

# **IEEE SB MBCET CONSOLIDATED REPORT 2024-2025**

## **Execom 2024-25**

- Branch Counselor: Dr. Lani Rachel Mathew
- Chair: Savya Unnikrishnan
- Vice-Chair: Adlu Rahman
- Secretary: Blessy Smitha Das
- Joint-Secretary: Sreya krishnan
- Treasurer: Abhishek S
- LINK Representative: Gouri Sankari S
- Content Writer: Krishna Prasanth
- Content First year Volunteer: Vasundhara S.R.

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- Head: Devadathan J Nair
- Design Cohead: Aashish S.
- Design Volunteer/Media: Chris Thomas Abraham

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- Head: Aditya S
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  - Niranj R.
  - Abhishek Raman R.

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- Co-heads:
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  - Vedha Mahadevan
  - Asif Shajeed

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- Faculty Advisor: Mr. Shiras S N
- Chair: Gourisankar
- Secretary: Krishna Prasad

- First Year Volunteer: Festin Fleenton Pereira

### **Computer Society**

- Faculty Advisor: Prof. Raju K Gopal
- Chair: Liya Susan Biju
- Secretary: Chandrasekhar S Nair
- First year Volunteer: Abhav Rajith Nair

### **Power and Energy Society**

- Faculty Advisor: Ms. P. Sandhya
- Chair: Sarang G.S.
- Secretary: Alan Gabriel
- First year Volunteer: Vinayak V. Nair

### **Signal Processing Society**

- Faculty Advisor: Ms. Deepa P L
- Chair: Aswin G
- Secretary: S. Blessy Catherine
- First year Volunteer: Mohammad Zulal S.

### **Engineering in Medicine and Biology**

- Faculty Advisor: Dr. Lani Rachel Mathew
- Chair: Sandra S.R.
- Secretary: Devika C.
- First Year Volunteer: Pushkala S.S.

### **Women In Engineering**

- Faculty Advisor: Ms. Ann Mary Alex
- Chair: Anoushka L. Nair
- First Year Volunteer Head: Afrin Shamnath

### **Special Interest Group on Humanitarian Technology**

- Faculty Advisor: Ms. Ann Mary Alex
- Chair: Jason.E
- First Year Volunteer Head: Adwaith Manoj

## **ANNUAL GENERAL MEETING 2024**

The annual General Meeting of IEEE SB MBCET, held at the Senatus Hall on 21st February, commenced with the welcome address by Sophy Maria Joy , Former Joint Secretary of IEEE . It was followed by the inaugural address by the Principal, Dr Abraham T Mathew. The members took the oath of the IEEE Code of Conduct, led by Mr Adlu Rahman, Vice-Chair. The annual report for the year 2023-24 was presented by the former Secretary, Ms Sruthi N A, followed by the Financial Report for the year 2023-24 by Mr Adlu Rahman , former Treasurer. The passing out Execom were awarded their certificates by the Principal. Three of the former execom members were given Best volunteer awards for the year 2023-24. The new Execom members for the year 2024-25 were introduced by Prof. Dr. Lani Rachel Mathew, Branch Counsellor. The AGM was addressed by Ms Savya Unnikrishnan, Chair. The annual plan for the year 2024-25 was presented by Ms Blessy Smitha Das, Secretary. The vote of thanks was delivered by Abhishek S S , Former RAS Chair.

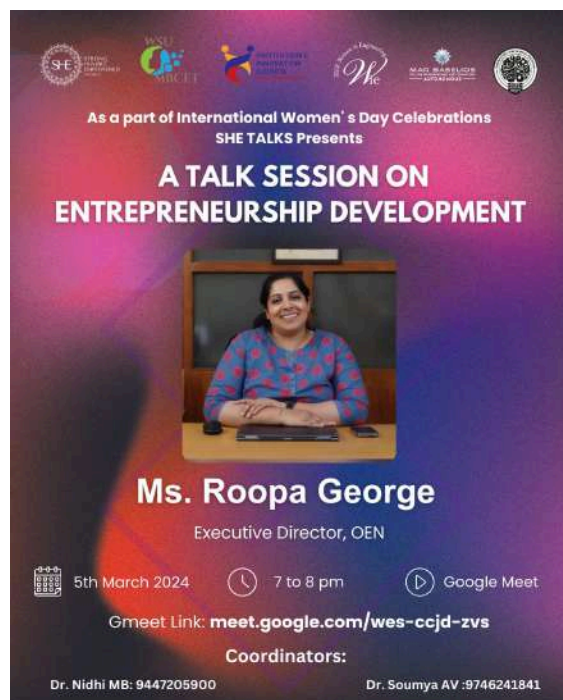
## TALK SESSION: ENTREPRENEURSHIP DEVELOPMENT

The session featured Ms. Roopa George, Executive Director, OEN. A successful entrepreneur who discussed entrepreneurship, its opportunities, and development on 5th March 2024.

She talked and discussed the role of women in technology. Attendees engaged in dynamic discussions on women's lack of access to finance, poor education, lack of mental support, etc... The event witnessed 120 attendees actively participating.

The session provided a platform for insightful discussions and reflections on the challenges and opportunities for women in entrepreneurship. It catalyzed inspiring action towards creating more inclusive and diverse empowered communities.

At the end, an interactive session was held. Participants actively responded and the session was successfully engaged.



## **Boot Camp 10.0 on “Allied Technologies for UAS/Drone**

The Boot Camp 10.0 workshop, hosted by NIELIT and supported by IEEE Kerala Section, IEEE Robotics & Automation Society Kerala Chapter, and Kerala Knowledge Economy Mission, under the Ministry of Electronics and Information Technology, Govt. of India unfolded from March 5th to 9th, 2024, attracting 92 participants from diverse academic backgrounds of 35 IEEE members and 57 Non IEEE . Through meticulously curated sessions covering themes like drone technology, AI applications, and regulatory frameworks, the workshop provided a comprehensive exploration of Unmanned Aircraft Systems (UAS). Participants demonstrated exceptional engagement and proficiency, reflecting a deep understanding of the subject matter. Overall, the event served as an exemplary platform for knowledge exchange and professional growth, facilitated by the collaborative efforts of the organizing entities.



# BOOT CAMP ON ALLIED TECHNOLOGIES FOR DRONES

ON 05<sup>TH</sup> TO 09<sup>TH</sup> MARCH 2024

funded by  
MeitY, Government of India.

Under the project  
"Capacity Building for Human Resource Development in  
Unmanned Aircraft System (Drone and related Technology)."



## BOOT CAMPS ON ALLIED TECHNOLOGIES FOR DRONES (5th - 9th MARCH 2024)

Capacity Building For Human Resource Development in  
Unmanned aircraft System (Drone and related Technology)

Venue: Mar Baselios College of Engineering Technology(Autonomous), Trivandrum



NATIONAL INSTITUTE OF ELECTRONICS AND INFORMATION TECHNOLOGY, CALICUT



<https://nielit.gov.in/calicut/index.php>



@nielitcalicut



/CALNIELIT



@CAL\_NIELIT



/school/NIELITIndia



@nielitindia



/NIELITIndia



## **THE ULTIMATE SLEEP QUIZ: PHASE I & PHASE II-**

A sleep quiz hosted on behalf of World Sleep Day by IEEE EMBS, Mar Baselios College of Engineering and Technology, Trivandrum on 15 March,2024 from 7 PM to 8 PM and 21 March,2024. A total of 12 IEEE members and 100 Non IEEE members participated. The quiz competition was set in two different phases. The first round was hosted through the online platform - Google Form on 15 March,2024 from 7 PM to 8 PM and the second phase was hosted in Faraday Hall, MBCET on 21 March2024 from 1 PM to 1:30 PM. From the first round we got seven winners and the winners were taken to the second phase and a final winner was chosen, Noel Giji Madukkamoottil from S2 CS Department.





## **WORDLE QUEST: DECODE-DECRYPT-CONQUER**

Wordle Quest is a three-day event about Wordle conducted by IEEE CS MBCET. It was conducted for all years.

It aims to initiate and indulge students in a competitive arena inspired by trending wordle challenges.

The event was held on March 20, 21 and 22. A total of 9 IEEE members and 99 Non IEEE members participated. It was conducted online on the google meet platform.

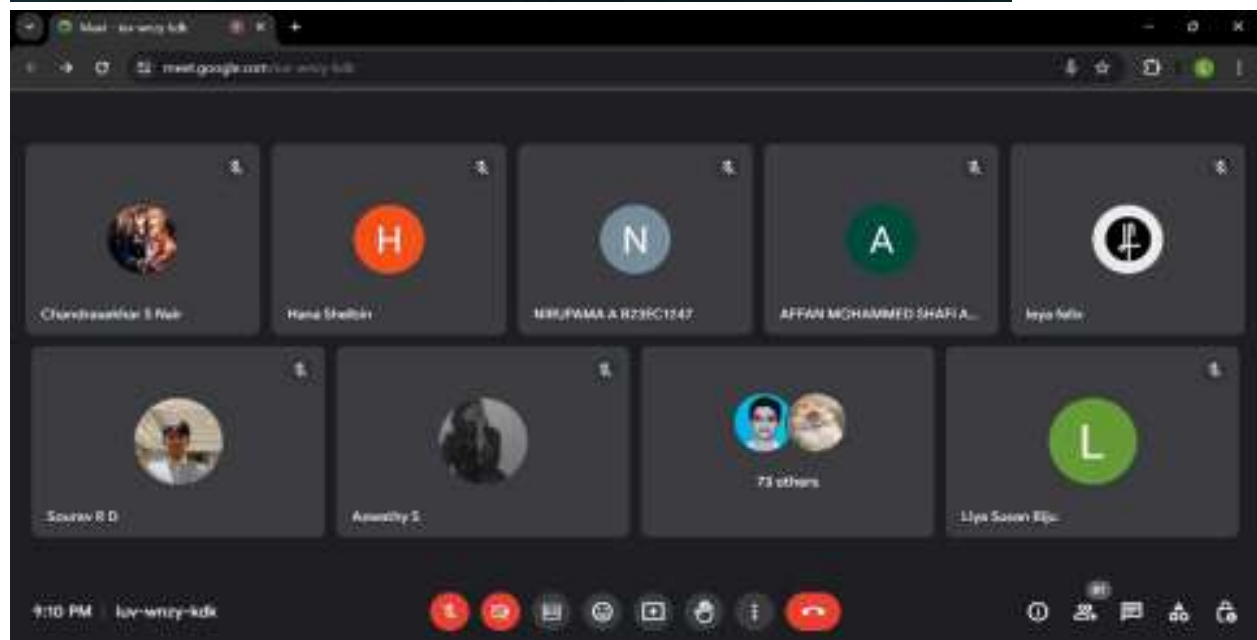
Rules for the quest were discussed on the first day via google meet.

The quest was conducted with the help of an online software 'wordle.strive math'.

Participants after completion were supposed to upload the screenshot of their results through a google form provided to them.



3 winners were selected for each day from 20th to 22nd March.



## **TALK SESSION ON HIGHER STUDIES WITH CAREER GUIDANCE**

IEEE PES SBC MBCET in collaboration with TIME - (Triumphant Institute of Management Education) conducted an expert talk on the topic, “HIGHER STUDIES WITH CAREER GUIDANCE ”

The event was conducted by Mr Ajay Nayar , Academic head of TIME .The session was conducted on March 21st 2024 from 3:30 pm to 4:30 pm , the session was open to all students. A total of 6 IEEE members and 25 Non IEEE members participated. A total of 31 members were there to attend the session.





## **Seizure Monitoring of Patients with Epilepsy using a Single Wearable EEG Sensor**

The IEEE SPS SBC MBCET organized a highly informative lecture on "Seizure Monitoring of Patients with Epilepsy using a Single Wearable EEG Sensor" on 8th April 2024. The session featured Dr. John Mathews, a distinguished Professor of Electrical Engineering and Computer Science at Oregon State University, U.S. Dr. Mathews shared his extensive research on the application of wearable EEG technology in monitoring epilepsy seizures, offering valuable insights into the latest advancements in the field.

Attendees were introduced to cutting-edge innovations in epilepsy monitoring, with a focus on how wearable EEG sensors can improve patient care by providing real-time data on seizure activity. The lecture underscored the significant impact of this technology in enhancing the quality of life for individuals living with epilepsy.

The program offered participants the unique opportunity to learn directly from a leading expert in the field, broadening their understanding of the potential of wearable technology in

medical applications. It was an enriching experience that highlighted the promising future of healthcare through technological advancements.



## **EV and EV Charging Technology :Current Trends and Exchange of Industrial Expertise (TALK SESSION)**

IEEE PES SBC MBCET conducted an expert talk on the topic, “EV and EV Charging Technology :Current Trends and Exchange of Industrial Expertise.”

The event was an enlightening discourse led by Dr. Manoharan J, Head of the E-Mobility Division at ANERT. The session was conducted on 23rd April 2024 from 7:30 pm to 8:30 pm, the session was open to all students, Faculties, Industrialists and both IEEE members and non-IEEE members were there. A total of 136 members from various colleges were there to attend the session.

The accelerating evolution of Electric Vehicle (EV) and EV charging technology reflects a pivotal shift towards sustainable transportation solutions. This report delves into the current trends shaping the industry, emphasizing the vital role of exchanging industrial expertise. As innovation drives advancements in battery technology, vehicle design, and charging infrastructure, the integration of EVs into mainstream transportation systems gains momentum. The exchange of industrial expertise fosters collaboration, driving innovation and addressing challenges effectively. This collaborative effort not only promotes the widespread adoption of EVs but also ensures the development of robust charging infrastructure and supportive regulatory frameworks. Through such synergy, the industry aims to realize a cleaner, more efficient, and sustainable transportation future.





IEEE PES SBC MBCET  
TECHNICAL

## EMPOWERING E-MOBILITY

### Talk Session



Session by :  
**Er. Manoharan J**  
Head E-Mobility Division,  
ANERT

Webinar on  
**EV and EV Charging Technology :Current Trends  
and Exchange of Industrial Expertise**

**IEEE PES DAY 2024**

## EMPOWERING E-MOBILITY QUIZ

The PES Day celebration at MBCET featured a captivating Power and Energy Systems (PES) quiz on the topic Empowering E-Mobility. The quiz, held on April 24 at 08:00 PM, aimed to assess and expand the knowledge of participants on EV industry.

In recognition of PES Day 2024, an intellectually stimulating quiz session centered on electric vehicle (EV) technologies garnered participation from approximately 50 students, providing an engaging and enriching experience for students. Beyond the competitive aspect, the event fostered a sense of curiosity and collaboration among participants, reinforcing the significance of Empowering E-Mobility in the realm of electrical engineering. The quiz served as a cornerstone in nurturing the passion of budding engineers, marking a successful and memorable celebration of IEEE Day at MBCET. Additionally, the event featured a distinguished expert talk session delving into the intricate realm of electric vehicles, providing invaluable insights to the attending audience.

The winners of this competition were:

1. Nandana Anand P	S4 CS	1st position
2. Roshan George Koshi	S4 CS	2nd position
3. Gowri RG	S2 ME	3rd position

QUIZIZZ 714277 Themes Pause End

Leaderboard Questions

51 participants Show only top 5

Rank	Name	Score	Progress	Close
1	Roshan George Joshi	16660	14/14	X
2	Gowri R G	13950	10/10	X
3	Devadathan J Nair	13660	6/6	X
4	Rishan	12170	0/0	X
5	Abel Louis Fernandez	11070	4/4	X

We currently support top 50 participants on the leaderboard



QUIZIZZ EV. TECHNOLOGY

Nandana Anand P

Roshan George J...

Gowri R G

2nd 1st 3rd



## EMBS ANNUAL GENERAL MEETING 2024

IEEE EMBS Annual General Meeting was held on 27<sup>th</sup> April, 2024 from 02:30PM to 04:00PM at IEEE Kerala Section Office Harmon IEEE, 1<sup>st</sup> Floor Cherian's Square Ambujavilasam Road Thiruvananthapuram. In the event the general body officers gave a briefing on how the EMBS Kerala Section worked and introduced the members of the Kerala Section. In the event the new Kerala Section excecocom was introduced for the year 2024, 3 students members and one faculty of Mar Baselios was selected into the new excecocom-Dr.M.J Jayasree as Student Activities Chair, Devika C as Membership development coordinator of Travancore Area, Sandra SR as SCC Representative and Gouri Sankari S as SBC WIBE Representative. Our student representatives present the annual report of all the events hosted and also the events that are yet to be hosted. Our previous EMBS SBC team was also awarded with Ever Rolling Trophy for Outstanding Student Branch Chapter by IEEE EMBS Kerala Chapter. It was such an honor to meet and interact with all the deligacies of different colleges and to share their thoughts and ideas on developing their SBC's.



## **Assistive Technology Internship**

The Assistive Technology Group of Mar Baselios College of Engineering and Technology (MBCET) in association with IEEE EMBS Kerala Section, organized an internship for students of MBCET and IEEE EMBS students from colleges across Kerala from 1st July to 12th July. During the internship, students were involved in understanding how technology can be used to enhance the lives of differently-abled persons. It comprised the following sessions, (each of which are entered as separate events, due to the effort involved.): Talk session on: "A Fresh Start: Exploring a New World.", Talk Session on: Chess Software For Blind, Talk session on: Assistive Technology-An Overview, Talk session on: Robotics In Assistive Technology, Field Visit To NISH, Demo Session on Alert System Using Vibrotactile Technology for Hearing Impaired, Field Visit to SCTIMST, Demo Session on Smart Air Quality Monitoring and Sleep Apnea Detection, Talk Session on Technology Interventions In Speech Therapy, Hands on Session on Iot For Home Automation – Part I, Field Visit to Pallium India, Talk Session on “Untold Story Of Fighting Arthritis” by Ms. Simla Balasubramaniyan, Field Visit to Vocational Rehabilitation Centre for Handicapped, Hands on Session on Iot For Home Automation – Part II, Hands on Session on Iot For Healthcare Monitoring and Project Idea Evaluation.

The valedictory session conducted on 12th July started off with a prayer song by Dr. Alice Thomas (Assistant. Prof., Dept. of CE) followed by the welcome address. Principal - Dr. S. Viswanatha Rao, , Dr. M.J. Jayashree - Head, AT Group & IQAC Coordinator and Ms. Simla Balasubramaniyan ,MBCET Alumnus , addressed the gathering, and awarded the certificates to the participants. Participants shared their feedback, and Ms. Sanjana D.S (Second year student, CSE) presented a brief report of the internship and Mr. Aswin R B (Assistant Prof., Dept. of EEE)concluded the internship program, by proposing the vote of thanks.







## **A. Talk session on "A Fresh Start: Exploring a New World."**

Mr. P. Balaraman, an Access Technology Trainer from the Jyothirgamaya Foundation, delivered a keynote speech titled "A Fresh Start: Exploring a New World." Mr. Balaraman, who is also a national-level chess player, shared his experiences and insights on overcoming visual impairment and leveraging assistive technology to enhance accessibility and inclusion.



## B. Talk Session on Chess Software For Blind

The event "Chess Software for Blind," conducted by Ms. Janet Kurian, an engineer at Acsia Technologies, focused on the development and application of accessible chess software designed specifically for blind and visually impaired individuals. The session aimed to shed light on the technological advancements and the importance of inclusivity in software development.



The poster is for the "ASSISTIVE TECHNOLOGY INTERNSHIP 2024". It features logos for MAR BASELIOS COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS), IEEE EMBS, IEEE, and IEEE-MBCET. The text indicates it is organized by the Assistive Technology Group, MBCET in association with the IEEE EMBS KERALA CHAPTER. A circular portrait of Ms. Janet Kurian is shown, with her name and title "ENGINEER, ACSIA TECHNOLOGIES" below it. The session title "CHESS SOFTWARE FOR BLIND" is highlighted in a purple box. The date and time are "1st July 2024, Session 2" from "11.30 am to 12.00 pm". Contact information for Dr. Alice Thomas and Mr. Aswin R.B. is provided, along with student coordinators Mr. Adlu Rahman, Ms. Sandra S. R., and Mr. Sarath S.C.

**ASSISTIVE TECHNOLOGY INTERNSHIP 2024**

Organized by  
Assistive Technology Group, MBCET in association with  
IEEE EMBS KERALA CHAPTER

**Ms. Janet Kurian**  
ENGINEER,  
ACSIA TECHNOLOGIES

**"CHESS SOFTWARE FOR BLIND"**

1st July 2024, Session 2  
11.30 am to 12.00 pm

Contact:  
Dr. Alice Thomas  
Asst. Professor, Dept. of CE  
9530443475

Mr. Aswin R.B.  
Asst. Professor, Dept. of EEE  
9447329628

Student coordinators  
Mr. Adlu Rahman 7356463869  
Ms. Sandra S. R. 88487 99721  
Mr. Sarath S.C. 70866 63586



### **C. Talk session on: Assistive Technology-An Overview**

The session "Assistive Technology - An Overview," led by Dr. M. J. Jayashree, aimed to provide a comprehensive understanding of assistive technology and its impact on individuals with disabilities. The session highlighted the latest advancements, applications, and future directions in the field of assistive technology.



## **D. Talk Session on Robotics In Assistive Technology**

The interactive session "Robotics In Assistive Technology," led by Mr. Vishnu.P. Kumar, CoFounder & CTO at Unibotics Innovations, focused on the integration of robotics into assistive technology to enhance the lives of individuals with disabilities. The session aimed to provide insights into the latest advancements, applications, and future directions in this field.



## **E. Field Visit To NISH**

The visit to the National Institute of Speech and Hearing (NISH) provided valuable insights into the institution's efforts to address the needs of individuals with communication and hearing challenges. NISH is a prestigious institution dedicated to providing comprehensive services in the field of communication disorders.





## E. Demo Session on Alert System Using Vibrotactile Technology for Hearing Impaired

The online session titled "Alert System Using Vibrotactile Technology for Hearing Impaired" was conducted by Ms. Gowri Krishnan L and Ms. Parvathy A, both alumni of the Electronics and Communication Engineering (ECE) department. The session focused on the development and application of a vibrotactile alert system designed to assist individuals with hearing impairments.

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "ALERT SYSTEM USING VIBROTACTILE TECHNOLOGY FOR HEARING IMPAIRED". The slide content includes a "RESULT" section with a table showing flight information and a photo of a smartwatch displaying a flight cancellation alert.

Flight Number	Status
ABC123	Cancelled

Below the table, there is a screenshot of a mobile app interface showing an "ALERT!!!!!!!!!!!!!!" and "FLIGHT CANCELLED" message. To the right of the table is a photo of a smartwatch displaying "FLIGHT CANCELLED".

At the bottom of the slide, it says "Dept of ECE, MBCET" and "20".

The Zoom meeting interface shows a list of participants on the right side, including Alice Thomas, Gowri Krishnan L, PARTHIV KIRAN..., ANIRUDH M NA..., Rishikesh Rajeev, ANAVADYA NAL..., Parvathy A (highlighted), 28 others, and Pushkala S S. The bottom status bar shows the time as 10:13 AM and the meeting ID as stw-swtn-qrh.



## **F. Field Visit to SCTIMST**

The visit to SCTIMST, Poojapura, provided valuable insights into the institute's efforts in the field of assistive technology. SCTIMST is a renowned institution dedicated to medical sciences and technology, with a strong focus on developing innovative solutions to improve healthcare.



## H. Demo Session on Smart Air Quality Monitoring and Sleep Apnea Detection

The interactive and informative session on "Smart Air Quality Monitoring and Sleep Apnea Detection" was conducted by Mr. Akshay R Nair, Ms. Vaishnavi Vinod, and Mr. Arevind Mohan, alumni of the Electronics and Communication (EC) department at Mar Baselios College of Engineering and Technology (MBCET). The session focused on the development and application of smart technologies for monitoring air quality and detecting sleep apnea.



The poster is for the "ASSISTIVE TECHNOLOGY INTERNSHIP 2024". At the top, it features logos for Mar Baselios College of Engineering and Technology (Autonomous), IEEE EMBS (2022 Engineering in Medicine & Biotechnology Society), IEEE, and IEEE MBCEET. The event is organized by the Assistive Technology Group, MBCET, in association with the IEEE EMBS KERALA CHAPTER. Three speakers are listed with their circular portraits: Mr. Akshay R Nair, Ms. Vaishnavi Vinod, and Mr. Arevind Mohan, all identified as ALUMNI 2020-24 EC. The session title is "SMART AIR QUALITY MONITORING AND SLEEP APNEA DETECTION". The date and time are 5th July 2024, from 9.30 am to 11.00 am. Contact information is provided for Dr. Alice Thomas (9930443475), Mr. Asulin R.B (9447329628), and student coordinators Mr. Adlu Rahman (7356463869), Ms. Sandra S. R (88487 99721), and Mr. Sarath A.C (70854 58586).

**ASSISTIVE TECHNOLOGY INTERNSHIP 2024**

Organized by  
Assistive Technology Group, MBCET in association with  
IEEE EMBS KERALA CHAPTER

**Mr. Akshay R Nair**   **Ms. Vaishnavi Vinod**   **Mr. Arevind Mohan**  
ALUMNI 2020-24 EC

**"SMART AIR QUALITY MONITORING AND SLEEP APNEA DETECTION"**

**5th July 2024**  
**9.30 am to 11.00 am**

**Contact**  
Dr. Alice Thomas  
Asst. Professor, Dept. of CE  
9930443475

**Mr. Asulin R.B**  
Asst. Professor, Dept of EEE  
9447329628

**Student coordinators**  
Mr. Adlu Rahman 7356463869  
Ms. Sandra S. R 88487 99721  
Mr. Sarath A.C 70854 58586



## **I. Talk Session on Technology Interventions In Speech Therapy**

The session titled "Technology Interventions In Speech Therapy" was conducted by Dr. Lani Rachel Mathew, Associate Professor in the Electronics and Communication Engineering (ECE) department at Mar Baselios College of Engineering and Technology (MBCET). The session described different methods in Speech therapy. Collaborative efforts between MBCET and NISH were described. Two projects, viz. The Voice Analyzer and a Visual Feedback System for Cleft Lip/ Palate were also discussed.



## ASSISTIVE TECHNOLOGY INTERNSHIP 2024

Organized by  
Assistive Technology Group, MBCET in association with  
IEEE EMBS KERALA CHAPTER



**DR. LANI RACHEL MATHEW**

ASSISTANT PROFESSOR,  
DEPT. OF ECE, MBCET

### "TECHNOLOGY INTERVENTIONS IN SPEECH THERAPY"



5th July 2024, Session 2  
11.15am to 12.30pm

Contact  
Dr. Alice Thomas  
Asst. Professor, Dept. of CE  
9930443475

Mr. Aswin.R.B  
Asst. Professor, Dept of EEE  
9447329628

Student coordinators  
Mr. Adlu Rahman 7356463869  
Ms. Sandra S. R 88487 99721  
Mr. Sarath S.C 70854 58586



## **J. Hands on Session on Iot For Home Automation – Part I**

The hands on session titled "IoT for Home Automation" was conducted by Mr. Jijo Jose, Assistant Professor in the Electronics and Communication Engineering (ECE) department at Mar Baselios College of Engineering and Technology (MBCET). The session aimed to provide participants with practical insights and skills to implement Internet of Things (IoT) technologies for home automation.





## **K. Field Visit to Pallium India**

The visit to Pallium India provided valuable insights into the organization's efforts to provide palliative care and pain relief to individuals with serious health-related issues. Pallium India is a renowned NGO dedicated to alleviating suffering and improving the quality of life for patients and their families.



## **L. Talk Session on “Untold Story Of Fighting Arthritis”**

The event titled "Untold Story of Fighting Arthritis" was an inspiring session led by Ms. Simla Balasubramaniyan, an alumna of the Electrical and Electronics Engineering (EEE) department at Mar Baselios College of Engineering and Technology (MBCET). The session focused on Ms. Balasubramaniyan's personal journey and her battle with arthritis, aiming to motivate and raise awareness among the audience.

**MAR BASELIOS**  
COLLEGE OF ENGINEERING AND TECHNOLOGY  
AUTONOMOUS

**IEEE EMBS**  
IEEE Engineering in Medicine & Biology Society

**IEEE**

**IEEE MBCE**

## ASSISTIVE TECHNOLOGY INTERNSHIP 2024

Organized by  
**Assistive Technology Group, MBCET** in association with  
**IEEE EMBS KERALA CHAPTER**



**Ms. Simla Balasubramaniyan**  
MBCET ALUMNUS  
DEPT. OF EEE, BATCH OF 2013

### "UNTOLD STORY OF FIGHTING ARTHRITIS"

 **9th July 2024**  
**10.30 to 11.30 am**  
**Venue: Senatus Hall**

<b>Contact</b> Dr. Alice Thomas Asst. Professor, Dept. of CE 9930443475	<b>Mr. Aswin R.B</b> Asst. Professor, Dept of EEE 9447329628	<b>Student coordinators</b> Mr. Adlu Rahman 7356463869 Ms. Sandra S. R 88687 99721 Mr. Karthik S C 70344 68484
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## **M. Field Visit to Vocational Rehabilitation Centre for Handicapped**

The visit to the Vocational Rehabilitation Centre for Handicapped (VRC) in Nalanchira provided valuable insights into the center's efforts to support and empower individuals with disabilities. The VRC is dedicated to providing vocational training, psychological support, and rehabilitation assistance to help individuals achieve independence and improve their quality of life.



## **N. Hands on Session on Iot For Home Automation – Part II**

The hands on session titled "IoT for Home Automation" Part (II) was conducted by Mr. Jijo Jose, Assistant Professor in the Electronics and Communication Engineering (ECE) department at Mar Baselios College of Engineering and Technology (MBCET). This session was a continuation of the previous workshop, delving deeper into advanced IoT applications for home automation.



## **P. Hands on Session on Iot For Healthcare Monitoring**

The hands-on session titled "IoT for Healthcare Monitoring" was conducted by Mr. M.G. Sreekumar and Ms. Merin Philip from the Electronics and Communication Engineering (ECE) department at Mar Baselios College of Engineering and Technology (MBCET). This session aimed to provide participants with practical knowledge and skills to implement IoT technologies in healthcare monitoring systems. It included the IoT for Healthcare



monitoring using ESP8266 node MCU Wifi development board. It also dealt with heart rate monitoring ,ECG signal monitoring etc..



## **Q. Project Idea Evaluation**

The project evaluation event featured presentations from eight student groups, showcasing their innovative project ideas. The judging panel, comprising esteemed faculty member



s Dr. M. J. Jayashree, Dr. Jayakumari J., and Dr. Soumya A. V., evaluated each project based on criteria such as originality, feasibility, and impact.

Panelists:

Dr. M. J. Jayashree, Professor & Dean (Academic Affairs-UG)

Dr. Jayakumari J., Professor & International Liaison Officer

Dr. Soumya A. V., Assistant Professor



**Bridging the GAP: Increasing women's representation in Robotics**

The session featured Ms. Athira Krishnan R, Developer at TCS RnI, Treasurer of IEEE RAS Kerala Chapter, and a Ph.D. scholar at IIT Hyderabad. A successful robotics engineer who discussed robotics, sensors, and development.

She talked and discussed the role of women in technology. Attendees engaged in dynamic discussions on robotics and its way of working. The event witnessed 78 attendees actively participating.

The event, themed around empowering women in these transformative technologies, is a celebration of Women in Engineering (WIE) Day on 11 July 2024. The session provided a platform for insightful discussions and reflections on the challenges and opportunities for women in robotics.

At the end, an interactive session was held. Participants actively responded and the session was successfully engaged.



# Bridging the Gap

Increasing Women's Representation in Robotics

July 11th



@ 7:00pm

## Athira Krishnan R

Developer TCS RnI, Treasurer IEEE RAS Kerala Chapter,  
PHD scholar IIT Hyderabad

Platform : Google meet

<https://meet.google.com/ztc-xvjg-bss>

Sangeetha P : +91 73064 42921 | Anoushka L Nair : +91 81139 58852



## **COSMOS CANVAS: Poster/Painting Competition**

The IEEE Power and Energy Society (PES), in collaboration with the Space Club at Mar Baselios College of Engineering and Technology (MBCET), organized an exciting poster and painting competition titled “**COSMOS CANVAS**” as part of the college’s Space Week celebrations.

The competition, which centered around the theme “**Space,**” was announced on 4th August 2024, inviting students to showcase their artistic talents and creativity. Participants were asked to submit their artworks in hard copy by 7th August 2024.

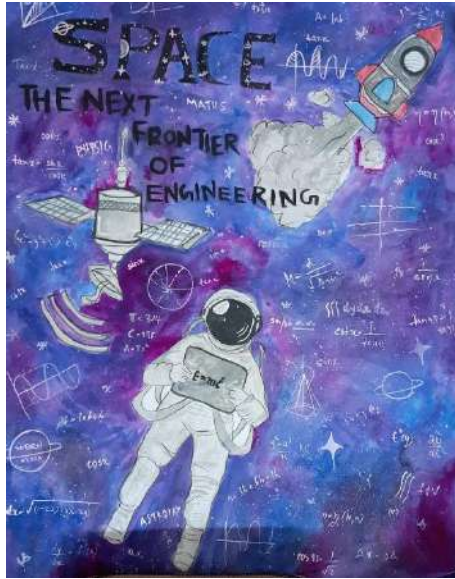
The competition attracted a significant number of entries, with students from various departments enthusiastically contributing their interpretations of the vast and intriguing theme. The submissions were judged based on creativity, relevance to the theme, and artistic execution.

After careful deliberation, the judges announced the winners:

- **First Prize:** Ms. Diya Dileep from S3EC 2
- **Second Prize:** Ms. Aneeta Sibi from S3EL

These talented students were recognized for their exceptional work and creativity in capturing the essence of space through their artwork.

The “**COSMOS CANVAS**” competition was a great success, sparking interest in space exploration and encouraging artistic expression among students. The event was a highlight of the Space Week celebrations at MBCET, bringing together the college community in appreciation of both science and art.



# INTRODUCTION TO PCB DESIGNING

On August 10th, 2024, the IEEE Robotics and Automation Society (RAS) Student Branch Chapter (SBC) at Mar Baselios College of Engineering and Technology (MBCET) successfully organized and hosted an online webinar titled "PCBs: Where Engineering Meets Artistry." This engaging and informative session sought to unravel the complexities of printed circuit board (PCB) design, emphasizing the harmonious blend of engineering principles and artistic creativity that lies at the heart of this essential field.

The webinar saw impressive participation, with 158 registrations and 101 active attendees, reflecting a strong interest in the subject matter. The high registration-to-attendance ratio indicated that the topic of PCB design resonates deeply with the audience, many of whom are aspiring engineers. Throughout the session, participants expressed their satisfaction with the content, particularly appreciating the clear explanations and practical demonstrations. The feedback received was overwhelmingly positive, underscoring the event's success in meeting its educational objectives.





meet.google.com/qkh-ccly-puv?pk=1

For quick access, place your bookmarks here on the bookmarks bar. [View your bookmarks here...](#)



Abhiram Krishna (Presenting)

Abhiram Krishna

94 others

Ferstin Fleemton Pereira

Single-Sided PCB and Double-Sided PCB



In-call messages

Unless they're pinned, messages can only be seen by people in the call when the message is sent. All messages are deleted when the call ends.

SEE RAS MICSET 4:13:06  
guyuz read chyu

Send a message

6:14 PM | qkh-ccly-puv

## **WEARABLES FOR VISUALLY IMPAIRED**

The Wearables for Visually Impaired program commenced on 16th August 2024, with a welcome address by the IEEE EMBS MBCET team, highlighting the importance of wearable technology in improving the lives of visually impaired individuals. Rahul George Paul, the speaker, delivered an engaging presentation, showcasing the current state of wearable technology for visually impaired users. The Wearables for Visually Impaired lecture program was a resounding success, demonstrating the power of technology in bringing people together and promoting inclusivity.

Faculty coordinator: Dr. Lani Rachel Mathew, Assistant Professor, ECED

Student Coordinator: Ms. Sandra SR, S6 EEE



## BlockCon-Step into the blockchain era

BlockCon was a 1-day event about Block chain conducted by IEEE CS MBCET. It was conducted for all years. It aims to initiate and indulge students in an informative arena inspired by trending concepts such as bitcoin and data distribution. The event was held on August 17. It was conducted online on the googlemeet platform. The speaker for the event was our alumni Kevin Jacobs who is currently an Associate 2 product engineer at UST. The session was informative and really intriguing. It included topics related to current trends in the data handling through Block chain and talked about concepts such as data mining and its chain structuring which has its benefits. Overall, the session was informative and exciting to the very end.



## **EXPLORING THE POSSIBILITIES OF MEMS & NANOTECHNOLOGY IN AEROSPACE APPLICATIONS**

IEEE SBC MBCET organized an enlightening lecture program on the topic **"Exploring the Possibilities of MEMS & Nanotechnology in Aerospace Applications"** on 27th September 2024. The session provided a comprehensive understanding of nanotechnology and its applications in the aerospace sector. A total of 89 students participated in this insightful event.

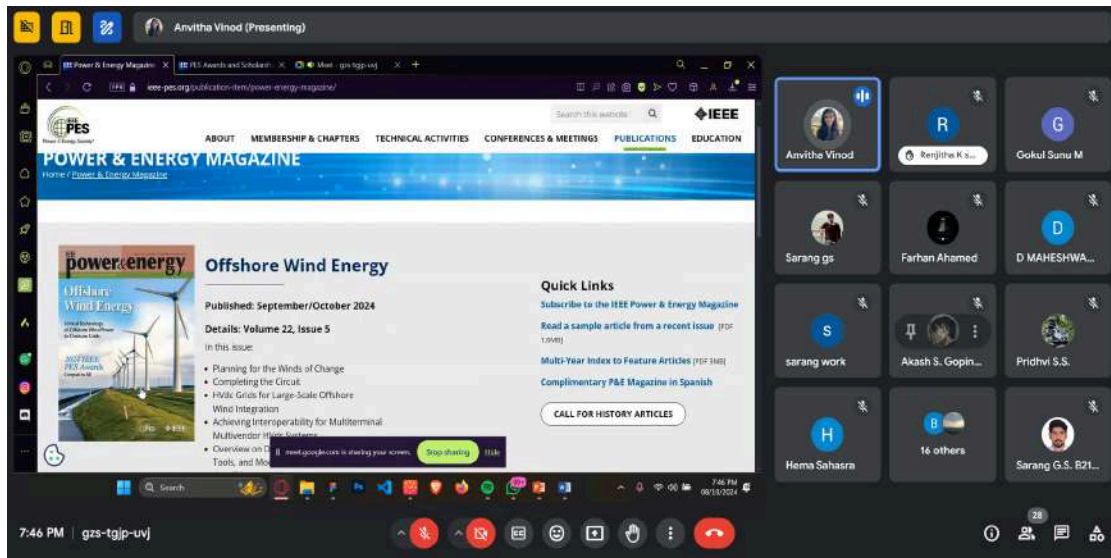
The lecture served as an excellent opportunity for participants to learn from a leading expert and gain a deeper understanding of the potential of MEMS and nanotechnology in shaping the future of aerospace engineering.





## **IEEE PES Member Development session**

On October 8, 2024, an informative IEEE PES membership development session was held online via Google Meet, led by Anvitha Inod, the student representative of the IEEE PES Kerala Chapter. The session attracted approximately 30 participants who engaged in discussions about the benefits and opportunities associated with IEEE PES membership. Anvitha provided valuable insights into the various resources available for members, including networking opportunities, access to industry knowledge, and participation in events. The interactive format encouraged questions and discussions, making the session a productive platform for students to explore how IEEE PES can enhance their academic and professional journeys.



## IEEE Day PES Quiz

On October 15, 2024, the IEEE Day PES Quiz was successfully conducted, engaging 40 enthusiastic students who showcased their knowledge and interest in electrical and electronics engineering. The event featured a series of challenging questions designed to test participants' understanding of power and energy systems, fostering both competition and collaboration among attendees. The quiz not only promoted awareness of IEEE and its initiatives but also encouraged students to enhance their technical skills and network with peers in the field. Overall, the event was a resounding success, leaving participants motivated and eager for future IEEE activities.





# **INTRODUCTION TO TINKERCAD AND WOKWI**

On October 19th, 2024, the IEEE Robotics and Automation Society (RAS) Student Branch Chapter (SBC) at Mar Baselios College of Engineering and Technology (MBCET) successfully organized and hosted an online webinar titled "Introduction to Tinkercad and Wokwi." This webinar introduced participants to two powerful and accessible online platforms: Tinkercad and Wokwi. These tools are widely used for designing and simulating electronic circuits and microcontroller-based projects. The event aimed to provide a foundational understanding of these platforms and their applications in robotics, electronics, and prototyping.

The session was conducted by RAS Chair Gourisankar S and RAS Secretary Krishna Prasad. Mr Gourisankar conducted the session on Tinkercad and then Mr Krishna Prasad conducted the session on Wokwi.

A project submission competition was also conducted where participants were encouraged to apply their newfound knowledge and design a roundabout traffic system.

The winners of the competition were:

1 First Position	Adithya Lalit	EL
2 Second Position	Agnivesh S Nair	CS

The webinar saw impressive participation, with 38 registrations and 23 active attendees, the feedback received was overwhelmingly positive, underscoring the event's success in meeting its educational objectives.

meet.google.com/okw-dojx-bxh

IEEE RAS MBCET (Presenting)

WOKWI

SAVE SHARE blinking using for Docs SIGN IN

```
1 const int LEDPin = 4;
2 void setup()
3 {
4   pinMode(LEDPin, OUTPUT);
5   Serial.begin(9600);
6   Serial.println("Enter the number of times the LED should blink");
7 }
8 void loop()
9 {
10  if(Serial.available() > 0)
11  {
12    int blinkCount = Serial.parseInt(); // read the input as int
13    for(int i=0; i<blinkCount; i++)
14    {
15      digitalWrite(LEDPin, HIGH);
16      delay(500);
17      digitalWrite(LEDPin, LOW);
18      delay(500);
19    }
20    Serial.println("Blink complete!");
21  }
22 }
23
```

Simulation

01:02.968 100%

Enter the number of times the LED should blink:  
Blink complete!  
Blink complete!

IEEE RAS MBCET

Adarsh N

Gourisankar S

Ritvik

17 others

Festin Fleenton ...

3:32 PM | okw-dojx-bxh



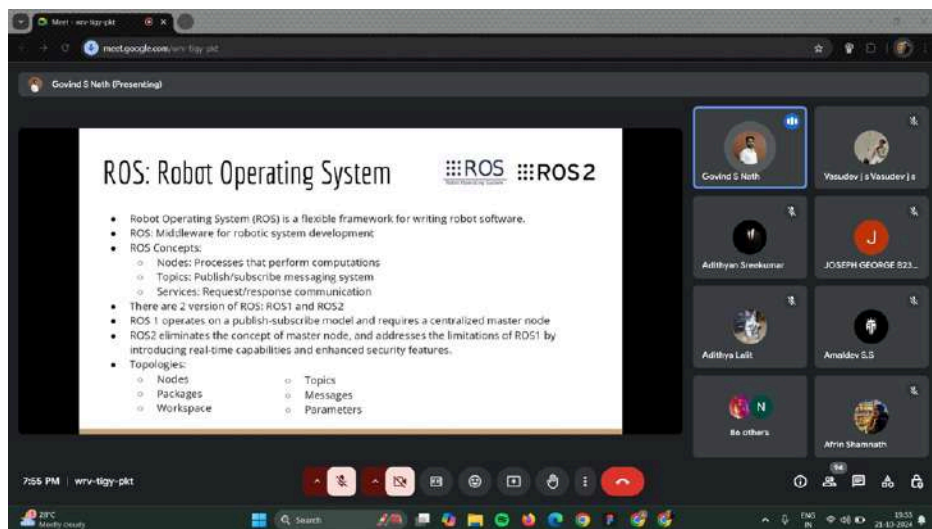
# ROBO WiE

The session featured Govind S Nath, a Tech Fellow at Trizlabz Pvt, as the esteemed speaker.

The session worked as a continuation of our previous robotics session 'Bridging the Gap' On 21 st October 2024. The speaker enthusiastically explained Advanced Sensor Integration and Fusion, Robotics Localization and Mapping, Robot Path Planning and Navigation, and Robotics Simulation and Virtual Environments.

The event witnessed enthusiastic participants. They had an informative session on robotics and AI. The session provided a platform for insightful discussions and reflections on the challenges and opportunities in the robotics world.

A total of 93 participated, overall the session was informative and enjoyable to the participants.



## **ShrIEEEk**

ShrIEEEk is the flagship event organized for first year students. The event was conducted on 9th November 2024. They are introduced to IEEE and its working through this event. Branch councilor of MBCET SB, Mrs LANI RACHEL gave the students an idea about IEEE and different opportunities associated with it. The event started with an ice breaking session followed by Team formation. A small ideathon and elevator pitching along with different fun games were conducted for students to interact with each other. The event was successful in bringing a total of 161 freshers. The event concluded with the announcement of the most dynamic team and a photo session.



## **The Role of Projects in Shaping an Engineering Career**

IEEE SPS SBC MBCET organized an enlightening webinar on "The Role of Projects in Shaping an Engineering Career" on 12th December. The event brought together aspiring engineers, professionals, and enthusiasts to explore the pivotal role of projects in fostering technical skills, innovation, and career growth. The session was led by Sanju Mathew, an accomplished Electronics Engineer, Entrepreneur, and CEO of Cod Of Duty.

Sanju Mathew successfully underscored the transformative role of projects in shaping an engineering career. His session inspired attendees to embrace a hands-on approach, prioritize innovation, and use their projects as stepping stones toward professional success. The speaker's practical examples and thoughtful responses added immense value to the session.

A total of 40 students attended the session, actively engaging through Q&A, sharing their experiences, and seeking advice on project selection, execution, and turning ideas into impactful outcomes. The speaker's insights provided valuable guidance, making the session an enriching experience for all participants.

