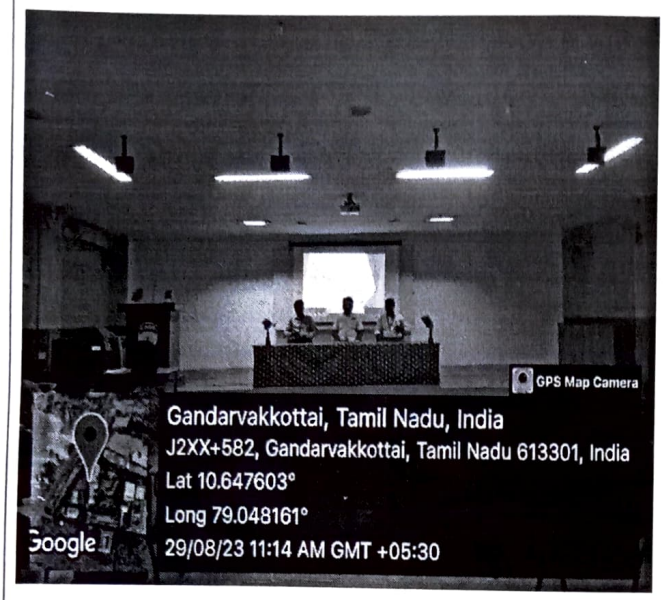
Total No. of Student Participation: 70 Members

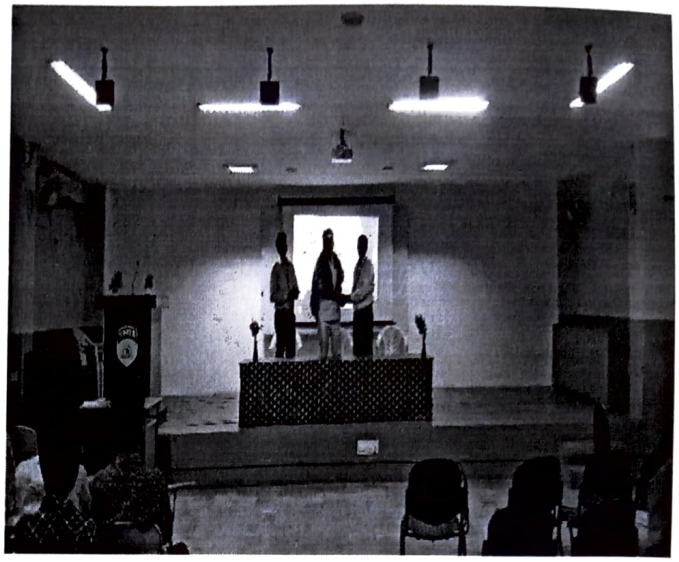
Total No. of Staff (Teaching / Non-Teaching) Participation: 05 Members

SNAPSHOTS:









9/9/23
Coordinators

9/9/2023
Vice President , IIC

09/9/2023
Principal/President, IIC

ACADEMIC YEAR 2023-24 (ODD SEMESTER)
QUARTER-IV-IIC ACTIVITY REPORT

Session Details:	
Title of the Session : Workshop on **"Innovation /Prototype Validation –Converting Innovation to startup "**	
Date :30.8.2023	Duration : 3 Hour (10.00 A.M TO 1.00 P.M)
Activity Category :Internal	Nature of the Session : Physical Mode
Facebook link for the event organized	Facebook/Kings College of Engineering
Instagram link for the event organized	Kings College of Engineering
Speaker Details:	
Name:Dr.S.Srinath	Designation:Founder
Organization: The Director, Ziwwit Educational and Research center, Thanjavur	

Programme Report:

Objective:

- To provide a brief idea of Innovation and Prototype validation and about it's important in the Industry and other sectors.
- To give Innovative ideas to the students to upgrade and know about the development and Technology.
- To provide a platform for the Teaching faculties and students to upgrade and know about the Innovation and product development.
- In addition, this programme will help to improve the student's ability in carrying out simple innovation to start up and to bring to product through professional discussions.

Institution's Innovation Council (IIC) of Kings College of Engineering organized seminar on **"Innovation /Prototype Validation –Converting Innovation to startup "on 30.8.2023**.The session was started by 11.00 A.M. VicePrincipal, Dr.S.Sivakumar delivered presidential address. The event had a whooping number of 80 participants of whom 75 were students and 05 were Faculty. Introduction about the resource person was delivered by S.Sneha, UG Student IIC Member.

The following points were discussed during session-I:

Innovation and Importance:

- Innovation is often necessary for Organizations to adapt and overcome the challenges of change. Achieving organizational and economic growth through innovation is key to staying afloat in today's highly competitive world. Innovation refers to introducing novelty in a product, service, strategy, or business model. Moreover, innovation also increases the usability and durability of the entity above. It is a concept that helps stay ahead of the competition and induces creativity and efficiency in businesses. Innovation is important to the advancement of society as it solves these kinds of social problems and enhances society's capacity to act.
- It's responsible for resolving collective problems in a sustainable and efficient way, usually with new technology. These new technologies, products and services simultaneously meet a social need and lead to improved capabilities and better use of assets and resources. In order to be able to solve these kinds of societal problems, private, public and non-profit sectors are involved.
- He explained about the following research areas: Experimental and theoretical research is carried out on the development and application of aero space Engineering, space propulsion system, electric propulsion systems, including electro thermal propulsion systems, electromagnetic propulsion systems and electrostatic propulsion systems.

Innovation/Prototype Design:

- Innovation/Prototyping is the process of designing and building an early model of a product to test it. Any system or device that will be sold to consumers, government agencies, or businesses will begin as a prototype that typically does not have all of the components or functions that will be used in the final product that is brought to market.
- A prototype can serve as a proof of concept showing that the system or device can be built and will perform correctly.

SessionII:

- During the session-II resource person has started from his research experience in the field of Aerospace Engineering and satellite communications are used in Prototype design and process designing order to develop the prototype. He has broadly given the agenda such as Introduction about prototype, basic circuit designing, latest software and applications etc. He clearly explained from basics of prototype through some practical examples such as LED TV and Refrigerator.
- Finally he has mentioned that general Instructions and guidelines to solve real world problems to convert prototype to product. The session was very informative and the participants have interacted with the resource person.

Valedictory Function:

This session proposed a chance to the Undergraduate and Faculty members to spread their skill in the various steps involved in prototype and various processes involved in design & development. The feedbacks from the participants were collected. Mr.G.Bharath, IIC Member delivered the vote of thanks.

Outcome of the activity:

- All the participants have benefitted and gained knowledge about Innovation/Prototype validation design and Development.
- Programme helped to adapt new technologies in all the sectors.
- Portrays the accelerated learning curve for students in involving different technologies associated with different Industries and funding Agencies.

Participants Details:

Total No. of Student Participation: 75Members

Total No. of Staff (Teaching / Non-Teaching) Participation: 05 Members

SNAPSHOTS:

9/9/23
Coordinators

9/9/23
Vice President , IIC

09/9/2023
Principal/President, IIC

ACADEMIC YEAR 2023-24(ODD SEMESTER)

INTRA INSTITUTIONAL IDEA COMPETITION 2023-REPORT

Session Details:

Title of the Session : **INTRA INSTITUTIONAL IDEA COMPETITION -2023**

Date :18.10.2023	Duration : 10 A.M TO 4.30 P.M
Activity Category : Internal	Nature of the Session : Physical Mode
Facebook link for the event organized	Facebook/Kings College of Engineering

Theme :Problem Statements for Idea Competition 2023

- Agriculture,FoodTech&Rural Development
- Renewable /Sustainable Energy
- Smart Automation
- Smart Vehicles
- Block chain and Cyber security

Speaker Details:

Name:Dr.A.albert Martin Ruban	Designation:Head of the Department/EEE

Organization: Kings College of Engineering

Jury Details

- Mrs.R.Suagantha lakshmi,AP/CSE –suganthalakshmi.cse@ kingsengg.edu.in
- Dr.P.Narasimman,AP/EEE-narasimman.eee@kingsengg.edu.in

Programme Report:

Objective:

- To enhance the knowledge of students and motivate them to compete in the wide-ranging aggressive engineering field.
- To showcase the research talents, innovativeness, and inventiveness among the students.
- It provides a platform for the students to upgrade and know about the development and Technology for the preparation of SIH 2024.
- To provide a forum for sharing new design and alternative technologies and to promote affable interactive environment leading to exchange of new research ideas.

Institution's Innovation Council (IIC) of Kings College of Engineering organized Intra institutional Ideathon-2023 on 18.10.2023 at Smart Class room. A total of 10 teams (40 Members) were actively presented their ideas. Each team consists of four members and different themes are selected from the Hackathon Ideas . The session was started by 10.30 A.M with Tamil Thaai Vaazthu .Welcome address was delivered by Mr.R.Sundaramoorthi,AP/EEE,IIC/Vice President. Presentation started by 11.00 a.m as per schedule circulated in Agenda. Instructions and Guidelines about presentation acknowledged. The following department teams were participated.

Participants Details:

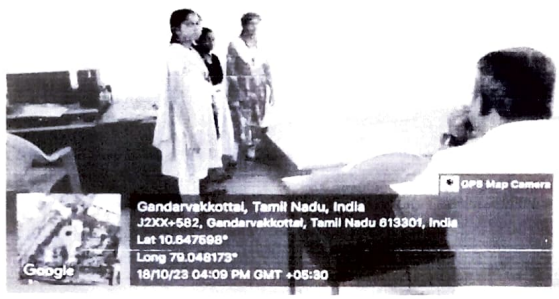
Total No. of Student Participation: 40 Members(10 Teams)

Total No. of Staff (Teaching / Non-Teaching) Participation: 10

SL.NO	DEPARTMENT	NO OF TEAMS	SECTOR
1	CSE	05	• Block chain and Cyber security
2	ECE	02	• Smart Automation
3	EEE	03	• Smart Vehicles
TOTAL :10(40 Members)			

Valedictory Function:

The shortlisted teams were declared. Evaluation made based on the following criteria :(a)Problem Evaluation-5 Marks(b)Description-5 Marks (c)Presentation-10 Marks (d)Queries-5Marks.A total of 25 marks allotted for each presentation. The feedbacks from the participants were collected. Dr.K.Sudhakar,AP/T&P, Startup Coordinator, IIC Member delivered the vote of thanks.



Outcome of the activity:

- All the participants have benefitted and gained knowledge about Problem statements and finding solutions.
- Programme helped to adapt new technologies in all the sectors also platform for SIH 2024.
- Portrays the accelerated learning curve for students in involving different technologies associated with different Industries and funding Agencies.

IIC-Vice President IIC- President

KINGS COLLEGE OF ENGINEERING

INSTITUTION'S INNOVATION COUNCIL

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ACADEMIC YEAR 2023-24 (ODD)

Report - Industrial Visit

Place Visited : Siemens Centre of Excellence in Manufacturing, NIT, Trichy.

Date of Visit : 02.11.2023

Number of Beneficiaries: 40 – Students from IIC students members & 4 Staff Members on 02.11.2023

As part of our curriculum, department has arranged one day Naan Mudhalvan Industrial Visit for IIC students at NIT, Trichy. Our team, comprising three faculty members and final year students, embarked on an insightful industrial visit to the National Institute of Technology, Trichy (NIT Trichy) to explore and understand the practical applications of Programmable Logic Controllers (PLC) in industrial settings.

Objectives of Industrial Visit at NIT Trichy:

The objective of an industrial visit is to provide an insight regarding internal working of industries.

- The primary goal of the visit was to gain hands-on experience and knowledge about PLC schematics, their implementation in real-world scenarios, and the role they play in industrial automation.
- **Automation**: Facilitate the automation of industrial processes by executing predefined logic, reducing the need for manual intervention and enhancing efficiency.
- **Control Logic Implementation**: Provide a platform for implementing and executing control logic diagrams, enabling precise control over various components and devices in a system.
- **Reliability**: Ensure reliable and consistent operation of industrial processes by minimizing errors, reducing downtime, and optimizing response times to input signals.
- **Monitoring and Diagnostics**: Enable real-time monitoring of system parameters and the ability to diagnose faults promptly, facilitating efficient maintenance and troubleshooting.
- **Interfacing with Sensors and Actuators**: Facilitate seamless integration with sensors and actuators, allowing PLCs to receive input data from the field and control output devices based on the programmed logic.
- **Cost Efficiency**: Contribute to cost savings by streamlining operations, reducing the need for manual labor, and optimizing resource utilization within industrial settings.

- **Scalability**: Provide a scalable solution that can accommodate the expansion or modification of industrial processes without significant changes to the control system.
- **Standardization**: Facilitate standardization of control processes, making it easier to replicate and maintain similar systems across different sections of an industrial facility.
- **Enhanced Safety**: Contribute to the overall safety of industrial operations by implementing fail-safe mechanisms and emergency shutdown protocols through the PLC control logic.
- **Data Logging and Reporting**: Support data logging and reporting functionalities, allowing for the collection and analysis of operational data for process optimization and regulatory compliance.
- **Integration with Communication Networks**: Enable communication with other automation and information systems, fostering connectivity and integration within the broader industrial ecosystem.

Overview of NIT Trichy:

NIT Trichy, renowned for its excellence in engineering education, provided an ideal backdrop for our exploration. The institution's state-of-the-art laboratories, experienced faculty, and industry collaborations make it a hub for cutting-edge research and practical learning.

Introduction:

We recently visited the National Institute of Technology (NIT), Trichy, accompanied by three esteemed faculty members and a group of final year students. The purpose of the visit was to gain insights into Programmable Logic Controller (PLC) schematics in an industrial setting.

The Students visited the following places at NIT:

Students discussed with resource person

Snapshot at NIT, Trichy

Outcome:

- Industrial visits help students to enhance their interpersonal, communication skills, and teamwork abilities.
- This visit not only broadened our understanding of PLC schematics but also underscored the importance of experiential learning in preparing students for the challenges of the industrial landscape.
- At the end of this visit, students should be able to improve their knowledge relevant to PLC to the learn new technologies and areas.

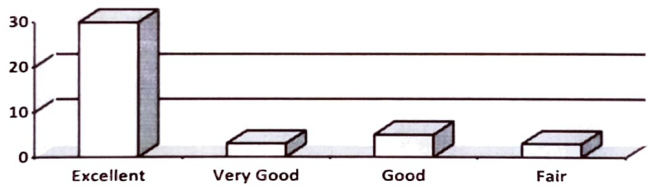
Key Observations:
Our visit to NIT Trichy provided invaluable insights into PLC schematics, reinforcing theoretical knowledge with practical applications. The hands-on sessions allowed students to interact with PLC systems, enhancing their problem-solving skills and familiarity with real-world scenarios.

Faculty Collaboration:
The collaboration with NIT Trichy's faculty members facilitated in-depth discussions and clarification of doubts. Their expertise in the field added depth to our understanding of PLC schematics and their role in modern industrial automation.

Practical Application:
Witnessing the real-time application of PLC schematics reinforced the importance of practical knowledge in engineering education. The hands-on experience allowed students to grasp concepts beyond the theoretical realm.

Conclusion:
The industrial visit to NIT Trichy was a resounding success, offering a comprehensive understanding of PLC schematics. The practical exposure provided a bridge between theoretical concepts and their practical implementation, enriching the learning experience for both faculty and students.

Students Feedback:



Principal

ACADEMIC YEAR 2023-24(EVEN SEMESTER)

MoE'S Sponsored Impact Lecture series

On

"Role of Innovation in startup success and Enforcement of Intellectual Property Rights-Patents and Design"

17.05.2024

IIC ID:IC201810951

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized Impact lecture series on **"Role of Innovation in startup success and enforcement of Intellectual Property Rights – Patents and Design** "sponsored by MoE's Innovation cell on 17.5.2024.

Objective:

The main objective of this Impact Lecture series:

- To provide ideas of future Innovation in various fields and Patent Rights.
- It provides a platform for the teaching faculties and students to upgrade and know about the Innovation and patents skills.
- In addition, this programme will help to improve the student's ability in carrying out how to build Product through simple innovation and convert to Patent rights to bring up professional discussions.

Speaker details:

Session 1: Session on "Enforcement of Intellectual Property Rights –Patents and Design" by **Mrs.Preethi Narayannan, IP Consultant, Chennai.**

Session 2: Session on "Role of Innovation in startup success "by Mr.P.Vinoth, Leadership Professional, Bangalore.

President:

Dr.J.Arputha vijaya selvi,Principal,KCE

Vice- President

Mr.R.Sundaramoorthi, Head of the Department / EEE

Convener

Dr.R.Shankar, Associate Professor /MECH

Members

Mr.R.Sundharam,AP/CIVIL
Ms.M.Mangalambigai,AP/CSE
Dr.K.Sudhakar,AP/T&P
Mr.J.Niranjan Samuel, JRF/R&D.

Programme Type: **Enforcement of Intellectual Property Rights –Patents and Design**

Promotion in social media: Facebook and Instagram

Inaugural Session:

Inaugural session was started 10.15 A.M presided over by Dr.**J.ArputhaVijaya Selvi, IIC President,Head of the Institution.** The dignitaries during the inaugural session were **Dr.S.Sivakumar, Vice Principal, Mrs.Preethi Narayanan, IP Consultant, Chennai**, Resoure **person** all the IIC Program Coordinators and IIC faculty and student Members. The program was started with Welcome address and Introduction about Impact lecture series delivered by Mr.R.Sundaramoorthi,HOD/EEE. Resource Person Introduction given by Mrs.M.Mangalambigai,AP/CSE.

Participants:

Faculty:10; Internal students :85 Total : 95

Session 1: **Session on "Enforcement of Intellectual Property Rights –Patents and Design** by **Mrs.Preethi Narayannan, IP Consultant, Chennai.**

The session was started by 10.30 A.M.Before starting the session, Resource person thanked Management, Principal, IIC Coordinators and members of Kings College of Engineering.

The following key points are discussed during presentation:

- Introduction about Intellectual Property Rights (IPR) such as necessity of Property Rights, Progress of nation towards Innovations, Patent, and prospers. Patents are one of the most crucial tools for protecting an inventor's ideas, innovations and promoting technological progress. Patents provide inventors with the exclusive right to use make and sell their inventions for a specified period of time, giving them a competitive edge in the marketplace. Patents also promote innovation and economic growth by incentivizing inventors and companies to invest in research and development.
- Patents encourage the sharing of ideas and knowledge, as inventors must publicly disclose their inventions in order to obtain a patent. She mentioned about increasing role, world Economy (The Paradigm shift) and Importance of science &technology and shared knowledge about the Eco system and various terminologies used in the IPR such as Intellect (Power of mind), Property (generally refers to something that can be traded), Intellect Property (refers to the ideas and creation of the mind having commercial values) and Intellect Property Rights (refers to legal rights associated with Intellectual Property).she also shared about copy rights with suitable examples such as literary, films, dramatic, musical, sound recording, artistic and procedure, registration, penalty (section63 &section 63A) and duration for copy rights.
- A patent is a legal protection granted by a government to an inventor or assignee of an invention. In the United States, patents are granted by the United States Patent and Trademark Office (USPTO).

Types of Patents

There are three types of patents: utility patents, design patents, and plant patents.

- Utility patents are the most common type of patent and are granted for new and useful processes, machines, manufactures, or compositions of matter.
- Design patents are granted for new, original, and ornamental designs for an article of manufacture.
- Plant patents are granted for new and distinct varieties of plants that have been asexually reproduced.

She also explained about Patent life cycle such as Idea, basic research; understand the economic importance, prior art research, patent filing, and patent prosecution. The complete procedure explained by flowchart which represents patent process and timeline was highly informative. The session was very useful and the participants have interacted with the resource person.

Session 2: Session on "Role of Innovation in startup success "by Mr.P.Vinoth, Leadership Professional, Bangalore.

The session-II was started by 1.45 p.m. Introduction about the resource person was delivered by Mrs.M.Mangalmbigai,AP/CSE,IIC faculty Member. Initailly, resource person thanked Management, Principal, IIC Coordinators and student members. In his initial part of the session, he started about general introduction about Innovations which help to catch the career and difference between Invention and Innovation with plenty of examples.

The following key points are discussed during presentation:

- Startups are important because they are the engine of economic growth. They are the source of new jobs, new products, and new services. They drive innovation and create wealth. Startups are riskier than established businesses, but they also have the potential to generate higher returns.
- In the dynamic landscape of modern business, startups stand out as vibrant hubs of innovation and entrepreneurship, playing a pivotal role in shaping economies and societies worldwide.
- Beyond innovation, startups play a crucial role in driving economic growth and job creation. As they expand and scale, startups generate employment opportunities, fuel demand for goods and services, and stimulate investment in related sectors.
- Moreover, startups inject dynamism and competitiveness into stagnant markets, spurring incumbents to adapt and evolve. The cumulative effect of startup activity contributes significantly to GDP growth, fostering a thriving ecosystem of entrepreneurship and prosperity.

- A startup is a company or organization in its early stages, typically characterized by high uncertainty and risk. Many startups are founded with the aim of solving a problem or filling a gap in the market, and they typically operate in fast-paced and dynamic environments.

- Startups are important for a number of reasons. Firstly, they are often the source of new and innovative ideas. This is because startups are typically founded by people who are passionate about their idea and are willing to take risks to make it a reality. Secondly, startups play a key role in driving economic growth. They create new jobs and wealth, and they often bring new products and services to the market. Finally, startups are important for social progress.

- He briefly explained about his career and innovations developed recently in different sectors such as Agriculture and medical applications. He shared the knowledge about product development and Entrepreneur. He has given an idea about how to start the Innovation and startup. The entire session was interactive through snapshots pictures and live examples. The session was very informative and the participants have interacted with the resource person. The feedbacks from the participants were collected.

Benefits In terms of Learning/Skills/Knowledge obtained:

- All the participants have benefitted and gained knowledge about Innovation and Patent Rights skills set through practical concepts and examples.
- Programme helped to initiate simple Innovations and how to convert to Patents.
- Portrays the accelerated learning curve for students in involving innovation and Intellectual Property Rights through practical examples.
- It helps to gain new experiences, train students brain to handle a wide range of Challenges and concentrate through Innovation.

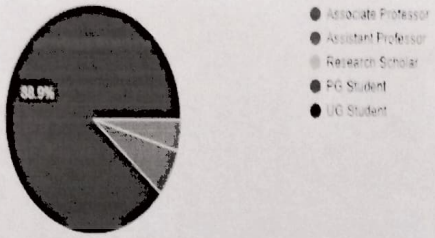
Valedictory Function:

The feedbacks from the participants were collected. Dr.R.Shankar,AP/MECH, IIC delivered the vote of thanks.

Feedback Analysis:

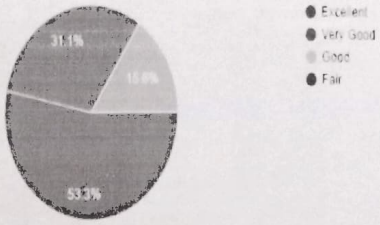
Designation

45 responses



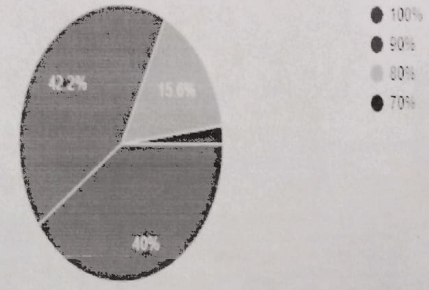
1 How satisfied you were with the session content?

45 responses



2 What percentage of the information was new to you?

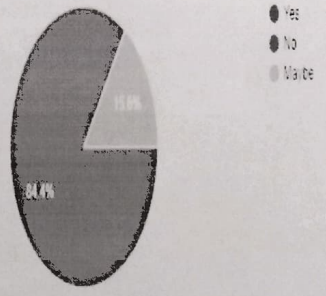
45 responses



3 Would you like to learn more about this topic?

Copy

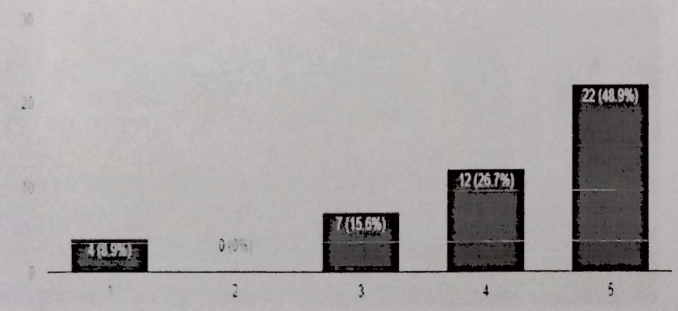
45 responses



4 Please rate the speaker's knowledge of the topic

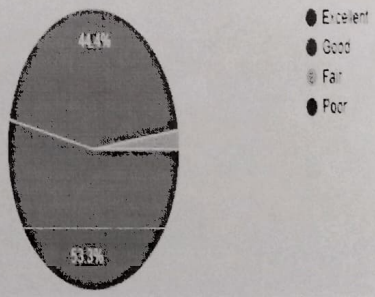
Copy

45 responses

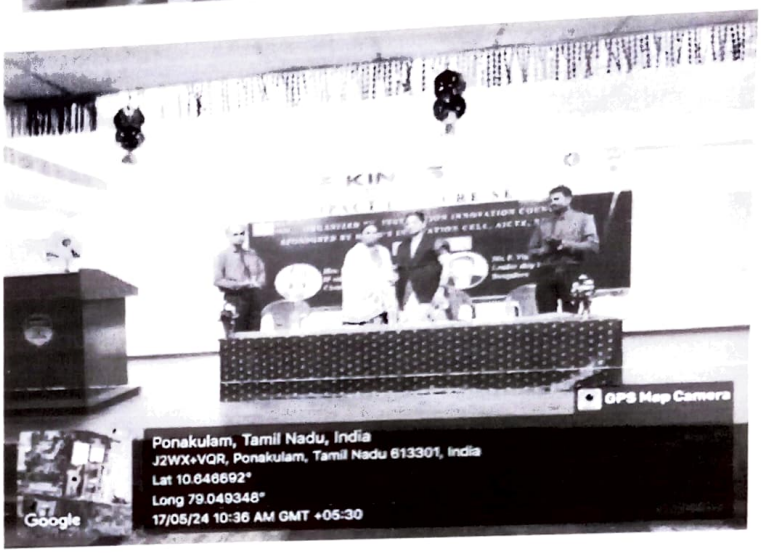


6 Overall session evaluation

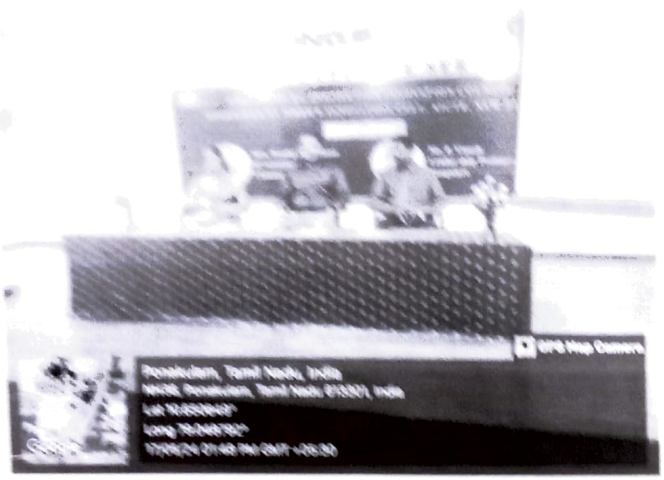
45 responses

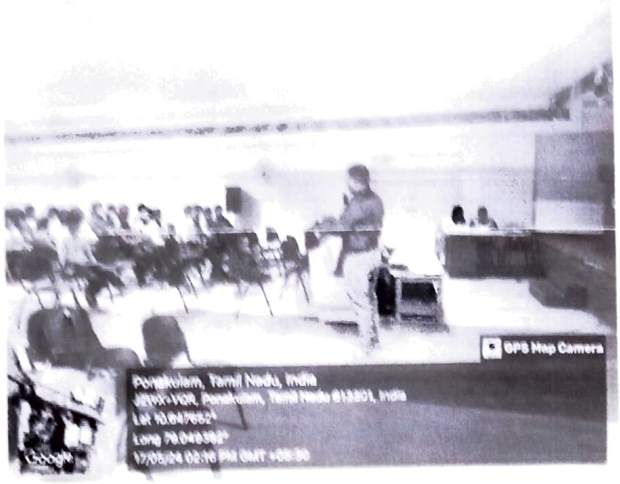


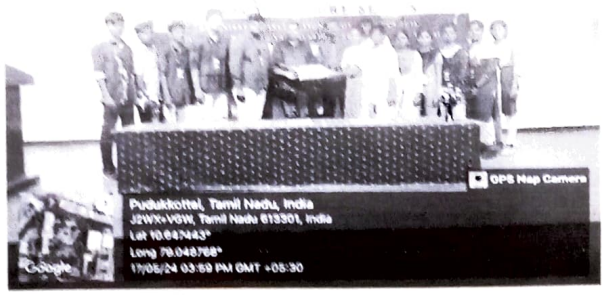
Session -I Photographs



Session –II Photographs







IIC Members

Vice President-IIC& HOD/EEE

President-IIC&Principal

KINGS
COLLEGE OF ENGINEERING
Recognised under 2(f) & 12(B) of UGC
Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai

ACCREDITED WITH GRADE B++ NAAC

INSTITUTION'S INNOVATION COUNCIL

ACADEMIC YEAR 2023-24 (EVEN SEMESTER)

WORKSHOP
On

"INTELLECTUAL PROPERTY RIGHTS (IPRs) AND IP MANAGEMENT FOR STARTUP"

20.05.2024

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized workshop on "**Intellectual Property Rights (IPRs) and I.P. Management For Startup**" on **20.05.2024.**

OBJECTIVE:

- To provide the attendees a broad idea about IPR and IP Management for start-up and its importance.
- To give idea about process, the useful steps for getting IPR approval for any start-up with useful links and information.

Resource person: **Dr. M. Satthiyaraju**
Associate Professor,
Department of Mechanical Engineering
Kathir College of Engineering,
Coimbatore.

President:

Dr. J. Arputha vijaya selvi, Principal, KCE

Vice- President

Mr. R. Sundaramoorthi, Associate Professor / EEE

IIC member & Coordinator

Dr.R.Shankar, Associate Professor / MECH

Quarter series-III

Programme Type: Workshop

Promotion in social media: Facebook

Workshop summary

This report provides a brief summary of the lecture on ""**Intellectual Property Rights (IPRs) and IP Management For Startup**" organized by Institutions Innovation Cell on **20.05.2024** at Smart class, ground floor, Block II. There were about 61 students of B.E. and 15 faculty members attended the workshop. The session was started by 11.10 am. Introduction about the resource person was delivered by IIC Vice president **Mr.R.Sundaramoorthi**, Associate Professor/EEE. The lecture was delivered by **Dr.M.Satthiyaraju,** Associate Professor, Department of Mechanical Engineering, Kathir College of Engineering, Coimbatore.

Resource person focuses on how to equip startup entrepreneurs with essential knowledge and tools to navigate the intricacies of intellectual property. Through interactive sessions and practical examples, students gain insights into different types of IP rights and learn how to develop a strategic approach to IP management. From understanding the basics of patents, trademarks, copyrights, and trade secrets to devising effective IP protection and commercialization strategies, the workshop covers a wide range of topics crucial for startup success.

Most of the participants who attended the workshop were students and faculty. By attending this workshop, students interested in startups will be better prepared to leverage their intellectual property assets for growth, innovation, and competitive advantage in the marketplace. The lecture provided an interactive atmosphere between the resource person and the participants.

In the valedictory function, participants expressed their feedback about the workshop. **Dr.R.Shankar**, coordinator of the workshop expressed the vote of thanks and the programme ended with a National Anthem.

Benefits Interms of Learning/Skills/Knowledge obtained:

- Student got detailed information about IPR and IP Management. They also got knowledge about the patenting process, its stages and time taken for the selection procedure. They also acquainted the use of IPR and IP Management for Startup.

Brochure-Sample copy

KINGS

INSTITUTION'S INNOVATION COUNCIL

Workshop
on
Intellectual Property Rights (IPRs)
and IP Management for startup

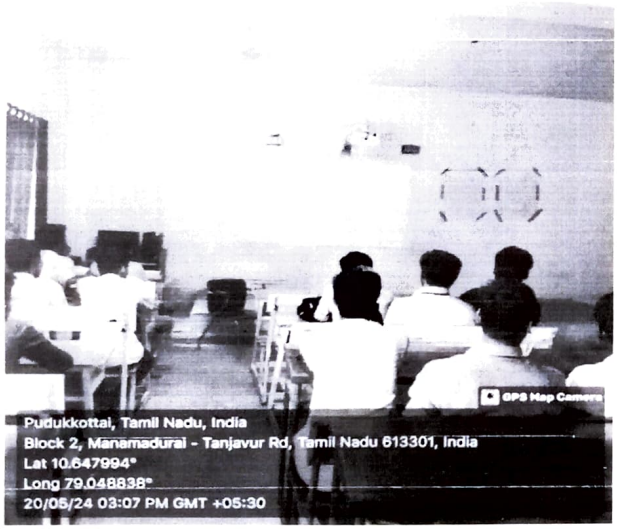
Resource Person

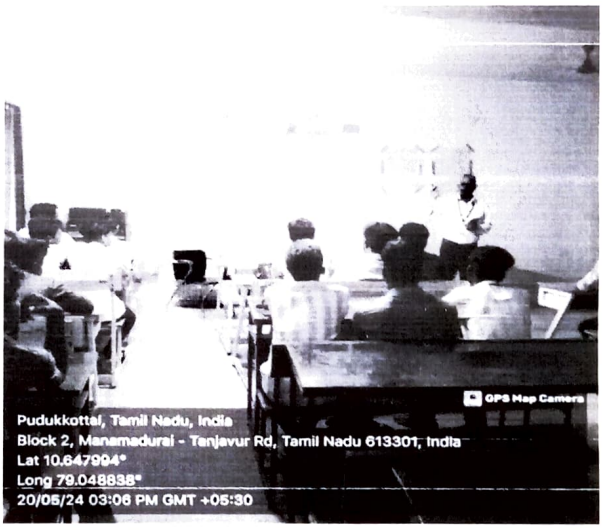
Dr.M. Satthiyaraju,
Associate Professor,
Department of Mechanical Engineering,
Kathir College of Engineering,
Coimbatore.

Date : 20.05.2024
Time : 11.00 a.m.
Venue : Smart Class, Ground floor, Block II

Dr.R.Shankar, Member IIC — Mr.R.Sundaramoorthi, Vice President IIC — Dr.J.Arputha Vijaya Selvi, Principal

Event Photographs





Resource person Dr. M. Satthiyaraju delivering the lecture on Intellectual Property Rights (IPRs) and IP Management for Startup

27/5/24

Member - IIC & Coordinator

27/5/2024

President-IIC & Principal

KINGS COLLEGE OF ENGINEERING
An Autonomous Institution

ACADEMIC YEAR 2023 – 24 24.05.2024

Workshop

on

"BUSINESS MODEL CANVAS"

23.05.2024

REPORT

MoEs - Institution Innovation Council and Entrepreneurship Development Cell of Kings College of Engineering organized a workshop on **"BUSINESS MODEL CANVAS"** on 23.05.2024.

Objective:

To provide necessary skills to the students who are aspiring to be entrepreneurs to turn their creative ideas into a successful business.

Resource persons:

1. Mr. G. Abraham Lincoln, District Field Coordinator, EDII – TN, Thanjavur and Mr. R. Amarnath, District Field Coordinator, EDII – TN, Pudukkottai.

Participants:

IIC and ED Cell members of II year students of all disciplines 41 participants attended the programme.

Inaugural Session:

Dr. K. Sudhakar, Coordinator of ED Cell, gave away the welcome address and introduced the resource persons to the participants.

Session highlights:

The workshop on the Business Model Canvas provided a comprehensive overview of this strategic tool, aimed at enhancing participants' understanding of business model development. Attendees engaged in detailed sessions covering each of the nine building blocks, including key aspects such as customer segments, value propositions, and revenue streams. Through interactive activities and case studies, participants applied the concepts to their own business ideas, gaining practical insights into model optimization and innovation.

Benefits in terms of Learning/Skills/Knowledge obtained:

Student members gained

- **Comprehensive Understanding**: Gained in-depth knowledge of the nine essential components of the Business Model Canvas.

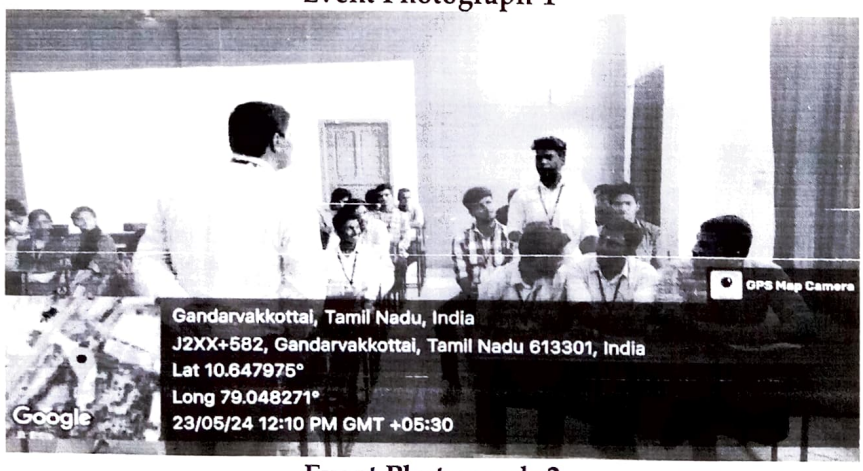
- **Strategic Thinking**: Learnt various skills in strategic analysis and planning, allowing you to assess and refine your business model in a structured and systematic way.
- **Practical Application**: Learnt to apply theoretical concepts to real-world scenarios, enhancing your ability to create and implement actionable business strategies.
- **Problem-Solving Skills**: Know how to improve the ability to identify business challenges and opportunities, and develop effective solutions through hands-on exercises and case studies.
- **Innovation Techniques**: Acquired the techniques for fostering innovation within their business model, enabling them to adapt and stay competitive in a rapidly changing market.
- **Collaborative Learning**: To Enhance skills in teamwork and collaboration by engaging with peers and facilitators, gaining diverse perspectives and constructive feedback.
- **Continuous Improvement**: To Build knowledge on how to regularly evaluate and adjust the business model to ensure on going relevance and effectiveness, supporting long-term success and adaptability.

Valedictory Function:

Finally, Mr. Ramprasad, member of ED Cell delivered a vote of thanks.

Event Photographs

Event Photograph-1



Event Photograph-2

KINGS COLLEGE OF ENGINEERING
An Autonomous Institution

ACADEMIC YEAR 2023 – 24 02.06.2024

Workshop

on

"Entrepreneurship Skill, Attitude and Behaviour Development"

29.05.2024

REPORT

MoEs - Institution Innovation Council and Entrepreneurship Development Cell of Kings College of Engineering organized a workshop on **"Entrepreneurship Skill, Attitude and Behaviour Development"** on 29.05.2024.

Objective:

- To equip participants with practical entrepreneurship skills such as business planning, financial management, marketing strategies, and effective networking techniques.
- To foster a positive entrepreneurial mindset by encouraging traits such as resilience, adaptability, and proactive problem-solving, essential for overcoming challenges and seizing opportunities.
- To develop key entrepreneurial behaviors, including leadership, decision-making, risk-taking, and self-discipline, to help participants navigate the entrepreneurial journey more effectively.

Resource person:

1. Dr. B. Suresh Babu, Assistant Professor, Department of Management Studies, Kings College of Engineering, Punalkulam, Pudukottai

Participants:

IIC and ED Cell members of IInd year students of all disciplines 36 participants attended the programme.

Inaugural Session:

The inaugural session started with a welcome address by Mr. Ramprasad, ED Cell Member welcomed the gathering.

Session highlights:

The speaker highlighted the following points:

Introduction to Entrepreneurial Skills: Overview of essential skills for entrepreneurs, including business planning, financial management, marketing strategies, and effective communication. Developing a Positive Entrepreneurial Attitude: Interactive exercises and discussions focused on cultivating resilience, adaptability, and a growth mindset, crucial for navigating the entrepreneurial landscape. Behavioral Traits of Successful Entrepreneurs: Exploration of key

entrepreneurial behaviors such as leadership, risk-taking, decision-making, and self-discipline, with practical tips for developing these traits. Creativity and Innovation Workshops: Hands-on activities designed to enhance creative thinking and problem-solving skills, encouraging participants to generate and refine innovative business ideas.

Self-Assessment and Personal Development: Sessions dedicated to self-awareness, including tools and techniques for identifying personal strengths and areas for improvement, and setting actionable goals for growth. Networking and Collaboration: Opportunities for participants to connect with peers, mentors, and industry experts through networking sessions, collaborative exercises, and group discussions. Actionable Business Planning: Guidance on developing practical business plans and setting realistic goals, including creating detailed roadmaps and strategies for launching and scaling entrepreneurial ventures.

Benefits in terms of Learning/Skills/Knowledge obtained:

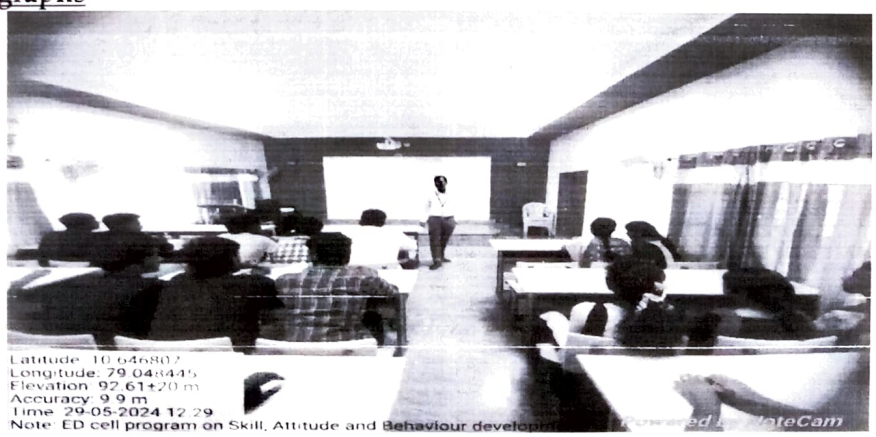
Student members gained

- The hands-on experience in crucial areas such as business planning, financial management, marketing, and operational strategies, enhancing their ability to effectively manage and grow their ventures.
- Awareness to develop a resilient and proactive mindset, learning to view challenges as opportunities and adopt a growth-oriented perspective essential for long-term entrepreneurial success.
- The strategy to cultivate key entrepreneurial behaviors, including strong leadership, strategic decision-making, and effective risk management, which are vital for navigating the complexities of entrepreneurship.
- Knowledge about the techniques to boost their creativity and innovate effectively, leading to the development of unique and competitive business ideas.
- Idea to create and implement detailed business plans and strategic goals, providing a clear roadmap for launching, managing, and scaling their entrepreneurial ventures effectively.

Valedictory Function:

Finally, Mr. T. Priyadharshini, member of ED Cell delivered a vote of thanks.

Event Photographs



Event Photograph-1

INSTITUTION'S INNOVATION COUNCIL

KINGS COLLEGE OF ENGINEERING
An Autonomous Institution

NAAC B++

ACADEMIC YEAR 2023-24(EVEN SEMESTER)

Seminar

On

"Entrepreneurship Awareness"

31.05.2024

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized Seminar on **"Entrepreneurship Awareness"** on 31.5.2024.

Objective:

The main objective of this Seminar is :

- Entrepreneurship Awareness Program training program objective is to create awareness among faculty and students of Engineering and Science courses about various facets of entrepreneurship as an alternative career option as also to highlight the merits of pursuing such an option.
- It is aim to inspire and educate potential entrepreneurs, equipping them with essential knowledge and skills to pursue entrepreneurial ventures.
- This Seminar typically cover topics such as business ideation, market research, financial planning, legal aspects, and networking.

Speaker details:

Session 1: 10.30 am-11.30am

Session on "Entrepreneurship Awareness" by
Mr. Mohamed Juher ,Founder and CEO, ESTOC ,Kumbakonam.

Session 2: 11.30am-12.30am

Session on "District Industries Centre Loan Scheme "by
Ms.S.R.Saranya, Founder and Managing Director, J-Holidays, Kumbakonam

President:

Dr.J.Arputha vijaya selvi,Principal,KCE

Vice- President

Mr.R.Sundaramoorthi, Head of the Department / EEE

Members

Mr.R.Sundharam,AP/CIVIL
Ms.M.Mangalambigai,AP/CSE
Dr.K.Sudhakar,AP/T&P
Mr.J.Niranjan Samuel, JRF/R&D.

Programme Type: Awareness of Start-up

Promotion in social media: Instagram

Inaugural Session:

Inaugural session was started 10.15 A.M presided over by **Dr.J.ArputhaVijaya Selvi, IIC President,Head of the Institution.** The dignitaries during the inaugural session were **Mr. Mohamed Juher ,Founder and CEO, ESTOC & Ms.S.R.Saranya,Founder and Managing Director,J-Holidays** Resoure **persons** all the IIC Program Coordinators and IIC faculty and student Members.The program was started with Welcome addres delivered by Mr.R.Sundaramoorthi,HOD/EEE. Resource Person Introduction given by Mrs.M.Mangalambigai,AP/CSE.

Participants:

Faculty:05; Internal students :35 Total : 40

Session 1: Session on "Entrepreneurship Awareness" by
Mr. Mohamed Juher ,Founder and CEO, ESTOC ,Kumbakonam.

The session was started by 10.30 A.M. Before starting the session, Resource person thanked Management, Principal, IIC Coordinators and members of Kings College of Engineering.

The following key points are discussed during presentation:

Introduction:

- The term business refers to an organization or enterprising entity engaged in commercial, industrial, or professional activities. The purpose of a business is to organize some sort of economic production of goods or services. Businesses can be for-profit entities or non-profit organizations fulfilling a charitable mission or furthering a social cause. Businesses range in scale and scope from sole proprietorships to large, international corporations.
- Discuss about the Essentials of entrepreneur.
- . Explain about how to build a team and the hierarchy of team for Start-up.
- Firm Registration of Proprietorship, Partnership, LLP,Private Limited, Public Limited, OPC
- Elaborated the details of Registration like Trademark, Copyright, Taxation, Licenses.
- Discuss about the importance of hierarchy Like CEO, General Manager, Manager, Supervisor, Executive.
- Finally he share the following tips about the Business Development is,
- Competitors are Good for Business
- Don't put profit into another business
- A month profit is not for whole year
- Closely monitor profit & loss for first 100 Days
- Loss Handling Capacity

- Understand AI technology & Algorithms
- Use social media wisely
- Always behind ROI
- Keep update yourself in your strong areas
- Find all kind of freebees' to support your firm

Session 2: Session on "District Industries Centre Loan Scheme "by Ms.S.R.Saranya,Founder and Managing Director,J-Holidays,Kumbakonam

The session-II was started by 11.30 a.m. Introduction about the resource person was delivered by Mrs.M.Mangalmbigai,AP/CSE,IIC faculty Member. Initailly, resource person thanked Management, Principal, IIC Coordinators and student members. In her initial part of the session, she started about general introduction about Business loan provided by government and also explain how to apply that government loan and benefits of DIC Loan which helps to know about the financial support by the government.

Benefits In terms of Learning/Skills/Knowledge obtained:

- As an entrepreneur, you have the freedom to work on your terms and set your own schedule. This flexibility allows you to balance work and personal life effectively.
- Entrepreneurship involves learning new things every day. Whether it's market trends, customer preferences, or industry developments, staying informed is crucial for success.
- Running your own business provides an opportunity to generate wealth for yourself and your venture.
- Successful entrepreneurs create value and extract it from researched opportunities.
    - Overcoming challenges and turning ideas into reality builds confidence. As you achieve milestones, your belief in your abilities grows.

Valedictory Function:

The feedbacks from the participants were collected. Mrs.D.Mangalambigai, IIC member delivered the vote of thanks.

Feedback:

- Entrepreneurship education plays a crucial role. When students receive formal or informal education about entrepreneurship, they gain insights into the challenges, skills, and mindset required. This education can positively impact their attitude by demystifying entrepreneurship.
- Positive experiences and role models can foster a favorable attitude, while negative perceptions may lead to skepticism. Encouraging awareness and providing relevant education can foster a positive mindset and inspire future entrepreneurs.

Session -I Photographs

Innagural Function

Session Handling

Welcome address

session –II Photographs

Honoring Chief guest

Discussions

1. 3/6/24
2. 3/6/2024

IIC Members

3/6/24

Vice President-IIC& HOD/EEE

03/6/2024.

President-IIC&Principal

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year 2023 - 2024

IEEE Student Branch – 16621 Activities

S. No	Title of the Event	Page No.
	JULY 2023	
1	IEEE Student Branch Meeting	4
	AUGUST 2023	
2	Internal Seminar on Basics of Emotional Intelligence	4
3	Awareness Programme for School Students on Robotics	4
4	National Level Training Programme on Innovative Project Development Using IoT	5
5	Internal staff seminar A fault tolerance and an optimal relay node selection algorithm for WSN using modified PSO	6
6	Internal Staff Seminar on Design Automation for Embedded Systems	6
7	Technical Quiz Series - Control Systems - 01	6
8	Webinar on Tips and Tricks to Succeed in Hackathon	7
	SEPTEMBER 2023	
9	Engineers' Day Celebration - Technical Quiz	8
10	Engineers' Day Celebration - Circuit Making	8
11	Engineers' Day Celebration - Code Debugging	8
12	FDP on Microsoft Power BI , Anaconda Tools and IBM Congos Analytics for Business Analytics and Data Science	9
13	Orientation Programme on Arduino Programming	10
14	Seminar on Evolution of Issues in Distributed System : A Systematic Review	10
15	Seminar on Hybrid Common-mode EMI Filter Design for Electric Vehicle Traction Inverters	10
16	Study of PD Signatures in Transformer using Lightning Impulse Voltage Analysis	11
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17	Technical "Connections"	12
18	Webinar on Essential ML Techniques for Engineering Projects - A case study Approach.	12
19	One Day Workshop on Recent Trends in Electrical Engineering	13
20	Webinar on 5G Skilling	13
21	Tech PBC	14
22	National Level Technical Symposium Enigma2K23	15
23	National Level Technical Symposium Electrovibez	15
24	National Level Technical Symposium CISABZ'23	16
25	Mini Project Expo	16
26	IEEE Madras Section sponsored Three-Day National Level Workshop on Data Science & Machine Learning	17

27	Two Days Workshop on IoT with Arduino / Raspberry Pi	18
28	webinar on "Paper Writing and Patents"	18
NOVEMBER 2023		
29	Motivational Talk on Career Guidance	20
30	Motivational Talk on Unlocking the Power Within You	20
31	Staff Seminar on Load Balancing framework for cross region tasks in cloud computing	20
32	Staff Seminar on Emerging Technologies	21
33	Workshop on Cloud Computing (AWS)	21
34	Technical Quiz Series - Control Systems	22
35	Technical Quiz - VLSI	22
36	Student Branch Meeting	22
DECEMBER 2023		
37	Awareness Programme on Women's Safety in Society	23
38	Student Branch Meeting	23
39	IEEE Spectrum Talk on IBM Quantum Computing	24
40	Energy Conservation Day - Technical Quiz	24
41	Seminar on Development of a Battery Management system with special focus on capacity Estimation and Thermal Management	25
42	IEEE Spectrum Talk on The Rise of Floating Wind Power : Advancements and Challenges	25
43	IEEE Spectrum Talk on AI Powered Micro Display for Eyesight	26
JANUARY 2024		
44	Poster Design Competition	27
45	IEEE SB 16621 - EXECOM Meeting – I	27
46	IEEE Spectrum Talk on Commercial Development of Humanoid Robots in Logistics	28
FEBRUARY 2024		
47	Orientation Programme - CSE	29
48	Orientation Programme - ECE	29
49	Student Branch Meeting -1	29
50	Spectrum Talk on Recent Trends in Agrivoltaics	30
51	Awareness Programme for Farmers	30
52	Outreach Programme on Awareness of IoT	31
53	Spectrum Talk	32
54	National Science Day 2024	32
MARCH 2024		
55	WIE - Officer Bearers Meeting	33
56	IEEE Spectrum Talk on The Global Project to Make a General Robotic Brain	33
57	Inauguration of WIE AG	33
58	AI Tools for Academic Research, Writing, and Publishing	34
59	International Women's Day Celebration	34
60	Orientation Programme	35
61	Internal staff seminar - Cloud Computing Security and Deep Learning: An ANN Approach	36

62	Outreach Programme for School Students on Microsoft Office	36
63	Career Guidance Programme	36
64	Workshop on Full stack Development	37
65	Online Spectrum Talk on Future of Generators	37
66	IEEE YESIST'12 PRELIMS	38
67	GATE Awareness	38
68	Career Guidance Programme	39
APRIL 2024		
69	Professional Development Session on Office Management	40
70	IEEE Spectrum Talk on What if we build a really Big Computer	40
71	Webinar on Communication Technologies and its real time Applications using Edge Computing Technologies	41
72	Internal Seminar on Solutions of soil Moisture Sensing with RFID for Landslide Monitoring	41
73	Online Spectrum Talk on MATLAB for AI	42
74	Workshop on Emerging Techniques in Electrical Engineering	42
MAY 2024		
75	Two Day Techie Fest	44
76	International Conference on Recent Trends in Engineering and Science (ICRTES'24)	44
77	Kings Project Expo'24	45
78	Session on Passion to Progress : My IEEE Member Experience	46
79	Two Days Workshop on Cyber Security : Safeguard Your Digital World	46
80	Online Spectrum Talk on Power Sensor for Agricultural IoT System	46
81	Webinar on How to Write a Grant Proposal in an Effective Manner	47

11/6/24

Coordinator

11/6/2024

SB Counsellor / Principal

Principal
Kings College of Engineering
(Autonomous)
Punalkulam - 613 303

JULY 2023

1. Student Branch meeting for the academic year 2023 – 2024 (odd semester) was held on 31.07.2023. Dr. J. Arputha Vijaya Selvi, SB Counsellor presided over the meeting. After a brief discussion, the following members were nominated as office bearers: Chair: Mr. Ranjith M; Treasurer: Ms. Swathi V; Vice Chair:Ms. Nithyashri B.M.; Webmaster: Mr. Muruganantham P and Secretary: Ms. Abikayil Aarthi S.

AUGUST 2023

1. IEEE STB 16621 in association with KINGS Project Center organized an Awareness Programme for School Students on Robotics on 18.08.2023 at Swami Dayanandha Nursery & Primary School, Thanjavur. The training mainly focused on encouraging school students in the field of robotics and automation. The students were introduced to different types of robots and their applications. The club members taught the students about the different parts and equipment's required to develop robots. The highlight of the programme was the hands-on training session, where students worked in small groups to assemble simple electronics projects. Step-by-step instructions were provided, allowing participants to construct their electronics project and gain insight into electronics and mechanical engineering principles. This workshop was coordinated by Dr. P. Narasimman, AP/EEE, Mr. R. Sathyaraj, AP/ECE and Mr. P.Jaya Prasad, Student Volunteer, STB 16621.

2. National Level Training Programme on Innovative Project Development Using IoT

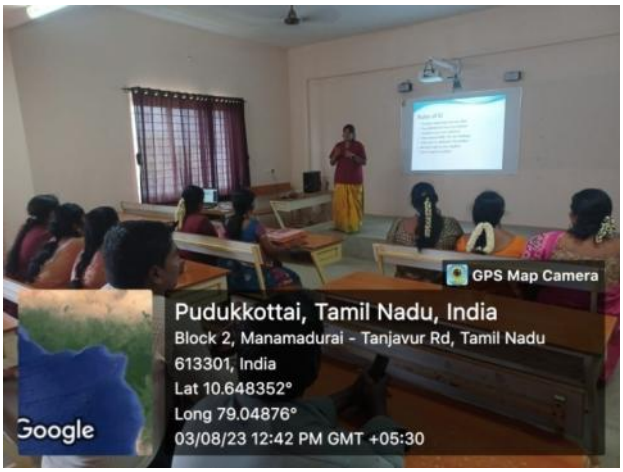
   National Level Training Programme on "Innovative Project Development using IoT" was organized on 21st August 2023 & 22nd August 2023. Ms.U.Jeyamalar, AP/ECE welcomed the gathering and introduced the resource persons. Mrs.N.Mangaiyarkarasi, HOD/ECE delivered the Inaugural address. In her speech, she motivated the students towards innovation and how the trainings help students to implement their ideas. **During session 1**, Ms.H.Hajitha Banu, Embedded Specialist, Jadayu Enterprises presented a brief technical note on the fundamentals of embedded system, features of Microprocessors, Microcontrollers and interfacing devices. She demonstrated how arduino development platform is used for a typical embedded application. **During the session 2**, she gave a complete description about the arduino pin configuration,

architecture and interfacing methods. She explained various blocks in the arduino development kit, she also demonstrated the students about Embedded C Programming using Arduino IDE.

During session 3, Mr.T.Jeyaseelan, AP /ECE, demonstrated the students with LCD interfacing and also trained the students, how to read temperature and humidity data from DHT11 sensor and display the sensor data's in the LCD display. **During session 4,** Dr.P.Narasasimman, AP /EEE, delivered about the wireless connectivity interface for arduino. He explained the pin details of ESP8266 and the specifications of wi-fi module. During this session he created a small android based application and demonstrated the on and off control of LED and motor. Finally he outlined typical project ideas and explained the methods for implementing these ideas. Students queries were addressed during the interactive sessions. Mr.R.Thandayuthapani, AP/ECE, delivered Vote of Thanks. Certificates were distributed by Mrs.N.Mangaiyarkarasi, HoD/ECE. Totally 39 external participants have enthusiastically participated in this workshop.

3. Seminar on Emotional Intelligence

Department of CSE in association with IEEE STB 16621 organized a seminar on Emotional Intelligence on 03.08.2023. Ms.N.Dhamayandhi and Ms.B.Bavithra explained the basics of Emotional Intelligence, factors that affect the human mind. They have described about DISC assessment tool which analyzes the behavior of a person. A DiSC assessment also measures the values of a person's prioritize. The results explain the percentage of each style of a person are and what that means for how the person handle challenges, interact with others, approach life and how others perceive that person.

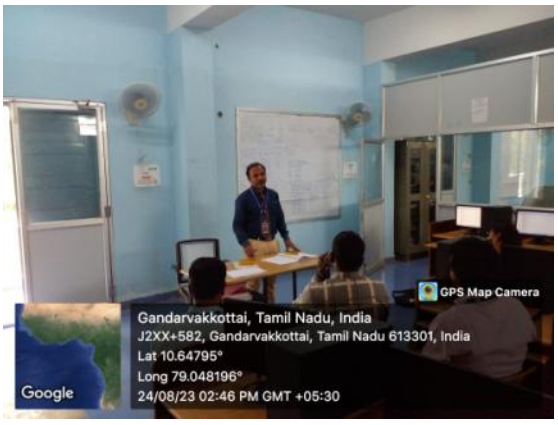


4. Seminar on A fault tolerance and an optimal relay node selection algorithm for WSN using modified PSO

   Department of CSE in association with IEEE STB 16621 organized a seminar on fault tolerance and an optimal relay node selection algorithm for WSN using modified PSO on 22.08.2023. Ms. K. Abinaya, AP/ CSE delivered lecture. She explained the concepts of Wireless Sensor Networks, need of fault tolerance in WSN and discussed various algorithms to achieve the fault tolerance.

5. Internal Staff Seminar on Design Automation for Embedded Systems

   Department of ECE in association with IEEE STB 16621 organized a seminar on Design Automation for Embedded Systems on 24.08.2023. Mr. T. Jeyaseelan, AP/ ECE delivered lecture.



6. Webinar on Tips and Tricks to Succeed in Hackathon

   Multimedia Club, Department of CSE in association with IEEE STB 16621 organized a webinar on Tips and Tricks to Succeed in Hackathon on 26th August 2023. Ms. K. Amirtha Lakshmi, System Engineer, TCS, Chennai and Ms. V. Mathumitha, Software Engineer, CEI, Chennai delivered lectures. During the session, they shared their experiences how they won in the hackathon. At the end of the session, students gained awareness about identifying and prototyping Smart India Hackathon problem statements A total of 56 students from CSE, ECE and EEE participated in the event.

7. Technical Quiz Series - Control Systems - 01

   Department of EEE in association with IEEE STB 16621 organized a Technical Quiz on Control Systems on 26th August 2023. 30 Students participated in the Programme and was coordinated by Dr. P. Narasimman, AP/EEE.

September, 2023

1. **Engineers' Day Celebration - Technical Quiz**

Research & Development Section in association with IEEE STB 16621 jointly organized Technical Quiz on 12.09.2023. Three rounds were conducted and 231 students participated in the event. Mr. Praveen kumar, IV EEE and Mr. Veerakumar, III Mech bagged the First Prize, Mr. Thirumurugan, IV CSE and Mr. Murugaraj, IV CSE bagged Second Prize. The event was coordinated by Ms. Abikayil Aarthi S, AP/CSE.

2. **Engineers' Day Celebration - Circuit Making**

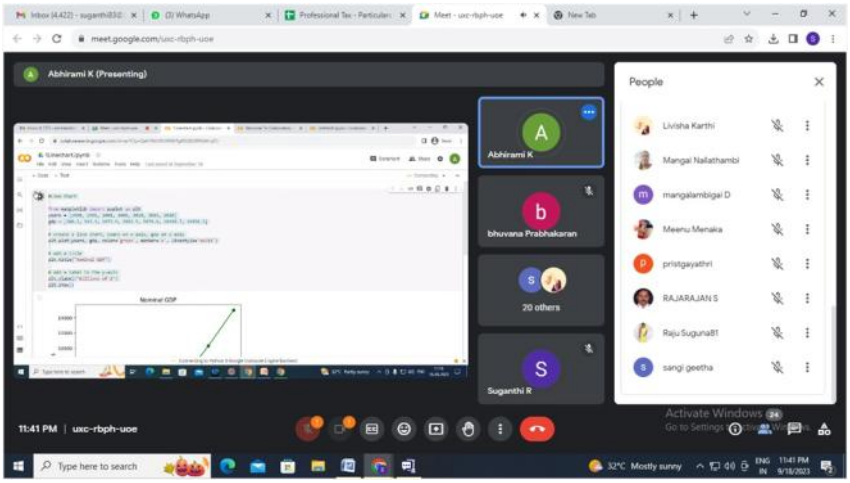
Research & Development Section in association with IEEE STB 16621 jointly organized Circuit Making on 12.09.2023. 23 students participated in the event. Mr. A.Yuvaraj, III EEE won First Prize, Mr. S.Sathish, IV EEE won Second Prize. The event was coordinated by Dr. Narasimman P, AP/EEE.

3. **Engineers' Day Celebration - Code Debugging**

Research & Development Section in association with IEEE STB 16621 jointly organized Code Debugging on 12.09.2023. 112 students participated in the event. Mr.Kumaresan.K.P and Mr. Manoj. M, of III CSE won First Prize, Ms. Roohi Shifa.M and Ms. Shalini.K, of III CSE won Second Prize. The event was coordinated by Dr. Pasupathi T, AP/ECE.

4. **FDP on Microsoft Power BI , Anaconda Tools and IBM Congos Analytics for Business Analytics and Data Science**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized an five days FDP on Microsoft Power BI , Anaconda Tools and IBM Congos Analytics for Business Analytics and Data Science from 19.09.2023 - 23.09.2023. On 19.09.2023, session-1 was handled by Dr.K.Abhirami, Assoc. Prof/CSE on the topic Introduction to Data Science & Business Analytics and session-2 was handled by Ms.S.Abikayil Aarthi, AP/ CSE on the topic Microsoft Power BI Data Fundamentals. On 20.09.2023 and 21.09.2023, session-1&2 were handled by Ms.P.Kaviya, AP/IT Kamaraj College of Engineering & Technology, Virudhunagar on the topic IBM Congos Analytics Tool. On 22.09.2023, Hands on session on Anaconda Navigator was handled by Mr.S.Rajarajan, AP/CSE and Hands on session on Hands on Session Microsoft Power BI Tool was handled by Ms.S.Abikayil Aarthi , AP/ CSE Ms.N.Dhamayandhi , AP/CSE. On 23.09.2023, in the forenoon, a Hands-on-session on Microsoft Power BI Tool was handled by Dr.K.Abhirami and Ms.R.Sugantha Lakshmi, AP/CSE. During the afternoon session, Ms.S.Puvaneswari, AP/CSE and Ms.R.Sugantha Lakshmi, AP/CSE handled the session with case study. The programme was coordinated by Ms.S.Puvaneswari, AP/CSE Ms.R.Sugantha Lakshmi, AP/CSE. Xx participated and 36 participants got benefitted.

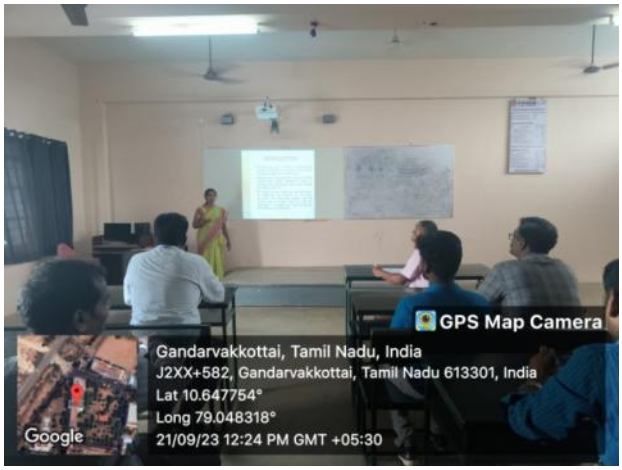


5. **Orientation Programme on Arduino Programming**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized an orientation Programme on Arduino Programming on 20.09.2023. Mr. T. Jayaseelan, AP/ECE delivered lecture. 40 participants participated in the programme.

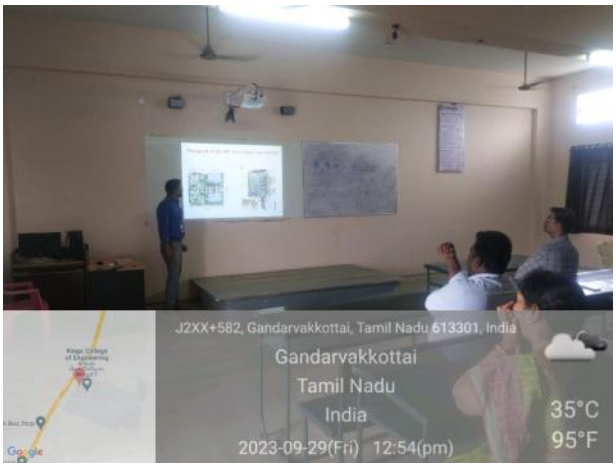
6. **Seminar on Evolution of Issues on Distributed Systems: A Systematic Review**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Evolution of Issues on Distributed Systems: A Systematic Review on 20.09.2023. Dr. A. Prabha, AP/EEE delivered lecture. In her lecture, she briefed on issues in distributed systems.



7. **Seminar on Hybrid Common-mode EMI Filter Design for Electric Vehicle Traction Inverters**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Hybrid Common-mode EMI Filter Design for Electric Vehicle Traction Inverters on 29.09.2023. Dr. P. Narasimman, AP/EEE delivered lecture, in his lecture, he briefed on EMI filter design for electric vehicle traction inverters.



8. **Seminar on Study of PD Signatures in Transformer using Lightning Impulse Voltage Analysis**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Study of PD Signatures in Transformer using Lightning Impulse Voltage Analysis on 30.09.2023. Dr. G. Suganya, AP/EEE delivered lecture, in his lecture, he briefed on PD Signatures in Transformers.

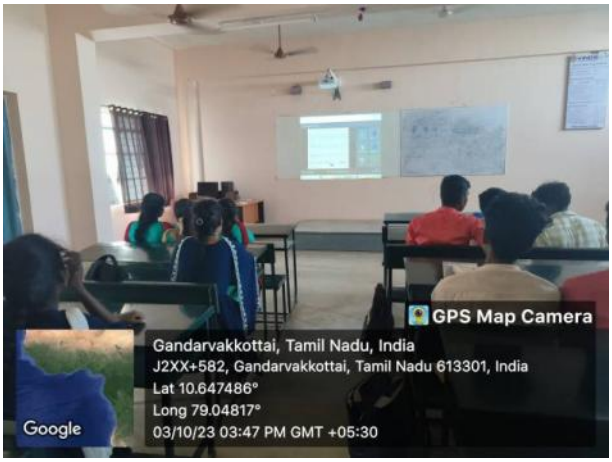
October, 2023

1. **Technical "Connections"**

   Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized an event named Technical Connections on 03.10.2023. The event was conducted with three rounds. Ms. Jaishree and Ms. Suruthi from IV year ECE won the First Prize. Winners of the event were appreciated with prizes and certificates. 52 students participated in the event. The event was coordinated by Ms. Eniyarasi and Ms. Swathi of III ECE.

2. **Webinar on Essential ML Techniques for Engineering Projects - A case study Approach.**

   IEEE STB 16621 organized a webinar on **Essential ML Techniques for Engineering Projects - A case study Approach** on 04.10.2023. Dr. G. Suganya, AP/EEE welcomed the gathering and introduced the resource person. Dr. K. Kannan, Professor, School of Computing, SASTRA Deemed University, Thanjavur was the resource person. In his lecture, the essentials of Machine learning and various machine learning techniques was presented. While concluding his lecture, he demonstrated a case study on how ML can be applied in various real-time applications. 39 students participated in this webinar.

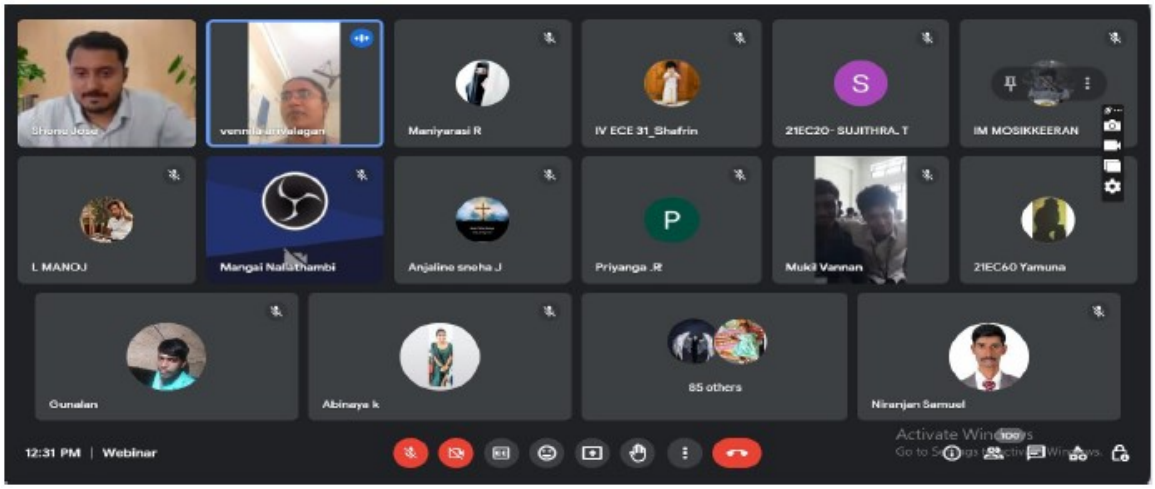


3. **One Day Workshop on "Recent Trends in Electrical Engineering"**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a **One Day Workshop on "Recent Trends in Electrical Engineering"** on 04.10.2023. **Dr. A.Prabha, AP/EEE** delivered welcome address. **Dr.S.Sivakumar,** Vice Principal delivered Presidential Address, in his address, he emphasized that this workshop will be a platform to gain more knowledge about the various technical skills for electrical engineers. He also insisted the students to have a clear idea about the recent trends in Electrical Engineering. **Session-1 was handled by** Dr.S.Sivakumar, Vice Principal on the topic "Introduction to MATLAB", In his lecture, he explained how MATLAB is used by millions of engineers and scientists to analyze data, develop algorithms, and create models. **Session-2 was handled by Dr.G.Suganya,AP\EEE on the topic "**Exploring High Voltage: Applications and Innovations". In her lecture, she briefed that High voltage engineering is a key technology used to ensure the power supply and also plays a major role in many technical sectors such as industrial manufacturing or the automotive industry. **Session-3** was handled by **Dr.A.Prabha, AP/EEE** on the topic, "Optimization and Intelligent Algorithms" In her lecture, she briefed on the optimization of a design and how optimization algorithm is executed iteratively by comparing various solutions till an optimum or a satisfactory solution is found. **Session-4** was handled by **Dr.P.Narasimman, AP/EEE on the topic "**Electrical Lighting Design and Calculation". In his lecture, he discussed the basic types of lighting in a room in order to accomplish Ambient or general lighting, Accent lighting and Task lighting. At the end of the session, feedback was collected from the students. Finally, Event coordinator Mrs.P.Thirumagal, AP/EEE delivered the vote of thanks.

4. **Webinar on 5G Skilling**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized a webinar on 5G Skilling on 04.10.2023. Mrs. R. Ponni, AP/ECE welcomed the gathering. Mrs. D.Vennila, AP/ECE introduced the resource person. In his lecture, he explained about the evolution of 5G. He also explained about the job roles in the 5G technology sector in India, Such as Network Engineer, System Integrator, Solutions Architect, Software Developer, Data Analyst, Network Security Specialist and Product Manager. 101 students participated in the programme and got benefitted.



5. **Tech PBC**

As part of IEEE day, Department of Computer Science and Engineering in association with IEEE STB 16621 organized an event named **TECH PBC** (Pictorial, Bingo, Chardes) on 06.10.2023 involving 74 teams from the departments of CIVIL, CSE, ECE, EEE &MECH. The event took place on three levels. Five teams made it to the final round out of 74 teams. R.Veerakumar & Team from MECH won I Prize, S.Reena & Team from CSE won II Prize, S.Ananthi & Team from CIVIL, S.Divakar & Team from EEE and S.Saravanana & Team from ECE won III Prize.

6. **National Level Technical Symposium Enigma2K23**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized National Level Technical Symposium Enigma2K23 on 10.10.2023. The session started with the prayer song Tamizhthai vazhthu. Lighting the holy lamp is considered as an important ceremony. The Chief Guest, Secretary, Principal, Vice Principal and a Participant from the student are invited to light the lamp. Our Secretary Dr.R.Rajendran honored the chief guest Dr.M.Venkata kirthiga, Professor, NIT, Trichy with a memento. Dr.R.Rajendran, Secretary, Kings College of Engineering delivered his presidential address. Dr.J.ArputhaVijaya Selvi, Principal of KCE delivered her Inaugural address. Dr.S.Sivakumar, Vice Principal, KCE delivered his Special Address. The symposium souvenir has been released by chief guest and received by HOD/EEE. Mr.M.Mukesh of IV Year EEE, introduced the chief guest. Chief Guest address was given by Dr.M.Venkata kirthiga, Professor, NIT, Trichy. The valedictory session started with feedback from the participants. The winners for the paper presentation were awarded with the cash prize. Finally, vote of thanks was delivered by Mr.C.PraveenKumar of final year EEE.

7. **National Level Technical Symposium Electrovibez**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized National Level Technical Symposium Electrovibez on 10.10.2023. The session started with the prayer song, Holy lamp was lit by the dignitaries. Our Secretary Dr.R.Rajendran honored the chief guest **Dr M Senthil Sivakumar,** Assistant Professor, Indian Institute of Information Technology, Tiruchirappalli. Dr.R.Rajendran, Secretary, Kings College of Engineering delivered his presidential address. Dr.J.ArputhaVijaya Selvi, Principal of KCE delivered her Inaugural address. Dr.S.Sivakumar, Vice Principal, KCE delivered his Special Address. The symposium souvenir has been released by chief guest and received by HOD/ECE. Chief Guest address was given by **Dr M Senthil Sivakumar**. During the valedictory session feedback was collected from the participants. The winners for the paper

presentation were awarded with the cash prize. Finally, vote of thanks was delivered by student member.

8. **National Level Technical Symposium CISABZ'23**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized National Level Technical Symposium CISABZ'23 on 10.10.2023. Ms. B. Senthamizh Selvi, who currently serves as the Talent Acquisition Lead at Think Global Technologies Pvt. Ltd in Chennai was the chief guest. The chief guest offered valuable insights into the world of job interviews and the art of crafting compelling resumes. Her guidance was particularly beneficial to the students who were on the cusp of graduating and stepping into the job market. CISABZ'23 managed to attract the participation of nearly 200 students from different engineering colleges. . As the day drew to a close, the event concluded with a valedictory function, the certificates were distributed to the winners and participants. The symposium was ended with vote of thanks delivered by Ms. A.C.Arunothaya, Vice president of IV year CSE.

9. **Mini Project Expo**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized **Mini Project Expo** on 10.10.2023. **Mr. Swami Prabakaran,** Senior Software Engineer, Ejyle Technologies Pvt. Ltd., Bangalore acted as Jury for the expo. 16

Projects were displayed and 65 students participated in the expo. The event was coordinated by Mr. R.Thandayuthapani, AP/ ECE.

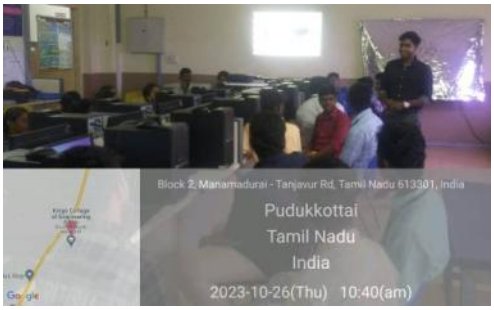
10. **IEEE MAS sponsored Workshop on "Data Science & Machine Learning"**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized **IEEE Madras Section sponsored A Three-Day National Level Workshop on "Data Science & Machine Learning"** from 18.10.2023 to 20.10.2023. On 18.10.2023, Inaugural function was graced by Dr. J. Arputha Vijaya Selvi Selvi, Principal & STB SBC. Dr.K. Abhirami, HOD(i/c)/CSE welcomed the gathering. Dr. J. Arputha Vijaya Selvi, delivered inaugural address, in her address, she stressed on the importance of IEEE membership and benefits to IEEE members. Also she stated the Data Science is a booming field and there is a large market open for Data Science and Machine Learning experts. Session-1 was handled by Dr. K. Lakshmi, Professor, Sri Manakula Vinayagar Engineering College, Puducherry. In her session, she briefed on Python programming and foundational statistics. Session-2 was handled by Mr.K.M.Arivu Chelvan, S/w Architect, E.K software solutions, Thanjavur. In his session, he briefed on NumPy and Pandas. Session-3 was handled by Dr.M.Brindha, Asst Professor, National Institute of Technology, Trichy. Her session brought a deep dive into data visualization. Session-4 was handled by Dr.S.Kanimozhi, Asst Professor, Vellore Institute of Technology, Vellore. During her session, she briefed on statistical analysis tailored for data. Session-5 was handled by Mr.S.Ramprakash, Teaching Fellow, UCE, Thirukkuvalai. In his session, he showcased real-world data science applications. Session-6 was handled by Mr.S.Dinesh Dhanabalan, Asst Professor, Arifa Institute of Technology, Esanoor and the session was an interactive hands-on session. Participants not only gained theoretical knowledge but also honed their practical skills, empowering them to tackle real-world challenges in the ever-evolving fields of data science and machine learning. The overall summary was dictated by Ms. S. Abikayil Aarthi, Convener of the programme. Feedback was collected from the participants. Certificate of Participation was provided to

all the Participants. Vote of Thanks was proposed by Ms. B. Bavithra, AP/CSE, KCE. The programme was attended by 94 participants from all over India.

11. **Two Days Workshop on IoT with Arduino / Raspberry Pi**

Center of Excellence in IoT in association with IEEE STB 16621 and Armada Industrial Automation organized **Two Days Workshop on IoT with Arduino / Raspberry Pi** on 26.10.2023 & 27.10.2023. Session-1 was handled by resource persons from Armada Industrial Automation, Thanjavur. During the session different types of sensors & IoT concepts were discussed. Session-2 was handled by Dr. T. Pasupathi. In his lecture, he discussed on Arduino basics & simple projects. Session-3 was handled by Dr. P. Narasimman. In his lecture, he handled Arduino based real- time projects using Tinkercad. Session-4 was handled by Mr. T. Jayaseelan. During his session, He demonstrated Arduino interface with different sensor and serial communication. 46 students participated in the programme and got benefitted. The event was coordinated by student coordinator Mr. P. Jayaprasad, III ECE.



12. **Webinar on "Paper Writing and Patents"**

Research & Development Section in association with IEEE STB 16621 organized **Webinar on "Paper Writing and Patents"** on 28.10.2023. Ms. Jayachitra Sekar, Asst. Professor, PSNA College of Engineering and Technology in Dindugal was the resource person. She began by discussing the fundamentals of academic paper writing, covering the structure, content, and organization of research papers. She provided practical tips on how to select suitable journals, write an abstract, and format references, among other key elements. Ms. Jayachitra Sekar's expertise in this area was evident, and her guidance was highly valuable

to the audience. Following the discussion on paper writing, Ms. Jayachitra Sekar shifted her focus to patents. She explained the significance of patents in protecting intellectual property and the innovation process. Ms. Jayachitra Sekar detailed the patent application process and highlighted its legal and commercial implications. Her comprehensive explanation shed light on the relevance of patents to researchers, inventors, and professionals in various fields.

November, 2023

1. **Motivational Talk on Career Guidance**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Motivational Talk on Career Guidance** on 01.11.2023 at Government Boys Higher Secondary School, Budalur, Near Thanjavur. Mrs. R. Sugantha Lakshmi, AP/CSE addressed the students. In her lecture, she shared the tips to excel in their higher education and career. 80 students participated in the programme and got benefitted.

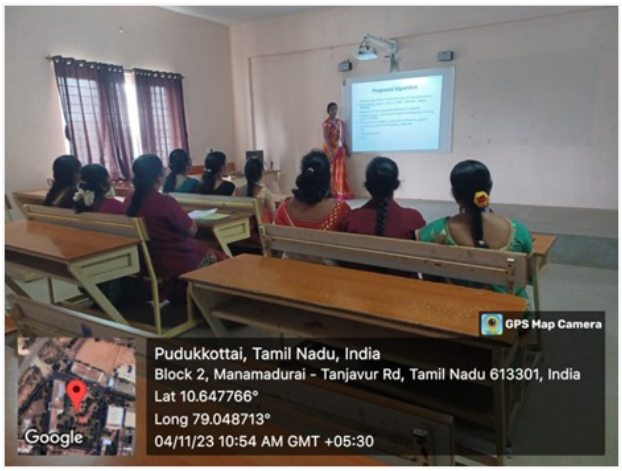
2. **Motivational Talk on Unlocking the Power Within You**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Motivational Talk on Career Guidance** on 01.11.2023 at Government Girls Higher Secondary School, Budalur, Near Thanjavur. Mrs.D.Mangalambigai, AP/CSE addressed the students. 150 students participated in the programme and got benefitted.

3. **Staff Seminar on Load Balancing framework for cross region tasks in cloud computing**

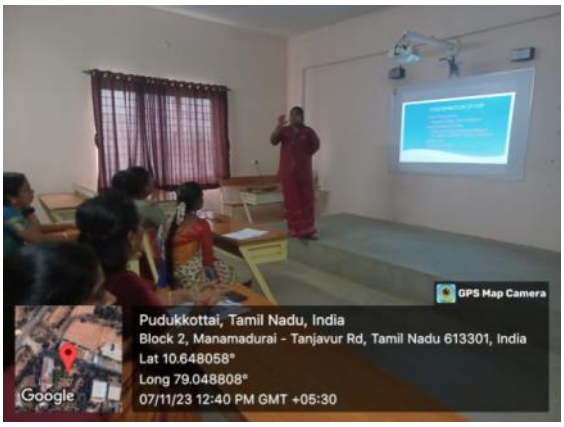
Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Seminar on Load Balancing framework for cross region tasks in cloud computing** on 04.11.2023. Ms.B.Sangeetha, AP/CSE delivered lecture. In her lecture, she presented a load balancing framework designed to manage and distribute tasks across

multiple regions in cloud computing environments. The framework aims to optimize resource utilization, enhance fault tolerance, and improve overall performance by intelligently distributing tasks across different regions. 12 staff members attended the seminar.



4. **Staff Seminar on Emerging Technologies**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Seminar on Emerging Technologies** on 07.11.2023. Ms.S.Abhikayil Aarthi, AP/CSE delivered lecture. In her lecture, she briefed on the various areas in the emerging technologies. In Design Thinking Starter, we adopt Empathy, Define, Idea and Prototypes. During the Project Management Phase, Collection of data, Analysis, Building of Prototypes, Prediction, Testing and Feedbacks. Also discussed about Cyber Security and AI Technologies. 13 staff members attended the seminar.



5. **Workshop on Cloud Computing (AWS)**

Department of Computer Science and Engineering organized a Workshop on **"Cloud Computing with Amazon Web Services (AWS)"** on 14.11.2023. **Dr. T. Avudaiappan,** AWS- Certified Solution Architect, Associate Professor, K. Ramakrishnan College of Technology, Tiruchirapalli was the resource person. The workshop provided a comprehensive overview of cloud concepts, AWS services, and certification courses on

cloud. The interactive sessions and hands-on exercises contributed to a comprehensive learning experience. 70 students participated in the programme and got benefitted.

6. **Technical Quiz Series - Control Systems**

Department of EEE in association with IEEE STB 16621 organized Technical Quiz Series - Control Systems on 14.11.2023. 25 students participated in the quiz. The event was coordinated by Dr. P. Narasimman, AP/EEE.

7. **Technical Quiz – VLSI**

Department of ECE in association with IEEE STB 16621 organized technical quiz on VLSI on 22.11.2023 between 05:00 p.m. and 07:00 p.m. 44 students participated in the quiz. The event was coordinated by Dr. T. Pasupathi, AP/ECE.

8. **Students EXECOM meeting**

IEEE Student Branch EXECOM meeting was organized on 22.11.2023 between 01.15 p.m. and 01.45 p.m. Dr. J. Arputha Vijaya Selvi, SBC presided over the meeting. Ms. B.M. Nithyashri, Vice Chairman, STB 16621 welcomed the members. Ms. Abikayil Aarthi S, Secretary briefed on the Action Plan for the year 2024 and conduct of membership development drive.

December, 2023

1. **Awareness Programme on Women's Safety in Society**

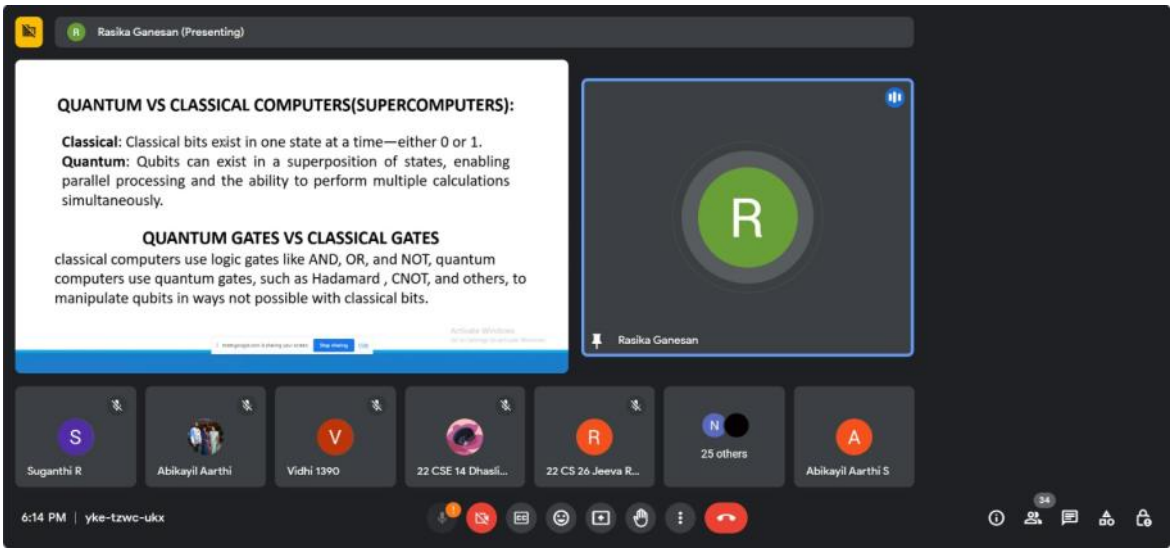
Women's cell and IEEE jointly organized by awareness session on **"Women's Safety in Society**" to girl students. **Dr.A.Prabha,** Assistant Professor, Kings College of Engineering, Thanjavur acted as resource person, on 01st December 2023 from 11.00 a.m. -12.30 p.m. at Pallava Hall. The resource person insisted the students to follow parents' guidance. Also she pointed out intuition is a powerful weapon it works and save every one. Teenage is golden age because in this stage the future is built. So she asked the students to focus on developing skills. She insisted the students to practice yoga and Meditation. Training our mind in a right direction will help us to lead a peaceful life. Self discipline and safety are like two sides of a coin.

2. **Student Branch Meeting**

IEEE Student Branch meeting of STB 16621 was held on 08.12.2023 by 10:00 a.m. at Pallava Hall. Ms. B.M. Nithyashri, Vice Chair and III CSE student welcomed the gathering. Dr. J. Arputha Vijaya Selvi, IEEE SB Counselor briefed on the activities carried out by the branch and importance on IEEE membership. Ms. S. Abikayil Aarthi, Secretary STB 16621 listed out the future plans for the year 2024. Around 50 students attended the meeting. Ms. xxx delivered vote of thanks.

3. **IEEE Spectrum Talk on IBM Quantum Computing**

IEEE STB 16621 organized a Spectrum Talk on IBM Quantum Computing on 08.12.2023. Ms. G.Rasika, II CSE student delivered lecture. In her lecture, gave an introduction to Quantum computing, that utilizes the principal of quantum mechanics to perform computation whereas classical computers use bits to represent information as 0's and 1's. Also she quoted that quantum computers gives faster and accurate results than classical computers in solving the hardest problems. While concluding she listed the specialty in IBM's quantum computer using ZNE technique and by using this technique they reduced the issues in quantum computing. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. 44 students participated and got benefitted. Ms. B.M. Nithyashri and Ms. J. Keerthana of CSE department acted as Student volunteers.

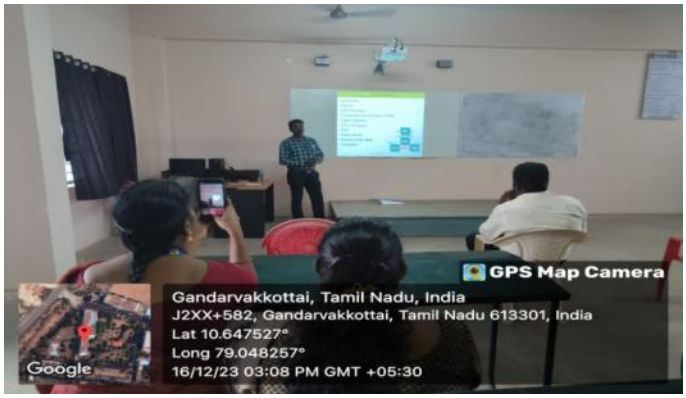


4. **Energy Conservation Day - Technical Quiz**

Department of EEE in association with IEEE has organized Technical Quiz through Google forms from 14th to 18th December, 2023. Quiz comprised of 25 questions and 2 points were awarded for each correct answer. 183 students participated in the programme. Ms. Abinayasri K, II Year Civil Engineering bagged I position, Mr. AJAY, IV Year ECE bagged II position and Ms. Abhiraami SP, I Year from KPR Institute of Engineering and Technology bagged III position. Mr. J. Arokkiaraj, AP/EEE and Mr. S.R. Karthikeyan, AP/EEE coordinated the event.

5. **Seminar on Development of a Battery Management system with special focus on capacity Estimation and Thermal Management**

   Department of EEE in association with IEEE has organized Internal Seminar on **"Development of a Battery Management System with Special Focus on Capacity Estimation and Thermal Management"** on 16.12.2023. During his session, he started with basic Introduction about converter topologies and the importance of Electric and Hybrid Electric vehicles. He pointed out that, the large number of automobiles in use around the world has caused and continues to cause serious problems of environment and human life. Air pollution, global warming, and the rapid depletion of the earth's petroleum resources are now serious problems. Electric Vehicles (EVs), Hybrid Electric Vehicles (HEVs) and Fuel Cell Electric Vehicles (FCEVs) have been typically proposed to replace conventional vehicles in the near future.



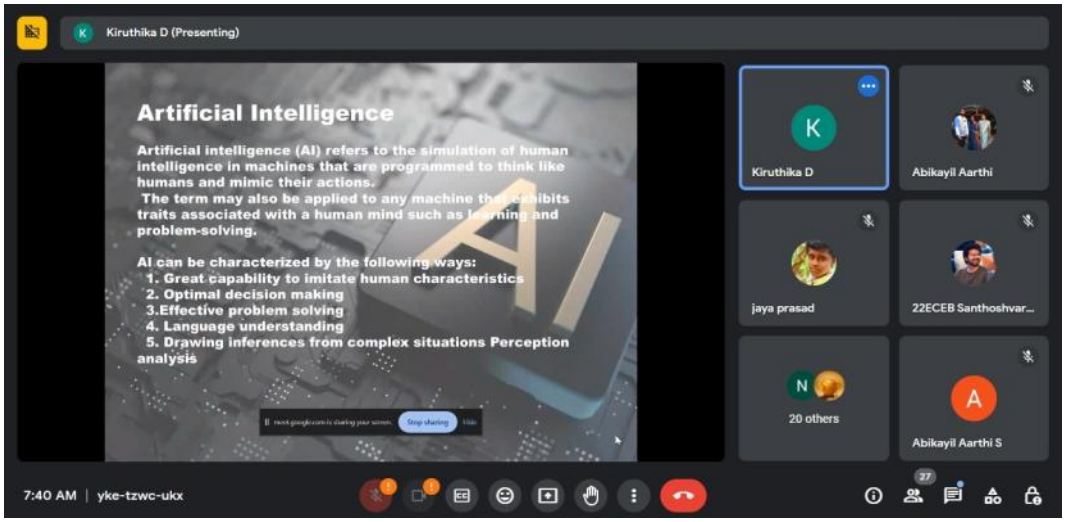
6. **IEEE Spectrum Talk on The Rise of Floating Wind Power: Advancements and Challenges**

   IEEE STB 16621 organized a Spectrum Talk on **The Rise of Floating Wind Power: Advancements and Challenges** on 20.12.2023. Ms. P Priya Niranjani, II EEE student delivered lecture. In her lecture, she briefed on the significance of harnessing wind energy over deep waters as well as overview of India's initiatives and plans in the floating wind power project. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. 53 students

participated and got benefitted. Ms. Sivasangari G and Ms. Abinaya M from EEE department acted as student volunteers.

7. **IEEE Spectrum Talk on AI Powered Micro Display for Eyesight**

IEEE STB 16621 organized a Spectrum Talk on **AI Powered Micro Display for Eyesight** on 29.12.2023. Mr. P. Jaya Prasad, welcomed the gathering. Ms. Kiruthika D, II ECE student delivered lecture. In her lecture, she briefed the application of AI in the area of biomedical engineering. The design perspective of micro display for eyesight using AI and the challenges are explained. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. Members of student branch and 45 students from CSE, ECE and EEE departments participated and got benefitted. Mr. Ranjith M proposed vote of thanks. Mr. Ranjith M, IV ECE and Mr. P. Jaya Prasad, III ECE acted as student volunteers.



January, 2024

1. **Poster Design Competition**

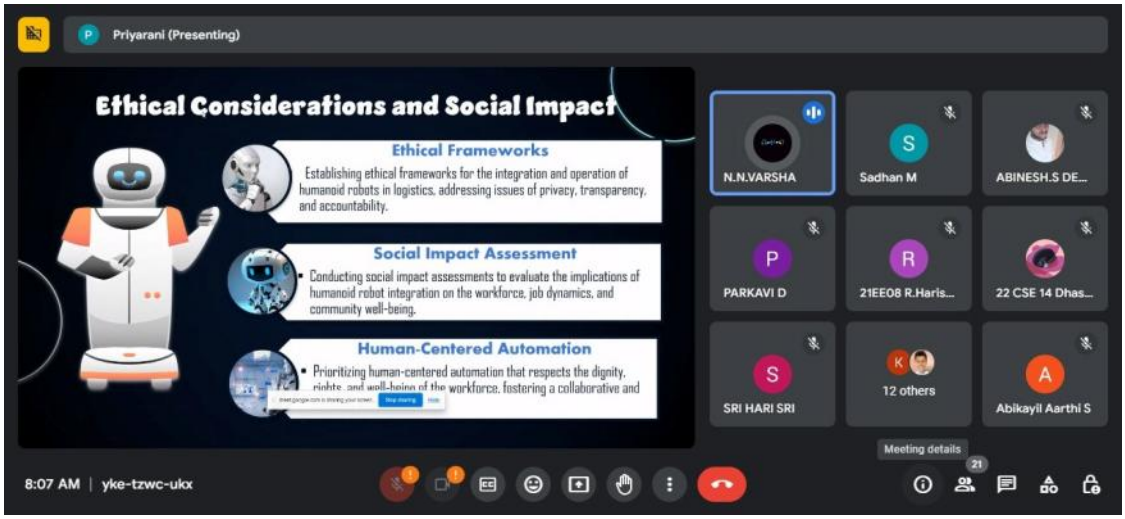
IEEE STB 16621 organized **Poster Design Competition** on the theme IEEE Banner Designing from 17.12.2023 to 05.01.2024 through Google forms. 10 participants submitted their entries. Juries selected three contestant based on design and creativity: First Position, Mr. K. Suresh, Third Year, Dept. of Mech, Second Position Mr. K. Akash, First Year, Dept. of CSE and Third Position Mr. S. Hasidhikshana, Second Year, Dept. of ECE. Special Mentions Mr. C. Veeramani, First Year, Dept. of CSE - AI & DS. They were awarded with certificate of appreciation. Ms. B.M. Nithyashri and Ms. J. Keerthana of CSE Department acted as student volunteers.

2. EXECOM Meeting – I

Executive Meeting of the STB 16621 was held on 12.01.2024. Dr. J. Arputha Vijaya Selvi presided over the meeting. Ms. B.M. Nithyashri, Vice Chairman welcomed the EXECOM members and briefed the plan for the first quarter of the year 2024. SB Counselor insisted the office bearers to involve volunteers in SB activities and concentrate more on extension activities. Also she approved the plan presented by the Vice Chairman. Ms. Abikayil Aarthi S, Secretary proposed vote of thanks.

3. IEEE Spectrum Talk on **Commercial Development of Humanoid Robots in Logistics**

Department of Computer Science and Engineering in association with IEEE STB 16621 is organizing IEEE Spectrum Talk on **Commercial Development of Humanoid Robots in Logistics** on 26.01.2024 between 06:00 p.m. and 07:00 p.m. Ms. B.M. Nithyashri, SB Chairperson, welcomed the gathering. Ms. B. Priyarani & Ms. N.N.Varsha, IV CSE student shared their views. 27 students participated in the event. Ms. Dhaslima shafreen proposed Vote of Thanks. Ms. G.Rasika & Ms. R V Atchaya acted as student volunteers.



February, 2024

1. **Orientation Programme – CSE**

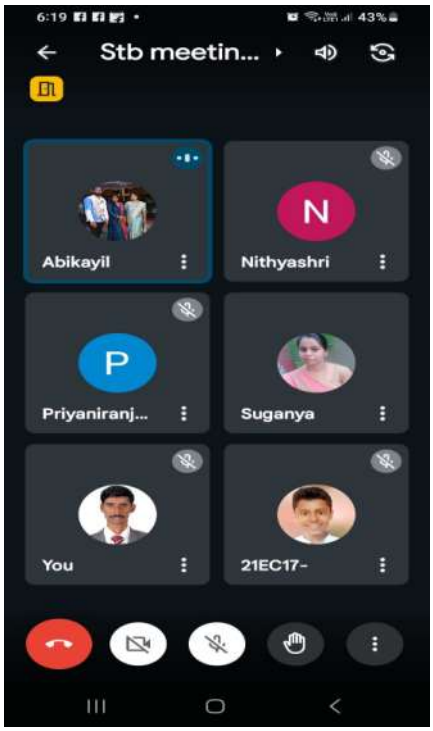
Department of Electronics and Communication Engineering organized orientation programme on 01.02.2024. The session was handled by Ms. S. Abikayil Aarthi, AP/CSE cum Secretary IEEE Student Branch. In her lecture, she narrated that IEEE membership has benefits including venues and tools for members to network with people across the globe and acquire leadership skills by organizing events. Also, she listed out the various funding schemes in IEEE. Around 60 students participated in the event.

2. **Orientation Programme – ECE**

Department of Electronics and Communication Engineering organized orientation programme on 01.02.2024. During the session-1, Dr. T. Shanthi, Assoc. Prof/ECE delivered a lecture on Emerging Trends in Networking. In the session-2, Mrs. Shyamala, CADD center, Thanjavur gave a Talk on Artificial Intelligence and Machine Learning. In the session-3, Mrs. U. Jeyamalar, AP/ECE delivered a lecture on Introduction to Virtual Instrumentation. In the session-4, Mr.T.Jeyaseelan, AP/ECE gave a talk on Embedded Systems and IOT Design. During the session-5, Mr.S. Jagadish Kumar, CEO, Navil Software, Thanjavur gave a talk on Digital marketing. In this programme, 60 students participated in the programme and was coordinated by Mr.T.Jeyaseelan, AP/ECE.

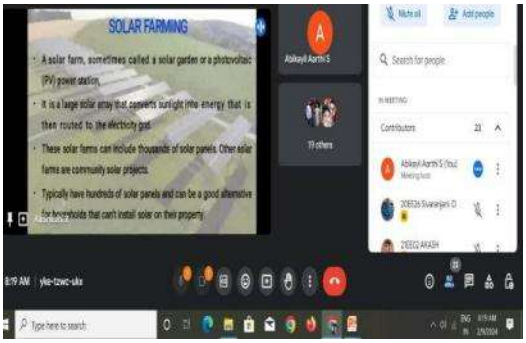
3. **Student Branch Meeting – I**

IEEE Student Branch meeting of STB 16621 was held on 06.02.2024 by 06:30 p.m. in online mode. Ms. B.M. Nithyashri, Chair and III CSE student welcomed the gathering. Ms. S. Abikayil Aarthi, Secretary STB 16621 listed out the plans for the month of February 2024.



4. **Spectrum Talk Recent Trends in Agrivoltaics**

Department of Electrical and Electronics Engineering organized online spectrum talk on Recent Trends in Agrivoltaics on 09.02.2024. Ms. R. Kanimozhi, IV EEE student delivered lecture. In her lecture, she briefed on the efforts to combine solar technology and farming that have been underway for a decade. Also, she briefed on Hildebrandt concept, that vertical solar panels can be used on farmland to collect energy both in the morning and evening, which counterbalances other solar plants. She also briefed on the India's largest vertical solar farm with a capacity of 120kW in Bengaluru by Tata Power Solar and Dell India. While concluding her talk, she mentioned that Gro Solar Energy has installed a 7 MW solar project in Maharashtra, where it has integrated solar panels with drip irrigation for crops like sugarcane and banana. The project has increased the crop yield and reduced the water consumption by 40%. Ms. G. Sivasankari and Ms. M. Abinaya acted as student volunteers.



5. **Awareness Programme for Farmers**

An awareness program on the **Welfare and Development of Farmers** was organized by IEEE Student Branch, Kings College of Engineering. Dr. J. Arputha Vijaya Selvi, Principal & IEEE SBC, Kings College of Engineering, welcomed all the special invitees and farmers to the program. Dr.

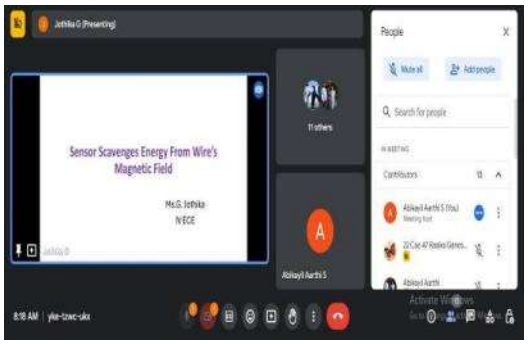
R. Rajendran, Secretary, KCE delivered a presidential address on the challenges faced by the farmers, their well-being and sustainable practices to improve agricultural productivity. The program was inaugurated by Dr. A. Velayutham, Principal, Dr. MS Swaminathan Agricultural College and Research Centre, Eachankottai. In his address, Dr. A. Velayutham, gave insights into the current state of agriculture, challenges faced by farmers and possible solutions for sustainable development. Dr. R.Umashankareshwari, Associate Professor of the Agricultural College highlighted various potential components like agricultural policies, technical interventions, financial assistance and market linkages. Agriculture Officer T. Kannan explained the farmers about the use of modern technologies in agriculture (Uzhavan App) in a very simple way that the farmers could easily understand. At the end of the program, Dr. S. Sivakumar, Vice Principal & Advisor IEEE STB delivered a vote of thanks. At the end of the programme, all the farmers were given 5 kg of natural fertilizer by SPIC Ltd., to encourage organic farming. The farmers happily expressed their gratitude and appreciated the college administration and the organizers. Around 250 farmers participated in the programme.

6. **Outreach Programme on Awareness of IoT**

Department of Electronics and Communication Engineering organized Outreach Programme on Awareness of IoT on 22.02.2024 at Little Flowers Higher Secondary School, Kumbakonam. The session was handled by Mr.T.Jeyaseelan, AP/ECE. During the session, he briefed on the simple projects using Raspberry Pi. Around 120 students participated in the programme.

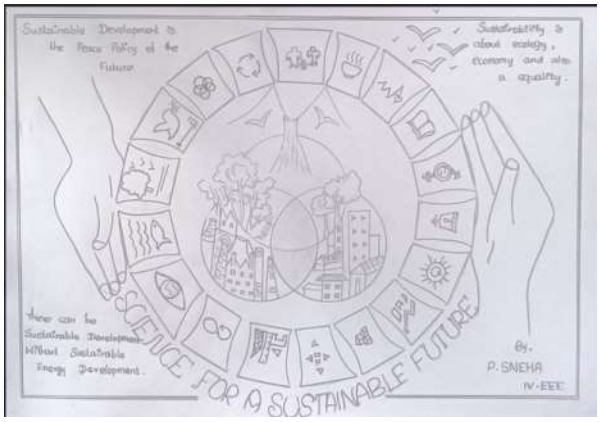
7. **Spectrum Talk**

Department of Electronics and Communication Engineering organized online spectrum talk on Energy from Wire's Magnetic Field for IoT Applications on 23.02.2024. Ms. G. Jothika, IV ECE student delivered lecture. In her lecture, she briefed on technique of generating energy from wire's magnetic field. The generated energy could be used for IoT Applications. Energy is generated by clamping energy harvester around a wire carrying current which uses electromagnet induction harvest energy from the magnetic field produced by the current. Mr. P. Jaya Prasad acted as student volunteer.



8. **National Science Day Celebrations**

In view of National Science Day Celebrations, Poster Design Competition on the theme **"Science for a Sustainable Future"** was organized in online mode from 20.02.2024 to 28.02.2024. 27 entries were received, based on the creativity and relevance to the theme two posters was selected. **Ms. P. Sneha** of IV EEE bagged the first prize and **Mr. S. Lexmadurai** of II CSE bagged the second prize. The winners were given shield and certificate of appreciation.



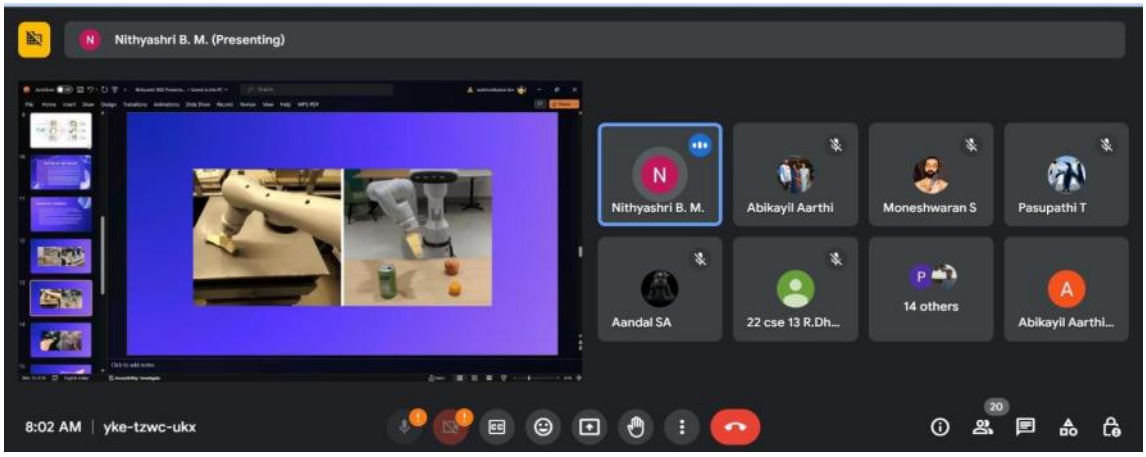
March, 2024

1. **WIE - Officer Bearers Meeting**

The IEEE Women in Engineering Affinity Group office bearers meeting was held on 01.03.2024. Dr. A. Prabha, Faculty Mentor presided over the member, and the office bearers were assigned the responsibilities, Ms. B. Priyarani, **Chairperson,** Ms. G. Rasika, **Vice Chair,** Ms. D. Kiruthika, **Secretary** and Ms .S .Abikayil Aarthi, **Treasurer.** The activities to be done during the year 2024 was discussed.

2. **IEEE Spectrum Talk on The Global Project to Make a General Robotic Brain**

IEEE Spectrum Talk on The Global Project to Make a General Robotic Brain was organized on 01.03.2024. Ms. B.M. Nithyashri, III CSE delivered lecture. In her lecture, she briefed on the concept of creating a general robotic brain referring to a global effort aimed at developing Artificial Intelligence (AI) systems that possess versatile cognitive abilities akin to those of the human brain. This ambitious project seeks to imbue robots with the capacity to perceive, learn, reason, and adapt to various tasks and environments, mirroring the broad spectrum of capabilities exhibited by humans. Key objectives of this endeavor include advancing machine learning algorithms, enhancing sensor technologies, and fostering interdisciplinary collaboration among experts in robotics, neuroscience, computer science, and related fields. Ultimately, the goal is to produce intelligent machines capable of autonomously performing complex tasks across diverse domains, from healthcare and manufacturing to exploration and service industries. Despite its promising potential, the project faces significant challenges, including ethical considerations, safety concerns, and the need for robust regulatory frameworks to govern the deployment and usage of advanced AI systems.



3. **Inauguration of WIE AG**

Women in Engineering Affinity Group of our college was inaugurated on 07.03.2024. Dr. A. Prabha, Faculty Mentor – WIE, welcomed the gathering. Dr. J. Arputha Vijaya Selvi, Principal & Faculty Advisor delivered the Inaugural Address. Ms. G. Rasika, Vice Chairman – SBA 16621 introduced the chief guest. Dr. T. Sree Sharmila, Chair- IEEE WIE Madras Section,

Chennai (Region -10) delivered a special address. In her address she explained how we can make use of IEEE –WIE for the development of our Engineering career and also explained about the available Scholarships and Awards under WIE. IEEE members of Kings College of Engineering attended the function. Ms. S. Abikayil Aarthi, Treasurer proposed the vote of thanks.

4. **Webinar on AI Tools for Academic Research, Writing, and Publishing**

Department of Computer Science and Engineering in association with R & D Section and IEEE STB 16621 organized a webinar on AI Tools for Academic Research, Writing, and Publishing. Dr. K. S. Sowmiya Rani, Cactus Communications, Mumbai delivered a lecture. In her lecture, she briefed on the various AI tools available for academic research writing and publishing. Also she demonstrated the usage of the tools that can be used for research writing. 69 participants participated in the webinar and got benefitted.

5. **International Women's Day Celebration**

Women's Cell of our institution in association with IEEE WIE AG organized the International Women's Day Celebration on 08.03.2024. Faculty members were sharing their experience and knowledge. Dr. J. Arputha Vijaya Selvi, Principal explained the importance of Education to girl child. Also she pointed out the impact of technology which affects the teenage students. Dr.T.Shanthi Professor & Head /ECE insisted the students participate in extracurricular activities. Dr.A.Abirami, Head /IQAC and Mrs.D. Mangalambigai, AP CSE explained about Health and how to maintain good health to lead a successful life. They

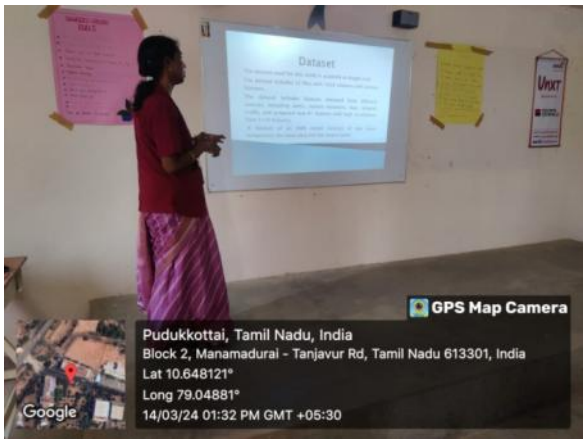
discussed the difficulties faced by them and how they converted them as stepping stones to success. Dr.A.Prabha, AP/ EEE suggested the students to be bold to face the challenges in life. Various competitions were conducted for the students, viz Singing, Dancing, Drawing and Speech.

6. **Orientation Programme**

Department of Electronics and Communication Engineering, Kings College of Engineering organized an Orientation Program for II year undergraduate ECE students on 13.03.2024. Ms. Shyamala, CADD center, Thanjavur presented a guest talk on "**Artificial Intelligence"** and her team member Mr.Sathish presented about "**Machine Learning".** Mr.R.Thandayuthapani, AP/ECE presented a Motivation Talk on **"Mini project".** Mr. W. Newton David Raj, AP/ECE presented a talk on **"Personal Health practices".** Mr.R.Balakrishnan, AP/ECE presented a talk on **"procedures and Benefits of Industrial Training and Internship".** Mr. T. Jeyaseelan, AP/ECE presented a Technical Talk on **"Embedded and IOT Systems Design".**

7. **Internal staff seminar - Cloud Computing Security and Deep Learning: An ANN Approach**

Department of Computer Science and Engineering organized internal staff seminar on **Cloud Computing Security and Deep Learning: An ANN Approach** on 14.03.2024. Ms.M. Vidhya, AP/ CSE delivered the lecture. In her lecture, she explored the intersection of two rapidly evolving fields, cloud computing security and deep learning. Also she briefed on the integration of Deep Learning with Cloud Computing Security and Key Components of the Approach. While concluding, Cloud Computing Security and Deep Learning: An ANN Approach represents a promising research direction to address critical security challenges in cloud environments through the application of advanced deep learning techniques.



8. **Outreach Programme for School Students on Microsoft Office**

Department of Computer Science and Engineering organized an Outreach Programme on Microsoft Office for School Students of Government High School on 14.03.2024. Ms. B. Sangeetha, AP/CSE and Mr.M. Arun, AP/CSE handled the sessions.

9. **Career Guidance Programme**

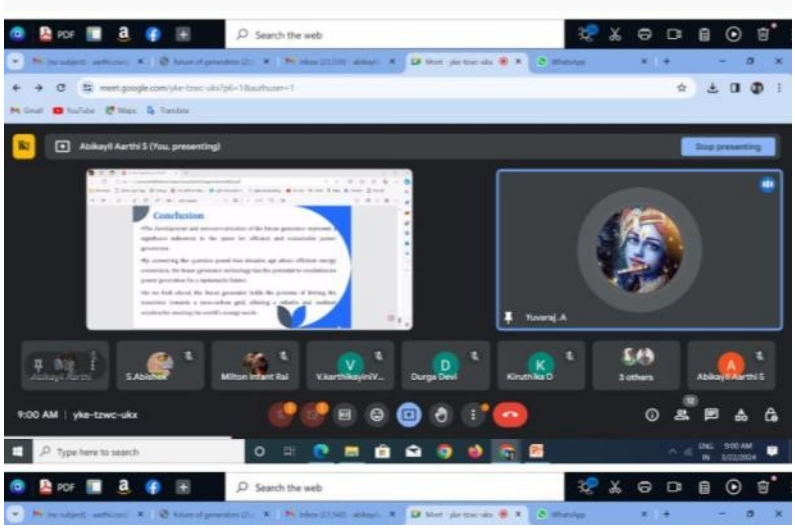
Career Guidance Programme for the students of Government Polytechnic College, Gandarvakottai was organized on 19.03.2024. Dr. R. Sarvanan, HOD/Civil briefed the students on the various career opportunities available in Government and Private Sector. Also, he briefed on the scope of higher education.

10. **Workshop on Full stack Development**

Department of Computer Science and Engineering organized a workshop on Full Stack Development on 22.03.2024. Mr. K. S. Guruprakash, AP/CSE, K. Ramakrishnan College of Engineering, Tiruchirappalli delivered a lecture. In his lecture, he briefed on comprehensive knowledge and practical skills in developing both the front-end and back-end components of web applications. Also he briefed on the Overview of Full Stack Development, importance and benefits of Full Stack Development in modern web development. The participants gained a structured learning experience with hands-on exercises, projects, and opportunities for interaction and collaboration, ultimately empowering participants to pursue careers or projects in Full Stack Development. Around 48 students participated in the programme.

11. **Online Spectrum Talk on Future of Generators!!!**

IEEE Spectrum Talk on Future of Generators !!! was organized on 22.03.2024. Mr. A. Yuvaraj, III EEE delivered a lecture. In his lecture, he described that linear generator can quickly switch between different types of green fuel, including biogas, ammonia, and hydrogen and Figuring out the generator's design. Also he briefed on how power generation using the linear generator is affordable and the journey how Linear generation reached the real world.

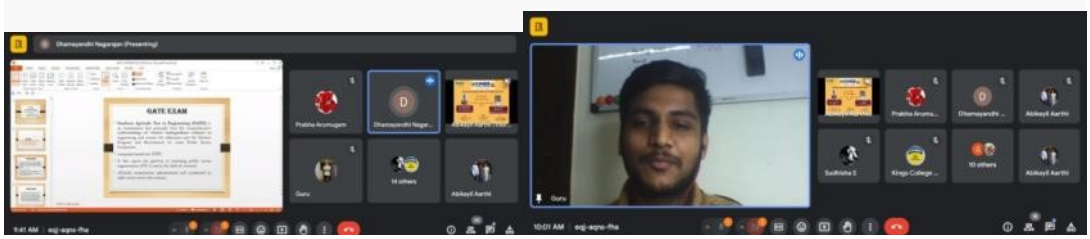


12. **IEEE YESIST'12 PRELIMS**

The **YESIST12** 2024 Prelims was hosted by **Kings College of Engineering**. The event brings together young minds from diverse backgrounds to collaborate, innovate, and create solutions that have a positive impact on society. The prelims was declared open at 09:30 a.m. and the juries addressed the participants both in online and offline mode. In the project expo,**41 batches presented their ideas including 04 from the host institution.** In the forenoon session, 24 batches were screened and remaining batches were screened in the afternoon session.The valedictory session was conducted and the results were announced. 3 tracks viz. innovation Challenge, Maker Fair, Special tracks were conducted. Based on the recommendation of the juries, **Abstract ID 6116 is selected as I position and 6092 as II position,** Alsothe juries appreciated the teams **6138, 3201, 3109, 6129,6101** for their work. Dr. M. G. Kavitha, HoD, Dept. CSE, University College of Engineering, Anna University, Pattukottai and Mr. P. Vinoth, Business Analytics Machine Learning, Indian Institute of Management, Tiruchirappalli acted as juries.

13. **GATE Awareness**

IEEE WIE AG organized a session on GATE Perspectives on 23.03.2024. Ms. N. Dhamayanthi, AP/CSE briefed on the Syllabus coverage preparing for examinations. Mr. K. S. Guru Swathik, PG Scholar, NIT Warangal, briefed on the various study materials to prepare for GATE. Also, he shared his experiences and challenges he faced during his preparation.



14. **Career Guidance Programme**

Career Guidance Programme for the students of Pattukottai Polytechnic College, Pattukottai was organized on 25.03.2024. Dr. R. Saravanan, HOD/Civil briefed the students on the various career opportunities available in Government and Private Sector. Also, he briefed on the scope of higher education. Mr. M. Arun, AP/CSE gave a talk on the recent advances in Artificial Intelligence and Machine Learning.

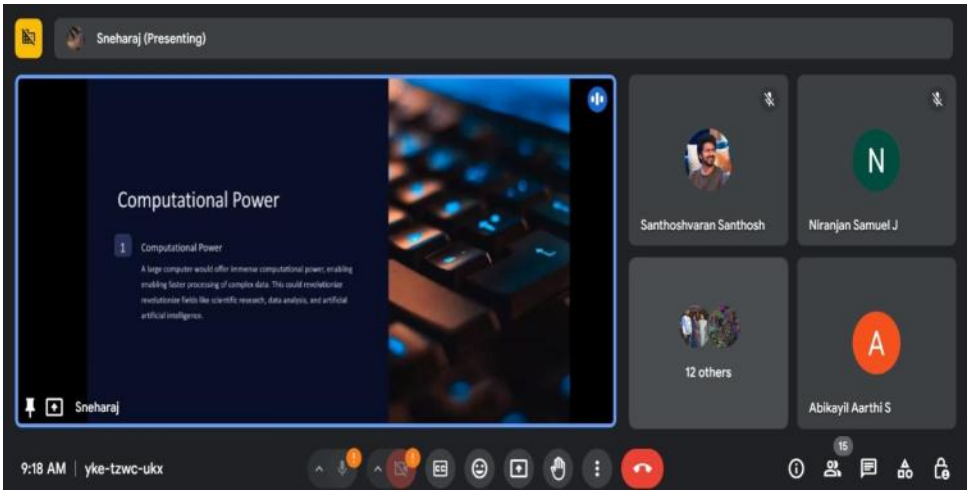
April, 2024

1. **Professional Development Session on Office Management**

   Training and Placement Cell in association with IEEE STB 16621 organized a professional development session on **Office Management** on 04.04.2024. Dr. T. Devasenathipathi, OD Consultant, Mentor, Siddha Vedha University, Director, SR Tech Training Academy, Coimbatore delivered the lecture. In his lecture, he briefed on the various strategies for effective office management. Around 20 staff members participated in the programme and was coordinated by Dr. B. Suresh Babu, Placement Officer.

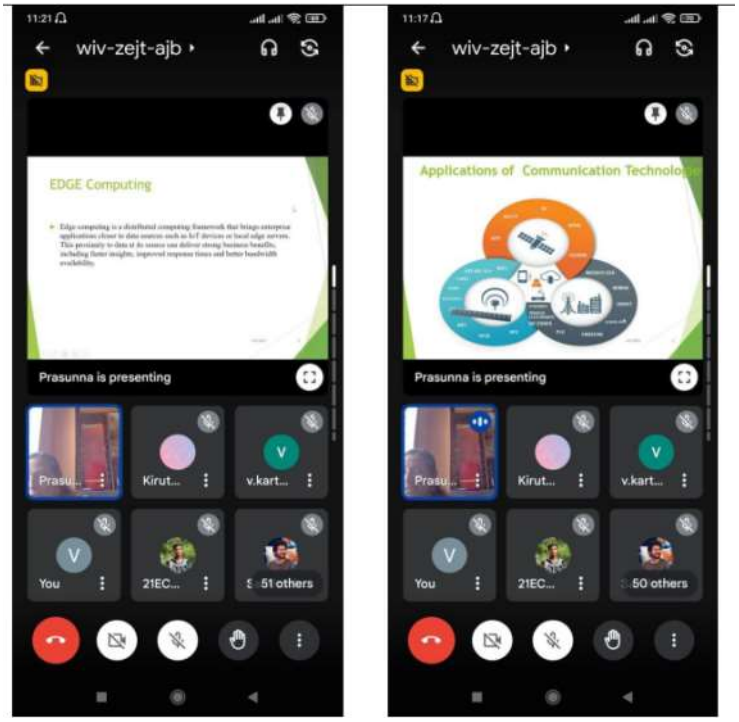
2. **IEEE Spectrum Talk on What if we build a really Big Computer**

   IEEE STB 16621 organized an IEEE Spectrum on **What if we build a really Big Computer** on 05.04.2024. Ms. Sneharaj, II year ECE student delivered the lecture. In her presentation, she explored the Impact of Building a Massive Computer. She also briefed on the 1. Computational Power, 2. Scientific Advancements, 3. AI Development, 4. Data Handling, 5. Energy and Environmental Impact. While concluding her lecture, she discussed the challenges & disadvantages and potential applications. The event was coordinated by student volunteers Mr. P. Jaya Prasad and Ms. D. Kiruthika of ECE department.



3. **Webinar on Communication Technologies and its real time Applications using Edge Computing Technologies**

Department of Electronics and Communication Engineering organized a webinar on Communication Technologies and its real time applications using Edge Computing Technologies on 09.04.2024. The resource person for the webinar was Dr. Vaddi Naga Padma Prasuna, Associate Professor, Atria Institute of Technology, Bangalore. Ms. D. Kiruthika, Student of II ECE and secretary - WIE SBA 16621, welcomed the resource person and the participants by the words. Mrs. D.Vennila, AP/ECE coordinator of this webinar gave the Introduction about the resource person. In her lecture, she explained about the various communication Technologies, The layered architecture of communication, Major communication protocols available, Edge computing technologies, Edge computing in real time applications etc. She emphasised the evolution of mobile networks and their characteristics. She gave an overview about the basic communication systems layered architecture, layered architecture protocols and compared the various protocols. 91 students participated in the programme and got benefitted.



4. **Internal Seminar on Solutions of soil Moisture Sensing with RFID for Landslide Monitoring**

Department of Electronics and Communication Engineering organized an Internal Seminar on **Solutions of Soil Moisture Sensing with RFID for Landslide Monitoring** on 13.04.2024. Mr.R.Thandayuthapani, AP/ECE delivered the lecture. In his lecture, he briefed on the UHF RFID tags for soil moisture sensing and described the construction of the soil moisture sensor. Also he compared the results obtained from the two types of sensors.

5. **Online Spectrum Talk on MATLAB for AI**

IEEE STB 16621 organized an IEEE Spectrum talk on MATLAB for AI on 05.04.2024. Ms. M. DhaslimaShafreen, II year CSE student delivered the lecture. In her presentation, she gave an introduction to the MATLAB environment and briefed on AI fundamentals. Also she briefed the various stages in AI based data processing namely, Data Preprocessing, Model Training, Performance Evaluation, Deployment and Integration and Optimization Techniques. While concluding her lecture, he discussed MATLAB essentials, challenges and solutions, performance optimization and future of AI and MATLAB. The event was coordinated by E. Karthikeyan and P. Marimuthu of CSE Department.

6. **Workshop on Emerging Techniques in Electrical Engineering**

Department of EEE in association with IEEE STB 16621 organized a workshop on Emerging Techniques in Electrical Engineering was organized on 30.04.2024. **Dr.S.Sivakumar**, Vice Principal delivered the Inaugural Address. He emphasized that; this workshop will provide more knowledge about the various technical skills and the future scope for electrical engineers. He insisted the students to ask more doubts and have a clear idea about the emerging techniques in Electrical Engineering. Session 1 on the title "Emerging Technologies in Electrical Engineering" was handled by **Dr.S.Sivakumar**, Vice Principal. In his lecture, he briefed on the emerging technologies in electrical engineering which involve advancements in battery technologies, supercapacitors, and even innovative solutions like gravity-based

energy storage. Session 2 on the title “Witricity” was handled by **Dr.A.Prabha**, AP/EEE, KCE. In her lecture, she briefed that WiTricity's technology allows wireless transfer of power over distance via magnetic resonance. Alternating Current (AC) electricity runs through an electromagnetic coil within a charging station to form an oscillating electromagnetic field. Session 3 was hands- on-session on RES Laboratory and was handled by **Mr.J.Arokiaraj** AP/EEE, KCE. During the session, the participants were demonstrated about renewable energy sources. Session 4 on the title RES and EV for Optical EM of microgrids with the aim of co2 emission reduction was handled by **Dr.S.Naveen** Prakash, AP/EEE, KCE. In his lecture, he detailed the different review works on microgrids network and their main focuses. Also, he illustrated hybrid renewable energy-based MG optimization using graphical construction, probabilistic approach, iterative technique, artificial intelligence (AI), dynamic programming, and linear programming. While concluding he discussed the optimized framework of MG operation. A total of 71 students participated and got benefitted.

May, 2024

1. **Two Day Techie Fest**

Department of CSE in association with IEEE Student Branch organized two days Techie Fest on 02.05.2024 & 03.05.2024. On day 1, session on UI & UX design, WebApp Development and Building a Machine Learning Model was organized. On day 2, design contest such as Mini Project Expo, Logo Designing and Coding Skill was organized. 121 students participated in the event. Ms. D. Mangalambigai, Mr. M. Arun and Mr. S. Rajarajan were the coordinators of the programme.

2. **International Conference on Recent Trends in Engineering and Science (ICRTES'24)**

The International conference on "Recent Trends in Engineering and Science –ICRTES 2024 was held from 02-05-2024 to 03-05-2024. The function was graced by the Chief Guest, Dr. B. Subramanian, Senior Principal Scientist, Central Electrochemical Research Institute, Karaikudi. The Keynote Speaker of the function was Dr. M. Revanasiddappa, Professor, PES University, Bangaluru. The special invitee of the function was Dr. Sivakumar Subramanian, Associate Professor, Electronics Engineering, Universiti Teknikal Malaysia, Melaka. Dr. J. Arputha Vijaya Selvi, Principal, delivered the Welcome Address. She welcomed the gatherings with the words also she emphasized that, this kind of conference will provide the opportunity for the students community as well as the participants to listen to the talk from eminent speakers. Dr. R. Rajendran, Secretary, delivered the Presidential Address. The conference proceedings were released by the Chief Guest Dr. B. Subramanian. The chief guest, Dr. B. Subramanian, delivered the inaugural address. He detailed about the Electroplating Technology and its material characterization. The special invitee of the function was Dr. Sivakumar Subramanian, Associate Professor, Electronics Engineering, Universiti Teknikal Malaysia, Melaka, has delivered the invited talk on "IoT Technology for Disaster Mitigation". The keynote address was given by Dr. M. Revanasiddappa, Professor, PES University, Bangaluru. Nearly 206 research articles were presented by the students, research scholars and faculty members from various reputed Institutions across India and abroad.

3. Kings Project Expo'24

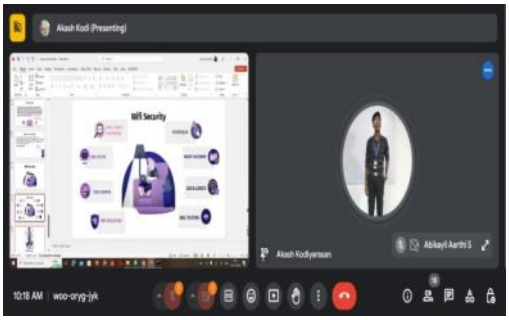
Center for Promotion of Research in association with IEEE STB 16621 organized KINGS PROJECT EXPO' 2024 on 03.05.2024. This project expo aims to encourage the students' creativity and innovations on Engineering & Technology. Dr.S.Sabanayagam, CPR Member & Associate Professor / Mechanical Engineering, welcomed the gathering. Dr.J.Arputha Vijaya Selvi, Principal, inaugurated the expo and delivered the inaugural address. In her speech, she emphasized the significance of innovations in projects. Mr.J.Niranjan Samuel, JRF/R&D, introduced the chief guest Mr. M. I. Abdul Halik, Secretary of IEEE Madras Young Professionals, Chennai. In his address, he briefed on importance of IEEE membership and his IEEE membership journey. Also he shared his memories as Passion to Progress: My IEEE Member Experience. Dr. S. Sivakumar, Vice Principal, delivered the felicitation address. He insisted the students to enhance their technical knowledge both in software and hardware. The projects of internal and external students were evaluated by senior faculty members of every department nominated as jury's. Totally 70 batches participated in the project expo. Jury's evaluated the projects and gave feedback & valuable comments to the students. Based on the innovation, presentation, implementation and demonstration marks were awarded by the jury's. Two projects were selected for rewards from each department. The valedictory ceremony of the project expo started by 01:30 p.m. at Pallava Hall. Dr.R.Rajendran, Secretary of the college distributed the prizes and certificates to the participants. Project Expo came to an end with vote of thanks by Ms. S. Abikayil Aarthi, AP/CSE cum Event Coordinator – IEEE MAS YP and Secretary – IEEE STB 16621.

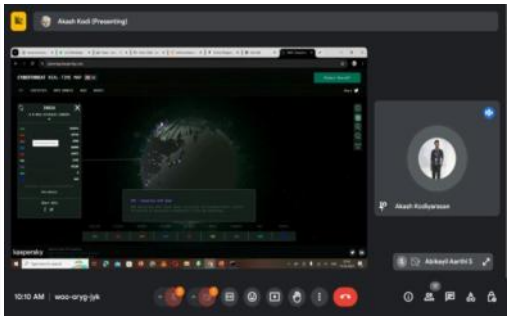
4. **Session on Passion to Progress : My IEEE Member Experience**

IEEE STB organized a session titled **Passion to Progress: My IEEE Member Experience** on 03.05.2024. Mr. M. I. Abdul Halik, Secretary of IEEE Madras Young Professionals, Chennai shared how IEEE membership for their career. Also he shared his experience, how IEEE membership was useful to him, how it helped to excel in his career. IEEE Student branch members participated in the session.

5. **Two Days Workshop on Cyber Security : Safeguard your Digital World**

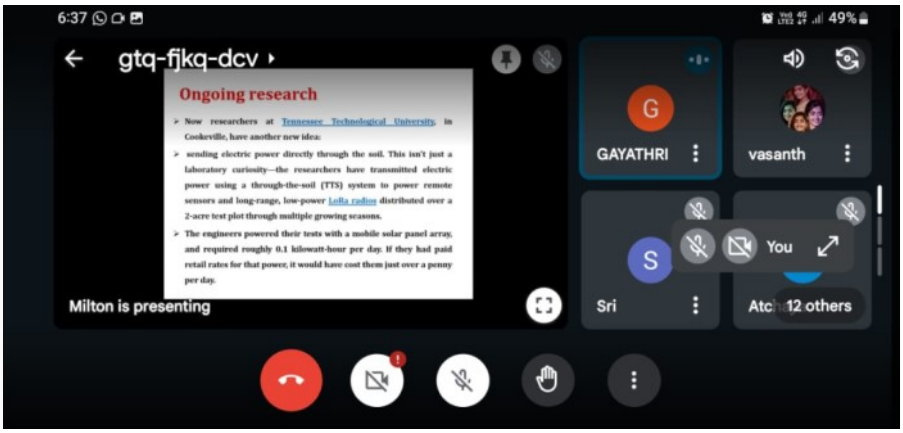
The two days workshop on "Cyber Security: Safeguard Your Digital World" was organized on 11.05.2024 & 12.05.2024, aimed to celebrate National Technology Day at educating participants about the fundamentals and advanced aspects of cyber security. On Day 1, Fundamentals of Cyber security with Interactive Session: Case Studies and on day 2, Advanced Cyber Security Practices were covered. At the end of the session, Q&A and Expert Panel Discussion were organized. The workshop was attended by 65 participants from various sectors including corporate, education, and government. The sessions were led by cyber security experts, providing comprehensive insights into protecting digital assets and enhancing overall cyber security posture.





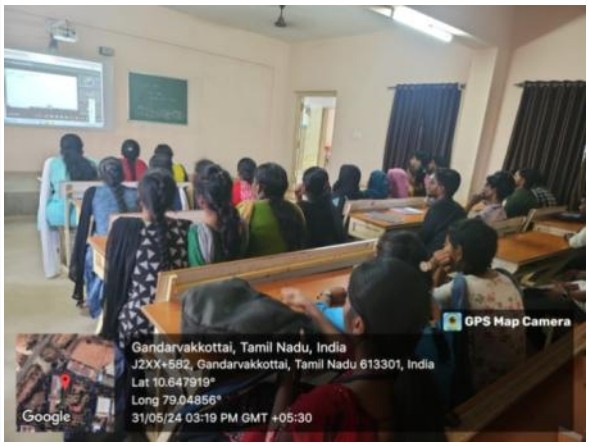
6. **Online Spectrum Talk on Power Sensor for Agricultural IoT System**

IEEE STB 16621 organized Online Spectrum Talk on Power Sensor for Agricultural IoT System on 24.05.2024. **Ms. K.C. GAYATHRI,** III EEE, delivered lecture. In her lecture, she briefed on the Evolution of IOT in agricultural system, role of IoT in agricultural systems, key milestones and developments and the ongoing research work. Also she briefed on the, design of Agricultural IoT System. While concluding her lecture, she briefed on the future scope of IoT in Agricultural systems.



7. Webinar on How to Write a Grant Proposal in an Effective Manner

Webinar titled "How to Write a Grant Proposal in an Effective Manner" was conducted on 31.05.2024. The session was organised by department of CSE in association with Centre for Promotion of Research & IEEE STB 16621. **Mr. M. Logeshwaran, Trainer, IGNZEE Software Solutions** was the resource person. The following topics were covered during the session, Introduction to Grant Proposals, Preparing to Write, Components of a Grant Proposal, Writing Tips and Strategies, Review and Submission. At the end, Q&A Session was organized and participants clarified their doubts with the resource person. The webinar attracted 62 participants. The session aimed to equip attendees with the skills and knowledge required to craft compelling grant proposals.



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3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year 2023 – 24

Entrepreneurship Development Cell

S. No	Name of the Activity	Page No.
1.	Awareness programme on "Niral Thiruvizha 2023"	2
2.	Orientation Programme about BEST Centre at SASTRA	4
3.	Workshop on Business Model Canvas	6
4.	Workshop on Entrepreneurship Skill, Attitude and Behaviour Development.	9

6/5/24

Coordinator, ED Cell

6/5/24

Principal

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ACADEMIC YEAR 2023–24 **03.01.2024**

Awareness programme
on
"Niral Thiruvizha 2023"
26.12.2023 to 28.12.2024

REPORT

Entrepreneurship Development Cell of Kings College of Engineering organized an Awareness Programme on **"Niral Thiruvizha 2023" from 26.12.2023 to 29.12.2023.**.

Objective:
The objective of this event is to trigger an innovation mindset among the student community which in turn develops the skills of our students across various sectors.

Resource persons:
Dr. B. Suresh Babu and Dr. K. Sudhakar , Coordinators, ED Cell, Kings College of Engineering, Punalkulam, Pudukottai

Participants:

Ist, IInd, IIIrd and IV year students of all disciplines attended the programme.

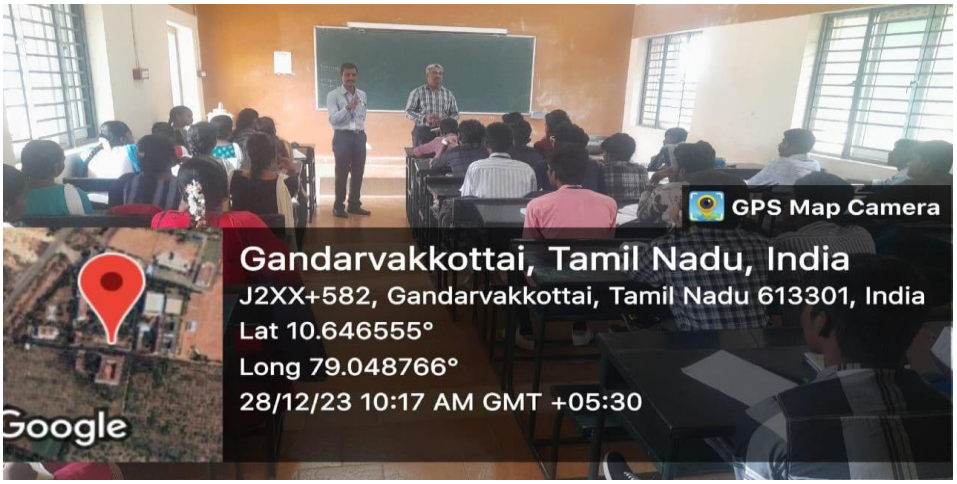
Programme Highlights:
Dr. K. Sudhakar, Coordinator, ED Cell and Dr. B. Suresh Babu, Member, ED Cell highlighted the importance of Niral Thiruvizha and the theme behind it. Also, outlined the key objectives of the event.
The event concluded with a summary of the key points covered and a call to action for participants to actively engage in the Niral Thiruvizha competition. The programme encouraged attendees to share their newfound knowledge with others and participate in upcoming events.

Outcome:
The awareness programme successfully met its objectives by providing a comprehensive overview of Niral Thiruvizha. As per the direction, innovative ideas from various departments were registered in the portal.

Valedictory Function:

Mr. Mohamed Sultan, IV Mechanical, delivered vote of thanks.

Event Photographs



EventPhotograph-1

EventPhotograph-2

EventPhotograph-3

03/01/24

Coordinator, ED Cell

03/1/2024

Principal

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ACADEMIC YEAR 2023–24 **09.04.2024**

Orientation Programme about BEST Centre at SASTRA 04.04.2024

REPORT

Entrepreneurship Development Cell of Kings College of Engineering organized an Orientation Programme about BEST Centre at SASTRA, Thanjavur on 04.04.2024.

Resource Person:
Mr. Martin, Marketing Manager, BEST Centre SASTRA, Thanjavur.

Participants:

Interested Final year students of all disciplines, 44 participants attended the programme.

Inaugural Session:

The inaugural session started with a welcome address by Dr. K. Sudhakar, Coordinator, ED Cell delivered welcome address and introduced the resource person to the participants.

About the Programme:

Mr. Martin, resource person of the orientation programme narrated about Bajaj Engineering Skill Training (BEST) CENTRE at SASTRA, Thanjavur with a detailed presentation on the various courses and training modules offered, including curriculum structure, learning objectives, and career prospects which helps trainees select the right programs based on their career aspirations and skill development goals. Also, disclosed the information on administrative procedures, including enrollment details, scheduling, and support services such as career counseling, mentorship programs, and technical support. Overall, the orientation program focused to ensure that new trainees are well-informed, comfortable, and prepared to makethemostoftheireducationalexperienceattheBajajEngineeringandSkillTrainingCentre.

Finally, in the question and answer session participants were clarified their doubts.

Valedictory Function:

Mr. Gushendra Prasad, IV EEE, delivered vote of thanks.

Event Photographs

EventPhotograph-1

EventPhotograph-2

9/4/24
Coordinator, ED Cell

09/4/2024.
Principal

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ACADEMIC YEAR 2023 – 24 **24.05.2024**

Workshop
on
"BUSINESS MODEL CANVAS"
23.05.2024

REPORT

MoEs - Institution Innovation Council and Entrepreneurship Development Cell of Kings College of Engineering organized a workshop on **"BUSINESS MODEL CANVAS"** on 23.05.2024.

Objective:
To provide necessary skills to the students who are aspiring to be entrepreneurs to turn their creative ideas into a successful business.

Resource persons:
1. Mr. G. Abraham Lincoln, District Field Coordinator, EDII – TN, Thanjavur and Mr. R. Amarnath, District Field Coordinator, EDII – TN, Pudukkottai.

Participants:

IIC and ED Cell members of II year students of all disciplines 41 participants attended the programme.

Inaugural Session:
Dr. K. Sudhakar, Coordinator of ED Cell, gave away the welcome address and introduced the resource persons to the participants.

Session highlights:
The workshop on the Business Model Canvas provided a comprehensive overview of this strategic tool, aimed at enhancing participants' understanding of business model development. Attendees engaged in detailed sessions covering each of the nine building blocks, including key aspects such as customer segments, value propositions, and revenue streams. Through interactive activities and case studies, participants applied the concepts to their own business ideas, gaining practical insights into model optimization and innovation.

Benefits in terms of Learning/Skills/Knowledge obtained:
Student members gained

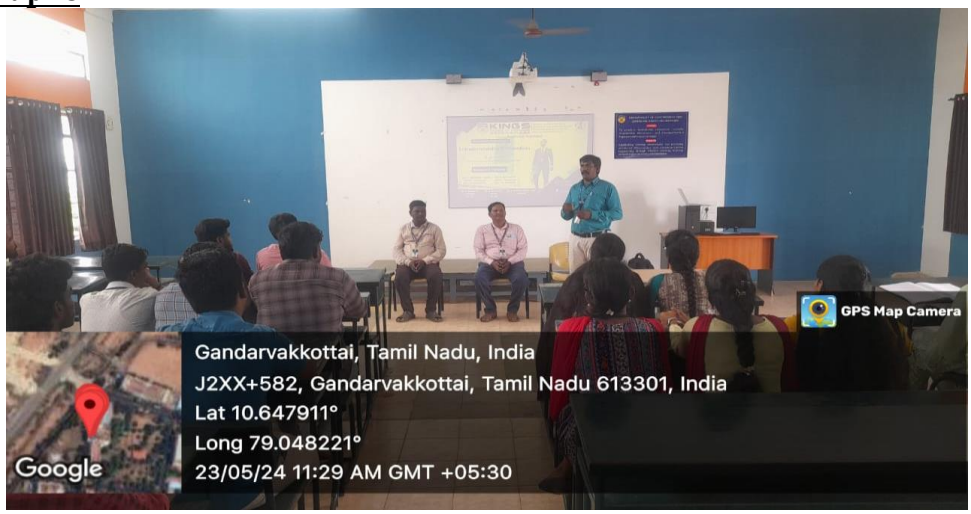
- **Comprehensive Understanding**: Gained in-depth knowledge of the nine essential components of the Business Model Canvas.

- **Strategic Thinking**: Learnt various skills in strategic analysis and planning, allowing you to assess and refine your business model in a structured and systematic way.
- **Practical Application**: Learnt to apply theoretical concepts to real-world scenarios, enhancing your ability to create and implement actionable business strategies.
- **Problem-Solving Skills**: Know how to improve the ability to identify business challenges and opportunities, and develop effective solutions through hands-on exercises and case studies.
- **Innovation Techniques**: Acquired the techniques for fostering innovation within their business model, enabling them to adapt and stay competitive in a rapidly changing market.
- **Collaborative Learning**: To Enhance skills in teamwork and collaboration by engaging with peers and facilitators, gaining diverse perspectives and constructive feedback.
- **Continuous Improvement**: To Build knowledge on how to regularly evaluate and adjust the business model to ensure on going relevance and effectiveness, supporting long-term success and adaptability.

Valedictory Function:

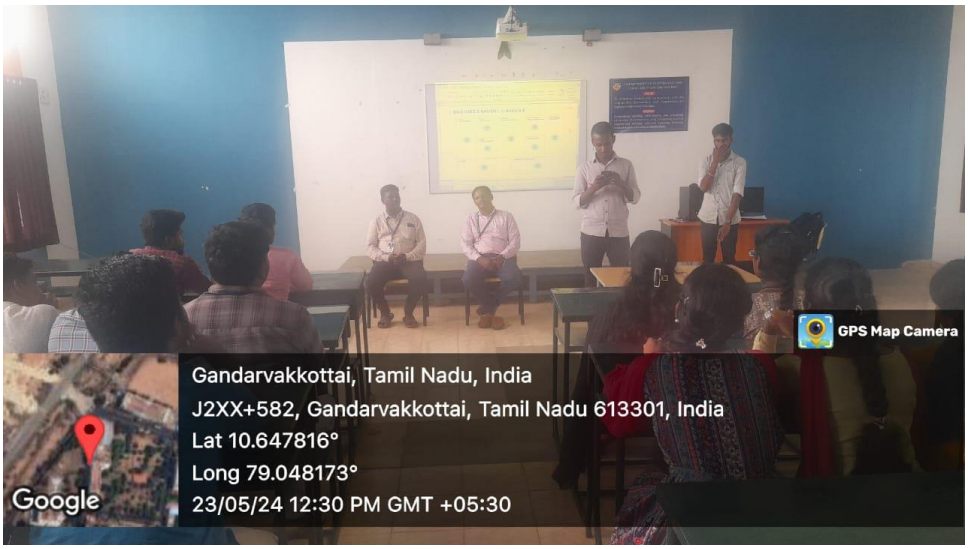
Finally, Mr. Ramprasad, member of ED Cell delivered a vote of thanks.

Event Photographs



Event Photograph-1

Event Photograph-2



Event Photograph-3

24/5/24.

Coordinator - ED Cell

24/5/24

Vice President-IIC & AP/EEE

24/5/2024.

President-IIC & Principal

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ACADEMIC YEAR 2023 – 24 **02.06.2024**

Workshop
on
"Entrepreneurship Skill, Attitude and Behaviour Development"
29.05.2024

REPORT

MoEs - Institution Innovation Council and Entrepreneurship Development Cell of Kings College of Engineering organized a workshop on **"Entrepreneurship Skill, Attitude and Behaviour Development"** on 29.05.2024.

Objective:

- To equip participants with practical entrepreneurship skills such as business planning, financial management, marketing strategies, and effective networking techniques.
- To foster a positive entrepreneurial mindset by encouraging traits such as resilience, adaptability, and proactive problem-solving, essential for overcoming challenges and seizing opportunities.
- To develop key entrepreneurial behaviors, including leadership, decision-making, risk-taking, and self-discipline, to help participants navigate the entrepreneurial journey more effectively.

Resource person:

1. Dr. B. Suresh Babu, Assistant Professor, Department of Management Studies, Kings College of Engineering, Punalkulam, Pudukottai

Participants:

IIC and ED Cell members of IInd year students of all disciplines 36 participants attended the programme.

Inaugural Session:

The inaugural session started with a welcome address by Mr. Ramprasad, ED Cell Member welcomed the gathering.

Session highlights:

The speaker highlighted the following points:
Introduction to Entrepreneurial Skills: Overview of essential skills for entrepreneurs, including business planning, financial management, marketing strategies, and effective communication. Developing a Positive Entrepreneurial Attitude: Interactive exercises and discussions focused on cultivating resilience, adaptability, and a growth mindset, crucial for navigating the entrepreneurial landscape. Behavioral Traits of Successful Entrepreneurs: Exploration of key

entrepreneurial behaviors such as leadership, risk-taking, decision-making, and self-discipline, with practical tips for developing these traits. Creativity and Innovation Workshops: Hands-on activities designed to enhance creative thinking and problem-solving skills, encouraging participants to generate and refine innovative business ideas.
Self-Assessment and Personal Development: Sessions dedicated to self-awareness, including tools and techniques for identifying personal strengths and areas for improvement, and setting actionable goals for growth. Networking and Collaboration: Opportunities for participants to connect with peers, mentors, and industry experts through networking sessions, collaborative exercises, and group discussions. Actionable Business Planning: Guidance on developing practical business plans and setting realistic goals, including creating detailed roadmaps and strategies for launching and scaling entrepreneurial ventures.

Benefits in terms of Learning/Skills/Knowledge obtained:

Student members gained

- The hands-on experience in crucial areas such as business planning, financial management, marketing, and operational strategies, enhancing their ability to effectively manage and grow their ventures.
- Awareness to develop a resilient and proactive mindset, learning to view challenges as opportunities and adopt a growth-oriented perspective essential for long-term entrepreneurial success.
- The strategy to cultivate key entrepreneurial behaviors, including strong leadership, strategic decision-making, and effective risk management, which are vital for navigating the complexities of entrepreneurship.
- Knowledge about the techniques to boost their creativity and innovate effectively, leading to the development of unique and competitive business ideas.
- Idea to create and implement detailed business plans and strategic goals, providing a clear roadmap for launching, managing, and scaling their entrepreneurial ventures effectively.

Valedictory Function:

Finally, Mr. T. Priyadharshini, member of ED Cell delivered a vote of thanks.

Event Photographs

Event Photograph-1

Event Photograph-2

02/06/24 | 2/6/24 | 02/6/2024

Coordinator - ED Cell | **Vice President-IIC & AP/EEE** | **President-IIC & Principal**