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Annual Newsletter 2022







IEEE IA/IE/PELS

Jt. Chapter Kerala



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## Messages



**Dr. Bijuna Kunju**Chair , IEEE IA/IE/PELS Jt.Chapter Kerala

IA/IE/PELS Joint Chapter is proud of the growth in membership in the past year too. This growth is due to the dedicated volunteering of each of our members in Kerala. As a Chapter Chair, I would like to place on record, the deepest gratitude for taking your time and effort in building this group. The vibrancy of our chapter has also increased due to the diversity and density of its programmes. The involvement of all our members in these activities is also so overwhelming. The upskilling of our student members and young professionals has been addressed very carefully in most of our programmes. The series of events presented by the Chapter has added values to professional members too. The collaborations of our professional members with industries and institutions of higher learning has also been well appreciated by the technical community. We could organize quality events which include EV Hack, AKIASSC'22 and i5 which is jointly organized by five prominent societies of Kerala Section. And we were able to bag many awards and funding too.

The three constituent Societies of our Joint Chapter - Industry Application Society, Industrial Electronics Society and Power Electronics Society have been sufficiently strengthened with membership and Student Branches. The attempts will be continued in the coming year also to improve the range of the Chapter.

Best wishes to the new team of students and professionals who have chosen the volunteering job.



**Dr. Vasanthi V**Vice Chair , IEEE IA/IE/PELS Jt.Chapter Kerala

IEEE IA/IE/PELS Jt.Chapter has been very vibrant last year with various activities. Jt.Chapter has been organizing a variety of quality programs throughout the year with the support of sincere and dedicated professional and student execom members. The student team also has been working very hard to execute the ideas resulting from the executive committee meetings into reality. We could organize quality events which include EV HACK and AKIASSC'22. We were able to be a part of i5, a national technical convention jointly organized by five prominent societies of IEEE Kerala Section. Our student branch chapters could bag many awards and could win IEEE PELS day contests.

We could also increase the membership exponentially due to the tireless efforts by our professional and student team. We would like to work hard to achieve the goals of IEEE this year also with the support of the devoted professional and very vibrant student team.



**Dr. Biju K**Immediate Past Vice Chair ,
IEEE IA/IE/PELS Jt.Chapter Kerala

I feel very glad to see another successful edition of the annual newsletter from IEEE IA/IE/PELS Jt. Chapter Kerala. Happy to see the Jt.chapter organized lot of high quality activities, including AKIASSC'22 and EV Hack 2.0. This is the combined effort of our student execom and professional execom with the support of various SBC Chairs and advisors. Hearty congratulations to the newsletter team lead by Ms. Ananthalakshmy. I wish all success to the magazine and the team behind it. I wish an engaging and enriching experience for the readers of this magazine. Best wishes to the activities of Jt.chapter for 2023.



**Mr. Vishnu M**Technical Coordinator, IEEE IA/IE/PELS Jt.Chapter Kerala

The year 2022 was a year full of vibrant activities in the Kerala Section and I can certainly say that IEEE IA/IE/PELS Jt. Chapter Kerala holds a major contribution in it. We had a wonderful and exuberant team last year that helped us to reach great heights. I have been lucky enough to spend time and work along with such vibrant minds. Being the largest Jt. chapter in the world, we have been constantly working to deliver the very best to our members. Through consistent efforts, the second edition of EV HACK 2.0 was successfully completed with over 1600+ participants from more than 21 states. I am proud to state that, last year we have been able to mark our signature in every domain of the society through our various activities and make use of multiple funding opportunities. Industrial involvement in engineering education and Jt. Chapter has always been synonymous. This has been evident from our contributions to the award winning event i5, EV HACK, AKIASSC etc. Our story doesn't stop there as we went on to bag the Outstanding Joint IAS Chapter award from IAS CMD. Our dearest IAS chapters from Kerala bagged 11 out of 18 awards from CMD. All these successes were only possible because of the captain leading our ship, Dr. Bijuna Kunju K, Chair IEEE IA/IE/PELS Jt. Chapter Kerala 2022, backed by our wonderful professional execom that has always been supporting our ideas and constantly mentoring us. Dr. Biju K, Secretary IEEE Kerala Section, was always upfront and played a key role in guiding us along our journey. Being part of Jt. Chapter was indeed an important milestone in my career, as I got to interact with several personalities across multiple sectors and major industries. I would like to thank all our dear members for their consistent support and also our entire team for always delivering their very best. Best wishes to the upcoming team of office bearers in uplifting this glory to attain much greater heights.

### **EXECOM 2023**

## **Professional Execom 2023**



IEEE IA/IE/PELS Jt. Chapter Kerala



### **PROFESSIONAL EXECOM 2023**



Dr. Vasanthi V Chair Professor NSSCE Palakkad



Prof. Divya N A Vice Chair Asst. Prof. GEC TVM



Dr.Deepak M Secretary Asst. Prof. NIT Calicut



Prof. Jithin K Jose Jt. Secretary Jyothi Eng. College Thrissur



Prof. Nitheesh Treasurer Asst. Prof. RSET Kochi



Dr. Bijuna Kunju Past Chair Prof. TKMCE Kollam



Prof. Mohammed Kasim Mentor Prof(Rtd.) TKMCE Kollam



Dr. Biju K Chair-Chapter Relations Asst. Prof. CoE Munnar



Prof. Aji George Chair-Educational Activities Asst. Prof. AJCE Kanjirappally



Dr. Jaison Mathew Chair-Conference Activities Assoc. Prof. GEC Trissur



Dr. R Sudharsan Karthik Chair-Research Activities Asst. Prof. IIST TVM



Er. Sajith C P Chair-Industry Relations Head of Engineering Electric Vehicles,BGST



Prof. Sunitha WIE Coordinator Prof(Rtd.) TKMCE Kollam



Er. Prasanth Pathiyil
Chair-Projects and Research
Head CoE Electrification,Group
Leader-Electric Powertrain,
BGST



Ruben Mathew Chair-YP Activities QA Engineer, Foundingminds Software PVT Ltd. Kochi



Thomas K Gimmy
Chair-Membership Development
Software Developer, IBM Software
Labs, Kochi

## **Student Execom 2022**

ADITYAN S PHILIP

ST.JOSEPH, PALA



AROMALPS

MEA, PERINTHALMANNA

SUJITH KUMAR A

CoE,ADOOR

## **IEEE IAS CMD AWARDS 2022**





## 11/18 IEEE IAS CMD AWARDS 2022

Outstanding Joint IAS Chapter
IEEE IA/IE/PELS Jt.Chapter Kerala

Outstanding Chapter Advisor

Haseena P Y (IEEE IAS SBC CEK) Outstanding Chapter Chair

Khadeeja Beevi M A (IEEE IAS SBC ASIET)

Outstanding SBC IEEE IAS SBC RIT Chapter Web Contest IEEE IAS SBC CEK (3rd Prize)

Continued Outstanding
Performance SBC
IEEE IAS SBC VJEC

Outstanding Small
IAS Chapter
IEEE IAS SBC SJCET

#### **Most Happening Chapter**

(1st) IEEE IAS SBC UKFCET (2nd) IEEE IAS SBC CEC (3rd) IEEE IAS SBC RIT

#### **Humanitarian Contest**

Muhammed Zain (IEEE SB MACE) Noyal Jose (IEEE IAS SBC VJEC)



#### **Annual General Meeting 2022**

The AGM 2022 of IEEE IA/IE/PELS Jt. Chapter Kerala was organized on 16th January 2022 from 10:00 AM - 1:00 PM through an online platform. The meeting commenced by 10:00 AM with the code of ethics recited by Prof, Sunitha Beevi K, Past Treasurer, IEEE Kerala Section. Dr. Vasanthi V, Vice-chairperson, IEEE IA/IE/-PELS Jt. Chapter Kerala welcomed the gathering. The chief guest of the meeting was Dr. S, Ayoob, Pro Vice Chancellor, AP-JAKTU. He inaugurated the event and commended the vibrant activities of the chapter and demanded to keep alive the vibrancy throughout the coming years too in his inaugural address. The Joint chapter activity report and Student Branch Chapter report were presented on the meeting by Prof. Prabin James, Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala and Mr. Sooraj V Namboothiri, Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala respectively. The new office bearers were announced by Prof. Muhammed Kasim S, Chair, NomCom and also after that Dr.Bijuna Kunju, Chairperson, IEEE IA/IE/PELS Jt. Chapter Kerala addressed the gathering..An interactive discussion on the future activities were conducted in which ever one marked their opinions and ideas. The meeting was well organized which was possible only because of the collective effort of each and every volunteer which again, is the sole reason behind the success of IEEE IA/IE/PELS Jt. Chapter Kerala. The meeting was concluded at 1:00 PM by the vote of thanks delivered by Prof. Prabin James, Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala.



#### F2F MEETING 2022 - IEEE IA/IE/PELS Jt. Chapter Kerala

IEEE IA/IE/PELS Jt. Chapter Kerala conducted the first Face to Face Meeting of the year on 12th of February 2022 in hybrid mode providing a platform for the members of Student Execom of 2021 and 2022 to interact with each other. The meeting was held at Nippon Kerala Centre, Kochi, and was live-streamed through google meet, with a total of 27 participants.

The session commenced at 10:20 AM with the welcome address by Dr. Vasanthi V (Vice-Chair, IEEE IA/IE/PELS Jt. Chapter Kerala) which was followed by the Inaugural Address by Prof. Muhammad Kasim (Immediate Past Chair,IEEE IA/IE/PELS Jt.Chapter Kerala). He urged the newly elected Execom to guard and preserve the glory of the chapter and to take it to greater heights and also enlightened the students regarding the wide range of opportunities provided by IEEE. Ms. Radhika (WiE Coordinator, Jt.Chapter) then pledged the IEEE code of ethics. Later all the attendees provided a brief self introduction.

Prof.Biju K (Treasurer, IEEE Kerala Section) addressed the gathering in which he talked about the role and responsibilities of each Execom member. He provided insights about upcoming activities of the chapter. Dr.K Bijuna Kunju ( Chair, IEEE IA/IE/PELS Jt.Chapter Kerala) gave a special address, talked about the glories of the chapter throughout these years, and exhorted each team member to keep up its legacy. The next session was handled by Prof. Agi George(Chair, Membership Development) on membership development in which he canvassed about the upcoming plans like organizing campaigns, events, surveys, MD sessions, MD team formation, giving wide publicity to promo codes, about continuing the flagship events, job fairs, followed by Prof. Nitheesh Kurian (Representative, Kochi Hub)who talked about collaborations with chapters and events that are boon to the student community.

Mr. Ruben Mathew(Student Representative,Execom 2020) and Mr. Eldho Babu(Technical coordinator,Execom 2020) gave a detailed overview of VTools and OU analytics for the Execom members. Later Sooraj Namboothiri (SR, Execom 2021) and Muhammad Mushraf (ECC, Execom 2021)communicated with the members and gave a recap about the chapter activities, the role of every position, WIE events, CMD awards, connecting

with LINK, updating the website, etc The activity plan for 2022 was devised through active discussion among the members. The valuable inputs from each and every student member along with the relevant suggestions from the Professional Execom together provide the picture of a promising year ahead. Webinars on VTools, precursor events, AKIASSC, chairs meet, EV Hack, industry collaboration, Event proposal -Renewable energy, training sessions for students were some of the event ideas evolved from the discussion. The meeting ended by 2.00 pm with a vote thanks by prof. Prabin James (Secre tary, IEEE IA/IE/PELS Jt.Chapter Kerala).



#### **EVO**

The event 'EVO' - Explore IEEE vTools and OU Analytics was organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 27th February 2022 from 7:00 PM - 8:00 PM through Google Hangouts Meet. The distinguished speakers of the session were Mr. Ruben Mathew, Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala 2020 and Mr. Eldho Babu, Technical Coordinator, IEEE IA/IE/PELS Jt. Chapter Kerala 2020. The event aims to make the student branch chapter office bearers aware about these platforms which are very much essential tools in their IEEE career and has got 40 participants.

The session was started out by the welcome speech of Dr. Bijuna Kunju, Chairperson, IEEE IA/IE/PELS Jt. Chapter Kerala. She introduced the renowned speakers of the session and added her personal experiences in working with them. Mr, Eldho Babu provided a brief introduction on IEEE OU Analytics to the participants and also about the various aspects like who can use, how to use and key features of this tool. The five sections of OU like members and affiliates, students, volunteer positions, memberships and subscription, doublet and map were clearly explained during the session. He described how to access the membership data, volunteer history, volunteer positions etc which benefited the new office bearers to use this platform even more comfortably.

The second half of the event which is on IEEE vTools was handled by Mr. Ruben Mathew. IEEE vtools is a platform used by IEEE student members and volunteers. He elucidated the importance of this tool for a person who is having an administrative role in any level of IEEE.

The practical session on officer reporting, event reporting were also done. The participants came to know about the new features of pre-event reporting, searching of events and using Webex etc from the session.

The participants got an opportunity to interact with the speakers and ask their queries at the end of the session. The speakers thoroughly answered the questions of attendees and motivated them to mold up a good professional career through IEEE. Through this event, the new office bearers were able to overcome the barriers and came to the forefront. A photo session was also conducted at the end. The session was concluded by the vote of thanks delivered by Prof. Prabin James, Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala.



#### CRESETERE

The event, 'Cresetere' was organized by IEEE IA/IE/PELS Jt. Chapter Kerala as a part of Women's day Celebrations on 8th of March 2022 from 8:30 PM - 10:00 PM via platform. The distinguished s peakers of the session were Ms. Sarada Jayakrishnan, Immediate Past Chair, IEEE Kerala Section and Ms. Sunitha Beevi K, Chair, Professional Activities, IEEE Kerala Section.

The session was started out by the welcome speech of Dr. Bijuna Kunju, Chairperson, IEEE IA/IE/PELS Jt. Chapter Kerala. . She also mentioned her friendship with them and the wonderful experience she had working with them. This interactive session between the speakers and the stu dent execom of Jt. Chapter discussed the diverse aspects of empowering women, its challenges and solutions for overcoming them. Speakers shared their experiences on how they began their professional careers and that of the IEEE as well as the importance of maintaining a balance in both career paths. The audience was very enlightened as they heard their perspectives on gender bias and also made them aware of the reason underpinned by the theme of this year's Women's Day.

The event was very interactive and stimulating and would certainly leave an indelible imprint of comforting memories on everyone's mind. The message on the importance of women, their contribution in engineering and especially in various industries were conveyed by speakers which helped to conclude the session on a positive note. The session was concluded by the vote of thanks delivered by Ms. Divya N.A, WiE Coordinator, IEEE IA/IE/PELS Jt. Chapter Kerala.



### ALL KERALA INDUSTRY APPLICA-TIONS SOCIETY STUDENT CON-CLAVE 2022 (AKIASSC'22)

IEEE IA/IE/PELS Joint Chapter Kerala and IEEE SB RIT jointly organized the All Kerala Industry Applications Society Student Conclave 2022 (AKIASSC'22) from 6th May to 8th May 2022 at Rajiv Gandhi Institute of Technology, Kottayam.



#### DAY 1

The registrations for the event started at 9:00 AM on 6th May 2022. The registration process ended at 10:00 AM. After the process all the delegates were assembled together.

#### INDUSTRIAL VISITS

Location 1: RUBCO Coir Mattress Factory The visit was organized from 10:00 AM to 12:30 PM with 50 delegates, five volunteers and three professionals. All the processes involved in mattress production were shown and explained. The processes include coir and rubber preparation, stitching, packing etc. Necessary explana tion was given to impart awareness regarding the industry's working for its quality production of its products. A quick but detailed tour was given of the machineries used, to ensure rapid production rate and superior quality products. The delegates got an opportunity to gain deep insight about real time industrial production, instilling in them a sense to contribute to the industrial world with better technologies.



Location 2: Dolphin Rubber Industries The visit was organized from 10:00 AM to 12:30 PM. A total count of 52 delegates, five volunteers and four professionals made the visit. First the students were given an introduction to the industry, and the production processes. Their representatives helped the students to explore the

machineries and their usage. They were given a brief explanation about the three processes of production of rubber mats, which includes mixing of tyre powder, sheet making using a mill and production of mats. Each and every stage of the process is explained in detail to the students and their doubts were also cleared at the moment. Around 250 moulds were introduced to the students. They were shown in all the stages of production and finished mats as well. The working of the company is detailed to the student which includes the details regarding the import of raw naterials, exporting of the products.

After the warehouse visit, the attendees were given a talk from the industry. Mr. Ebin K Mathew gave an introduction to the students about the industry and its development throughout the years. They started in 1995 with a 930 Rs capital and now reached 75 crore sales per annum. He explained about rubber mats, their

He explained about rubber mats, their wide applications and exporting of their products around the globe. Their certifications are also explained to the students, and a video is also shown regarding the details of the Dolphin Rubber Industries. The students were given an enlightenment about the future scope for engineering students to contribute to the industry.



#### STUDENT PROFESSIONAL AWARE-NESS SESSIONS

#### Session 1

The talk session started by 2:30 PM on 6th May 2022. The interactive talk session with the Director of the Lead College of Management, Dr. Thomas George K, made the delegates think differently. The program was arranged in the motive of sharing the knowledge and practical experiences of Dr. Thomas George K, who has a demonstrated history of working in the professional training and coaching industry Through his engaging session, he inspired many promising minds to make their dreams reality. He engaged the audience in a very interactive way by ex plaining his own life experiences during the development as an entrepreneur. This talk helped the students to gain more insights into a professional career and successful life. The speaker was able to establish a good connection with the delegates. He urged the students to approach the education system in a very different way. Through his talks, he taught them to identify what they are good at and do that and be an expert in that particular field in which they think that they can do the best. There are a lot of opportunities existing and going to come. Every passion can be turned into a reality and a career can be carved out from that. At the end he pointed out that finding out a particular field, spending time, and excelling in the same is more important. The speaker replied to all the questions of the students and emphasized the importance of being unique, thinking differently, taking challenges as opportunities, which will always

lenges as opportunities, which will always give amazing results. The talk session was attended by a total of 102 delegates. The talk indeed was motivational for the young minds to face the future with confidence. Students were extremely delighted after having this enlightening session.



#### Session 2

The interactive panel discussion on Art of Communication started at 4:15 PM. The panelists for the discussion were Mr. Shahim Baker, Founder and Ceo of Baker and Grey, Cochin, Kerala and Mr. Vijay S Paul, Sr. Communication Coordinator at Monash University, Australia. communication is a key skill to becoming a good leader. As a future generation moving towards workplaces, the topic of the discussion was highly relevant to the delegates.The session had an active participation of 102 delegates. The panelists conveyed that communication is all about understanding the intentions behind the information and being able to clearly convey a message that makes the other person feel heard and understood. And the better you communicate, the higher will be your growth curve.

They stressed on the importance of effective communication skills which include active listening, being empathetic and compassionate, body language and being present in a communication. The panelists discussed the art of communication through many real life experiences.

Further, they discussed clarity in conversation, tone of voice and assumptions made in conversations which helped the delegates to clearly understand the way of communication of a professional. Then they moved on to the discussions regarding the right way to send an Email and how to attend an interview in an effective manner. At last the panelists also discussed the importance of IEEE in moulding one into a good professional and how the IEEE and its community help us improve our networking and communication skills which indeed gives us a potential to be good leaders.



#### INAUGURATION CEREMONY

The inaugural ceremony of All Kerala Industry Applications Society Student Conclave 2022 (AKIASSC'22) was held at 5:30 PM on 6th May 2022 at RIT, Kottayam. Ms.Adheena V Abraham (Past Chair, IEEE IAS SBC RIT) delivered the Code of Ethics. Dr. Bijuna Kunju (Chair, IEEE IA/IE/PELS Jt.

Chapter Kerala) welcomed the chief quest, dignitaries and all other volunteers and delegates present. The presidential address was delivered by Prof. Muhammed Kasim S (Vice Chair, IEEE Kerala Section). He interacted with the delegates and motivated them to actively participate and utilize the essence of the event to its maximum. Chief Guest Dr. K N Raghavan IRS and other dignitaries together inaugurated the conclave by lighting the lamp. Dr. K N Raghavan IRS delivered the inaugural address and he inspired the young ignited minds with his enlightening words, fol lowed by the address by Dr. C Sathish Kumar ( Principal, RIT). The inaugural ceremony further moved with the felicitations by Dr. Mini Ulanat ( Chair, IEEE Kerala Section), Dr. Biju K (Immediate Past Vice Chair, IEEE IA/IE/PELS Jt. Chapter Kerala), Dr. Binoj Kumar AC (Chapter Advisor, IEEE IAS SBC RIT ). They all pointed out the importance of IEEE in both professional and personal development. Mr. Sooraj V Namboothiri ( Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala, 2021) gave an overview of the event. Dr. Mini Ulanat ( Chair, IEEE Kerala Section) released the Annual Newsletter of IEEE IA/IE/PELS Jt. Chapter Kerala. The awards for the best student branch chapters and volunteers were distributed during the ceremony by the chief guest. The inaugural ceremony was concluded with the vote of thanks delivered by Dr. Dolly Mary A ( Branch Counselor, IEEE SB RIT).



#### DAY 2

#### **WORKSHOPS**

The day 2 started at 9:00 AM with 3 work-shops that ran parallel.

#### 1. Future with Electric Vehicles

The session was handled by Mr. Pradeepkumar Keloth, Former Head of Engineering, Electrification at Bosch Global Software Technologies. He is a technology leader with 3 decades of experience in the areas of systems modeling and simulation in both the Automotive and Non-Auto motive industries. The session enabled the participants to add more insights into the past, present, and future of EVs.It was carried out in two sessions forenoon and afternoon. The workshop had the active participation of 52 delegates. Manju, Vice-Chair IEEE WiE AG RIT delivered the welcome speech. The speaker briefly explained EV components and systems, DC power source converter dc to ac, Carbon emission, greenhouse effect, Vehicle emissions - impact on human health, Solar potential In India, and renewable energy sources for charging EV.

The workshop was very interactive in nature and received positive feedback from the delegates. Participants became aware of IEEE membership benefits and the Mission and vision of IEEE. Vasanthi V, Vice Chair, IA/IE/PELS Jt. Chapter Kerala delivered the vote of thanks and handed over the momentum to the speaker.



#### 2. 3D Modelling in Blender

The workshop was handled by Mr. Muhammad Nisaj I P, Product Design Engineer, Schneider Electric. The students were first given an introduction about the Blender Software, its features, scope and applications. After giving a brief introduction to the software and detailing its features, the students were given guidance to download the software.

The workshop spanning over 5 hours was used to teach the attendees the basics of Blender, starting from its interface, to completely making a 3D model from scratch. The students, who are complete newbies to the Blender software, were taught how to model, texture, light and render.

The workshop was carried out in two sessions, forenoon and afternoon that covered all the basics of Blender and hands-on training on the same. The workshop was attended by a total of 32 delegates. The session was very engaging, that every student consumed the best learning experience possible. The session was a transition for the students from a beginner to a blender enthusiast. It was received with much enthusiasm and appreciation by both the students and organizers alike. There was a Q&A session in the end where the students got a chance to interact with the speaker to clear any last doubt.



## 3. Technical Paper Writing and Presentation

Workshop on Technical Paper Writing & Presentation handled by Dr Vincent G,Retired Professor, RIT KOTTAYAM. The workshop was carried out in two sessions forenoon and afternoon that consisted of theory and practical. The session had an active participation of 18 delegates. For noon session covers areas regarding the art and science of writing its archival values, types of technical articles.

Also includes the method of writing content and how to make it concise and at the same time to be comprehensive too. The speaker gives a brief idea regarding the sequence of abstract writing, presentation skills, communication ways etc. Afternoon session deals with practical things, such as an introduction to a new platform named INKSCAPE, a professional vector editor for graphics in windows. Method of using inkscape tools for creation of new empty document, to open existing svg document, to cycle through all documents are included. Also includes creation of shape and al teration of shape using INKSCAPE.



The three workshop sessions that ran parallel ended at 3:00 PM.

#### FIELD TRIP

A field trip was arranged for the delegates of AKIASSC'22 on the second day. The trip started at 3:00 PM. 102 delegates along with the volunteers and professionals had a visit to Kumarakom Backwaters. Kumarakom is a perfect blend of Kerala's natural beauty. The delegates really cherished those moments. A photo session was also included to savor the memories.



#### **CULTURAL EVENTS**

On 7th May 2022, the second day of AKI-ASSC'22 a cultural night was arranged for the delegates in the college auditorium at RIT, Kottayam. The cultural night started at 7:00 PM. The event included vibrant musical and dance performances by the college students. The delegates were engaged with the fun games and scintillating music and dance performances. The cultural night ended with a fulfilling dinner.



#### DAY 3

#### TALK SESSION

#### **Career Planning for Long Term Success**

The session started by 9.00 AM .The talk session was handled by Mr. Shinto Joseph, Director South East Asia Operations,LDRA India.

The session discussed the success, failure, values and importance of career planning. A career is more than just a job, it also includes your progress through life, your growth and development. He urged the delegates to identify those occupations in which they have a high probability for success and happiness. The main points under discussion were influential thought leaders, right measure of success, impact of win at any cost mindset, short medium long term goal. The session concluded by stressing the importance of not giving up and doing something new which is creative and innovative. Many tend to perceive career decision making as complex or confusing. After attending the session the delegates got an insight into the world of opportunities and how to face life with confidence.

The talk session ended at 9:45 AM. The session had a participation of 102 delegates. The participants were able to clarify all their queries by the end of the session. A momento was presented to Mr. Shinto Joseph as a token of appreciation.

#### INDUSTRIA | IA/IE/PELS JT. CHAPTER KERALA SECTION



#### **WiE TRACK**

The talk session started at 9:45 Am. Dr. Leena Mary, Research Dean at RIT Kottayam and Ameera Sherin, ex-RITian and Associate Software Engineer at KeyValue Software Systems were the main speakers at the event. Various SB Chapter Chairs also graced the occasion. The session commenced with a talk session by Dr. Leena Mary on Career resilience for Women Engineers. She spoke at length about resilience in career and ways to develop it. She also shared her views about the importance of Women Engineers which would mean more role models for the futur generation. She also emphasized that women in engineering benefits everyone by increasing the potential to develop inclusive, innovative solutions for the complex problems that the world is facing.



It was followed by a talk session by Ameera Sherin on the Representation and Importance of Women in the STEM field. Women and girls are systematically tracked away from the STEM field. She explained in detail about the reasons for the feeble population of women in the STEM field and the problems they face. She stressed the fact that women have an important contribution in building a more equal world. They just need an equal chance to do so. She also suggested solutions to overcome the STEM gap. The session successfully concluded at around 11am.



#### YP TRACK

An interactive and motivating YP Track session was handled by an IEEE Young Professional, Mr. Jaikrishnan Nair, Associate Product Manager, KeyValues Software Systems, Ernakulam, Kerala. The session was held in Sopanam Hall on 8th May 2022 from 11 am to 12 pm. Delegates were given deep insights on failures in life and measures to brave it. The session offered an opportunity for the delegates to rediscover themselves, assess their strengths and weaknesses, thus inspiring them to maximize their effectiveness.

Many tips were given to instill inner strength. Many questions were asked to and by the audience to make it an engaging experience. Delegates and the volunteers were spirited, filled with vigor to master all the endeavors that life throws its way.



#### SB CHAPTER CHAIRS MEET

IEEE IA/IE/PELS SBC Student Chairs meet was organized on the final day of AKI-ASSC'22. The meeting started at 10:00 AM at RIT, Kottayam. The main aim of the meet was to present the annual report of 2021 and to discuss the plans for 2022, and also for an effective interaction between the chairs with the Student Leadership Team and Professional Team of IEEE IA/IE/PELS Joint Chapter, Kerala. Dr. Vasanthi V (Vice Chair, IEEE IA/IE/PELS Joint Chapter Kerala) delivered the welcome speech. She welcomed all the dignitaries present including Dr. Bijuna Kunju ( Chair, IEEE IA/IE/PELS Jt. Chapter, Kerala), Dr. Biju K (Immediate Past Chair, IEEE IA/IE/PELS Jt. Chapter, Kerala), Prof. Agi George (Chair, Membership Development, IEEE IA/IE/PELS Jt. Chapter, Kerala), Prof. Nitheesh Kurian (Representative, Kochi Hub, IEEE IA/IE/PELS Jt. Chapter, Kerala).

Hub, IEEE IA/IE/PELS Jt. Chapter, Kerala). The first session was handled by Prof. Agi George, regarding membership development and benefits of IEEE. It was followed by the future events presentation by Govindaraman (HSR, IEEE IA/IE/PELS Jt. Chapter, Kerala, 2021) and Rakesh M R (Student Representative, IEEE IA/IE/PELS Jt. Chapter, Kerala). Further the gathering was addressed by Prof. Nitheesh Kurian. He urged the volunteers to work without any expectations and to relish the joy of volunteering. Afterwards, every SBC Chair came up with the future event plans and past event details. The meet further moved with the felicitations by Dr. Bijuna Kunju (Chair, IEEE IA/IE/PELS Jt. Chapter, Kerala), Dr. Biju K (Immediate Past Chair, IEEE IA/IE/PELS Jt. Chapter, Kerala), and Nebic Johnson (Student Representative, IEEE IA/IE/PELS Jt. Chapter, Kerala, 2019). They all stressed on the importance of making growth in the memberships and amplifying the activities of the chapter. Prof. Agi George, (Chair, Membership development, IEEE IA/IE/PELS Jt. Chapter, Kerala) delivered the Vote of Thanks.



#### **CLOSING CEREMONY**

The closing ceremony of AKIASSC'22 started at 3:00 PM at RIT, Kottayam. Dr. Bijuna Kunju (Chair, IEEE IA/IE/PELS Jt. Chapter, Kerala) delivered the welcome speech. She welcomed all the dignitaries present. All the delegates and volunteers gathered to be a part of the ceremony. All the dignitaries interacted with the delegates. It was followed by the delegates and volunteers sharing their experience of being a part of the event. The Student Leadership Team members of IEEE IA/IE/-PELS Jt. Chapter Kerala for the previous year were awarded the certificates. The event concluded with a photo session.



**IDEATE** 

IEEE IA/IE/PELS Jt. Chapter Kerala in accordance with the PELS Celebrations 2022 organized an offline idea pitching competition based on the recent advancement in the field of power electronics from 25th to 26th June 2022. The event commenced with the inaugural ceremony by chief guest Dr Nalesh (department of electronics, CUSAT chair, RFID council, Kerala chapter) followed by his keynote session

on "Turning ideas to product". The session started at 10 AM. The speaker walked the delegates through the concept of how to turn a great idea into a prototype and then turn that into a product. He also gave the delegates an idea about the topic in which they are required to ideate and prepare the presentation. After the 1st session participants were allowed to ideate and network. Each team discussed and created their idea accordingly within the spectrum of a given topic.

The second day of the event was for report presentation, which commenced at 10.00 AM with the participation of 7 teams. The participants were allotted a total of 15 minutes to present the idea to judges followed by a question answer session. All the teams brought the best out of them. Each and every idea was efficient and versatile. The report presentation of all 7 teams was concluded in 2 hours.

The event was concluded with a valedictory function. The chief guest of the event was Dr. Elizabeth Rita Samuel (Hod, EEE dept, RSET IEEE Kochi Hub VSAC) distributed the prize to the winning team.





#### EV Hack2.0 Bootcamp

EV Hack is a Hackathon on Electric Vehicles organized by IEEE IA/IE/PELS Jt. Chapter Kerala in collaboration with Bosch Global Software Technologies Pvt Ltd Prior to the hackathon, an online Bootcamp was organized on 26th June to educate the participants about designing Electric Vehicles and provide them with a clear idea regarding the hackathon. The session was handled by industrial experts in the field. They gave a brief overview of Bosch, regarding its objectives and services.

The Bootcamp kicked off at 9:00 am with the inauguration by Mr. Prashanth Pathiyil (head-COE-Electrification -BGSW), Mr. Vivek Bhageria (program manager-BGSW). The first session was on "system engineering in Evs- topologies and component detailing" which was handled by Dr Sandeep Sasidaran.

Followed by this Mr. Vikas P CTO of Alfatron motors discussed the concepts of motor designing, motor topologies, and drives. he also detailed the current practices and trends. an introduction about axial flux machines and the fundamentals of designing aspects was given by Mr. Suresh, design engineer, Torus Robot-

ics . the speaker also discussed the modelling and simulation of EV. the After noon session was by Mr. Vaibhav Shah research scholar of IIT Ropar. he gave an overview of switched reluctance motor drives. also, there was a case study of tesla motors and power electronic circuits which was carried out by Mr Rohit P(Electromagnetic FEA engineer- Reliamotive labs) and Mrs. Fathima(power electronics engineer -Reliamotive labs).all the session was well detailed and effectively delivered.

The Bootcamp concluded by 4.00 am. Throughout the session, we could see active participation by the attendees which clearly showed their enthusiasm toward the hackathon.



#### **ARDUINOX**

#### TRY ENGINEERING WORKSHOP FUNDED BY IEEE R10 EDUCATIONAL ACTIVITIES

ARDUINOX is a workshop jointly organized by IEEE IA/IE/PELS Jt Chapter Kerala and IEEE SB TKM from 13 July to 15 July in online mode and 23 July in offline mode, at TKM College of Engineering, Kollam. The event mainly focused on providing theoretical and practical knowledge on microcontrollers.

Main focus of the workshop was to do hands-on practice with the Arduino Uno board. Arduino is an open-source development board used by developers and hobbyists for creating projects and prototypes. Arduino has a vast collection of supporting libraries developed open-source users across the world. Learning this platform might help students in the rapid prototype development of their project. Keeping these facts in mind, the content of the workshop was designed and delivered. The topics covered in the workshop include - Hardware and Software Programming. The outcome of the workshop was in the form of the implementation of a sample working project.

#### DAY1

Day 1 started at 8.00 pm. The session was handled by prof Nithesh Kurian, who is an assistant professor in the electronics and communication department, Rajagiri school of engineering and technology. The session began with the discussion on "what is an Arduino".also about its significance .He introduced the Arduino board and IDE to the participants.

#### DAY 2

Day 2 of the online workshop continued with the basics of Arduino programming.

#### DAY 3

The last online session of Arduinox was component interfacing using Tinker CAD, where delegates were introduced to the platform where they can use Arduino and learn its functions and applications more.

#### DAY 4

The event's last day was held on 23 rd July 22 at the TKM college of engineering. The official inaugural ceremony started at 10.00 am. Dr. Bijuna Kunju, chairperson of IEEE IA/IE/PELS Jt Chapter Kerala inaugurated the event. She talked about the importance of Arduino and its real-life applications and also about the knowledge that the participants will achieve through this event. She interacted with the delegates for some time and motivated them to utilize the opportunity to its core.

The inaugural ceremony was followed by the practical session, hands-on training using Arduino kit under the guidance of Prof Nithesh Kurian(asst prof: dept of electronic and communication, Rajagiri school of engineering and technology). The session started with the basics of Arduino. The session also concentrated on familiarizing the platform TinkerCAD which is one of the most commonly used platforms to study and work with Arduino .Later 2 hands-on works were done. one of them was blinking a single led with Arduino and another one was blinking an led based on intensity. The session wound up at 12.30. The event resumed after the lunch break, with an orientation by Dr. Biju on "whats IEEE all about".he expressed the significance of IEEE and its impact on the careers of students as well as professionals. The event was concluded with the distribution of mementos for prof Nithesh Kurian and Dr. Biju for their valuable time and involvement throughout the event

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#### CAPACITY BUILDING WORKSHOP

Capacity building workshop is an R10 EAC-funded event organized by IEEE IA/IE/PELS/Jt Chapter Kerala on 1st October 2022 at TKM College of Engineering for framing a global curriculum for academic and industrial excellence.

The event commenced at 10 AM with a welcome speech by Dr. Bijuna Kun-ju(Chairperson, IEEE IA/IE/PELS Jt Chapter).she gave a brief preface.

Followed by it Prof.Divya N A(Wie Coordinator) presented the syllabus, academics, and credit systems of different universities, and Vishnu M (Technical Coordinator, Jt Chapter) gave an outline of the academic structures, curriculum, credit system, of IIT, NIT, VIT. Also analyzed their differences from other universities.

The next section was an open discussion on the present curriculum of Kerala Technical University and analyzed the key demands and limitations of the current curriculum. Acceptance of curriculum, availability of opportunities, credit systems, value-based educations-AICTE model, college values, organizational backgrounds, and job opportunities are some of the key elements discussed throughout. At the end of the workshop, after the interaction of 5 OUs, a new curriculum was framed using key facts obtained through discussion.

#### EV HACK 2.0

EV Hack, the outstanding student event of the IEEE Kerala section in the year 2021 in its very first version is an online Electric Vehicle Hackathon at a Pan India level organized by IEEE IA/IE/PELS Jt. Chapter Kerala in collaboration with Bosch Global Software Technologies Private Limited. EV HACK 2.0 (the second version) was also conducted successfully and its final round was on October 8, 2022, through an online platform. The event kicked off at 9:00 AM. with an inaugural speech by Dattatri Salagame (CEO and Executive Vice President, BGSW). R.K. Shenoy addresses the audience (Member of the Executive Leadership Team and Senior VP at Mobility Engineering, BGSW. Anusha Kinnimulk (Campus Executive Officer, BGSW) provides the event briefing.

Following the opening ceremony, attendees were guided to the second meeting following their scheduled timeslots. The number of teams was twenty three. The moderators were members of the bosch. The panel made a pretty accurate assessment of the work. The evaluation was based on certain criteria. They mainly focused on, whether the idea put forth by delegates has business value in the current scenario, and whether it makes an impact on society. It must be realistic and able to be implemented, the team innovated to build the product As the partici pants did such a great job, It was really hard for the panel to evaluate. The event went off without a hitch and the delegates gave the best presentations.

The closing ceremony was held in the main meeting room after the entire presentation. closing speech by Mohan Bellur from BGSW (Head of University Collaborations, BGSW). The final address was delivered by Dr Sameer (Secretary, IEEE Region 10). The hackathon concluded at 2:00 pm.

## LET'S GO DIGITAL- Reaching Local Initiative

The majority of people in the tribal areas are digitally illiterate which makes it difficult for them to cope up with the digital environment that has evolved over the last few decades. IEEE IA/IE/PELS Joint Chapter Kerala in association with IEEE Student Branch of NSS College of Engineering, Palakkad conducted a digital literacy program LET'S GO DIGITAL sponsored by IEEE R10 Educational Activities Committee in Kallakkara ooru, Sholayur Panchayat at Attappadi on 29th October,2022. The program was inaugurated by Dr. Venugopal G, Syndicate and BoG Member, APJ Abdul Kalam Technological University, Kerala. The ultimate aim of this program is to impart them with the basic knowledge of technology to improve their standards of living, bring them into the mainstream and ensure that they can access all the information and benefits they are entitled to.

We had conducted training sessions and a class engaged by our student team members and professionals. The classes covered all the things right from the basics in their local language giving due importance to their level of understanding. The training sessions and classes mainly focused on creating email accounts, usage of necessary mobile applications such as WhatsApp, e-certificates and their renewal, how to avail e-services, how to use digital payment methods etc. Learners from all ages and genders showed great enthusiasm during the digital literacy classes. It is sure that this initiative has made a considerable change in their life making it easier for them to live in this digital era and it really helped to bridge the gap between them and technology. After the session, most of them were able to do things independently.





#### INTRODUCTION TO PV SYST

A PVsyst workshop was presented as part of EMERGENCE 2.0 by IEEE Industry Applications Society Student Branch Chapter at the College of Engineering Chengannur in collaboration with IEEE IA/IE/PELS Jt. Chapter Kerala. Mr. Ajayan J, a Project Engineer at TATA Power, and Mr. Ananthu R Krishnan, a Clean Energy Expert at DE-LOITTE, INDIA managed the workshop. Mr. Yadhu R Nair (Secretary, IEEE IAS SBC CEC) gave a welcome address to kick off the session. First, an overview of the PVsyst software's capabilities as well as it's scope was given to the participants. Speakers provided participants with background information on sun, solar cells, energy conversion processes, and numerous technical aspects and terminologies used in solar energy conversions before moving right into the software component. The first day's workshop, which lasted more than three hours, was utilized to instruct the participants in the fundamentals of the PVsyst program, from its user interface to fully designing a PV panel in accordance with the specifications. There were forty delegates in total that attended the event. Every student got the best learning experience possible because of the session's high level of engagement.

The program continued for the past three hours on the second day (November 6, 2022) starting at 9:30 am IST. The lesson served as a transition for the students from being new to using PVsyst. Both students and the organizers responded to it with great enthusiasm and admiration. The students had the opportunity to talk

with the speaker during a Q&A session at the conclusion of the presentation. The first day's workshop, which lasted more than three hours, was utilized to instruct the participants in the fundamentals of the PVsyst program, from its user interface to fully designing an PV panel in accordance with the specifications. The students had the opportunity to talk with the speaker during a Q&A session at the conclusion of the presentation.



## DESIGN AND DEVELOPMENT OF POWER ELECTRONICS

IA/IE/PELS Jt. Chapter Kerala in collaboration with C-DAC organized a workshop on the Design and Development of Power Electronic Systems as part of i5, a three-day national conference organized by five chapters of recognized societies of IEEE Kerala Section.

The session was moderated by Mr. Danesh and Mr. Ajeesh from the Centre for Development of Advanced Computing (C-DAC) is the premier organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out research and development in IT, Electronics, and associated areas. This session provided attendees with an overview of

power electronics design and development. It was held over two days in two parts, morning and afternoon. 42 representatives actively participated in the workshop.

Ananthalakshmi, News-letter Editor of IA/IE/PELS Jt Chapter Kerala gave the welcome Address. The session begins with the Introduction of the mentors and delegates. The delegates were grouped, and each group consisted of 4 members.

On the first day, the Morning session was handled by Dinesh Sir. He briefly explained the Fundamentals of the basics of power electronics, power converters &types of converters. control and monitoring circuits, resistors in power electronics circuits and type, and magnetics in power electronics. (limitation:frequency), power electronics thermal design, Losses in the switching device sensors for power electronics, and the principle of a hall sensor. The afternoon hands-on training session was led by Mr. Ajeesh. The session ended with Q and A session. The second day was kick-started with circuit simulation using Psim software, followed by circuit synthesis and operation confirmation of the buck, boost, and buck-boost converters. Hackathon was held in the afternoon session.

The workshop was highly interactive and received positive feedback from the participants. The hackathon is judged by a jury of experts. The result was declared on the last day of i5.

### Distinguished Lecturer Program 1

IEEE IAS SBC CET conducted a session

on 18 November 2022 as part of the Distinguished Lecturer Program. The session was engaged by Dr. Vinod Khadkikar, IEEE Fellow, Professor, EECS Department, Khalifa, University, Abu Dhabi, UAE.

The session was on the topic Active, Reactive and Harmonic Power Sharing in Islanded Microgrids. There were a total of 103 participants. Apart from students, a good number of faculties were also present in the session. The session was really interesting and there were a lot of questions from the audience. Refreshments were provided after the event for audience along with lunch for the speaker.

#### Distinguished Lecturer Program 2

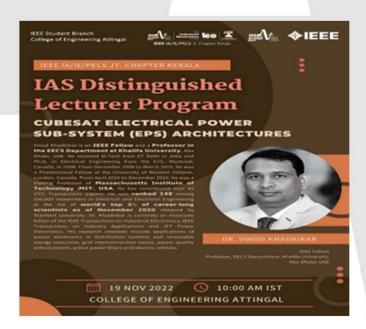
IEEE IA/IE/PELS Jt. CHAPTER KERALA in association with IEEE IAS SBC COLLEGE OF ENGINEERING ATTINGAL had successfully hosted the Distinguished Lecturer Program, on the topic "CUBESAT ELECTRICAL POWER SUB-SYSTEM (EPS) ARCHITECTURE "on 19th November 2022 at college auditorium.

The resource person for the webinar was Dr Vinod Khadkikar ,IEEE Fellow Professor, EECS Department, Khalifa University, Abu Dhabi, UAE.



Welcome note was given by Adithya sunil.

The lecturer program was intended to give the students a fair idea about CubeSat electric power system. The discussion started with the question "What is CubeSat " to assess the knowledge of the students and to break the ice. The distinguished speaker spoke at length on the topic. He also shared his screen to give more clarification on what he said. This provided students an opportunity to provide input to and exchange ideas and give individual feedback on issues of importance to this topic. Participants raised many questions and provided comments regarding the Webinar's scope and how it connects with the broader picture. Some students even clarified their doubts in a one-on-one conversation. The distinquished speaker ensured that he patiently answered all the questions elaborately.

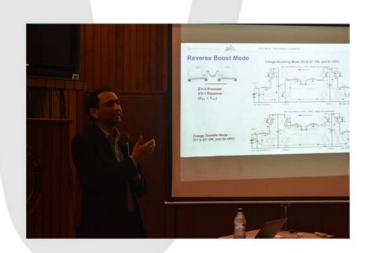


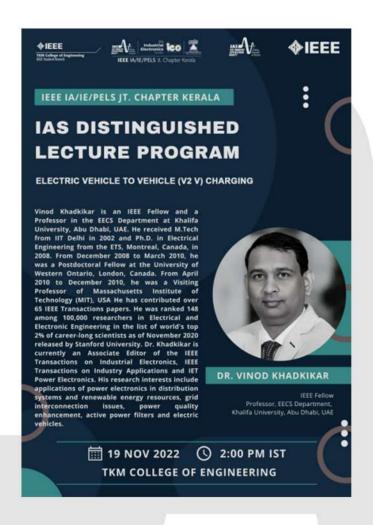
#### Distinguished Lecturer Program 3

The lecture on V2V Charging was organised by IEEE IA/IE/PELS JT. Chapter Kerala. The event was hosted by IEEE SB TKMCE. A domain of great scope of development

was the topic of discussion. A highly proficient personality Dr. Vinod Khadkikar was the highlight of the session. He is a Fellow member of IEEE and a Professor in the EECA Department at Khalifa University, Abu Dhabi, UAE. His proficiency in electric vehicles was explored by the students. He spoke about the incredible potential of V2V charging in the future as Electric Vehicles are becoming more ubiquitous day by day. The positive repercussions to the environment and society if this notion was implemented were explored too. He showcased a precise methodology of the charging mechanism, if there existed a future opportunity to implement this technology.

Apart from the technical discussion, this incredible personality also put forward the most significant advice to elevate one's career. He shared the lessons learnt from his years of experience in the field. The session was very vibrant with the students actively interacting with Dr. Vinod. It was indeed well received and concluded on a highly positive note from everyone







# SBC Events

#### Academia to Industry

IEEE IAS SBC College of Engineering Attingal along with IEEE PES SBC CEAL in collaboration with IEEE IA/IE/PELS Jt.Chapter Kerala conducted an event "ACADEMIA TO INDUSTRY" on 2nd January 2022 evening by 7:00pm. The event started under the coordination of Laksh mi S (Secretory IEEE WIE SBC CEAL) thereafter the welcome speech was delivered by Foroila J (Vice Chair IEEE PES SBC CEAL). Lakshmi S introduced our chief guest of the evening Mr. Varghese Cherian(Head of Technology service at UST)and invited him to share his valu able points on the topic.

The session ended with Q&A, and it received a bunch of questions from the participants and the speaker patiently gave the answers one by one with proper explanations. The webinar ended by the vote of thanks given by Akshay Prasad (Secretory IEEE IAS SBC CEAL).

#### Get Set Pitch

As a part of Lollapalooza 3.0,Industrial Applications Society in collaboration with Power Electronics Society of IEEE SB GCEK conducted an idea pitching competition, Get Set Pitch, on 23rd December 2022. The competition was conducted exclusively for the IEEE members of GCEK and held in an online mode. 2 students participated in the event. Alaka P from the team Lazy Lolanz bagged the first prize while Vaishakh Suresh from the team Evangelics bagged the second prize.



#### **CIRCUITIZED**

As a part of Lollapalooza 3.O, IEEE PELS SBC GCEK conducted an online circuit debugging and designing competition named CircuiTized to boost the tactics on designing a circuit. The event was conducted on 8 January 2023 at 7 pm. The students were allowed to register as indi viduals or as a group of two students. About 30 participants registered for the event. And a total of 12 teams actively participated in the event. The participants were allowed to use any kind of software like Circuit lab, Matlab to demonstrate their model. A submission link was provided to the participants at the end of the event. The first prize was bagged by Adwaid Pola & Krishnendu P from Astros and the second prize was bagged by Haritha M E & Akshay Paul from Pirates. The event received satisfactory response from it's participants.



### **Project Ideation and Development**

The IEEEstudent branch at SNIT, IEEE IAS student branch chapter at SNIT & IEEE IES Student branch chapter at SNIT has organized an exceptional webinar session on the topic Project ideation and development. The Speaker for the webinar was Mr. Shyam Pradeep Ali, Chief Technology Officer, Infosury Future Tech Labs Pvt. Ltd. It was conducted via Google Meet platform. The program was started with a welcome address by Ms. Sona PS, Student Member of IEEE SB SNIT. She welcomed Dr. Shaji Mohan, the Principal of SNIT and speaker Mr. Shyam the honorable Pradeep Ali. Then she addressed Asst. Prof. Ms. Karthika Nair, the Counselor of IEEE SB SNIT, Asst. Prof. Mrs. Sreelakshmy Nair, the Advisor of IEEE IAS SBC SNIT and finally welcomed all our participants to the session.

Later, the webinar session was taken by the speaker. The main topics discussed are how to identify a problem, come up with a solution, the necessity of teamwork and the workflow when developing an idea for the first time. He also gave am interesting talk about his own project creations such as portito, VCB monitor and i-post which was very inspirational to the participants and also provided a practical idea about the whole seminar. After the webinar, a doubt clearing section and a feedback section was conducted. The webinar session came to a conclusion with the vote of thanks from Ms. Avarna Mol, Vice Chair of IEEE SB SNIT. The session was found incredibly good as it gained lots of positive feedback and appreciation.



#### Let's Explore CUSAT

IAS CUSAT SBC conducted an event named "Let's Explore CUSAT" on 25th January 2023. The main objective of the event was to provide an opportunity for students to visit and interact with faculties and research fellows of various research departments, including Science and Tech nology Innovation Centre (STIC) and Atmospheric Chemistry and Aerosols Research (ACARR) of CUSAT. The event was conducted as part of "Sasthrayaan," an annual science exhibition conducted by CUSAT. The event received an overwhelming response, more than 40 students attended the event.

The event was well-organized, and the participants were provided with a guided tour of various research departments. They were given the opportunity to interact with faculty members and research fellows and gain insights into their ongoing research activities. The event was a valuable learning experience for participants, providing them with a glimpse of the research activities and facilities available at CUSAT. The event was effective in promoting a culture of research and innovation among the student community and inspiring them to pursue research as a career. It was well-organized and received positive feedback from participants. The event was effective in promoting a culture of research and innovation among the student community and inspiring them to pursue research as a career.





### IEEE IAS CUSAT SBC

On February 15, 2022, the IEEE IAS (Industry Applications Society) CUSAT SBC conducted an orientation session for its members. The session was held at 7 pm and was conducted on the Google Meet platform. The resource person for the session was Mr. Hari Govind M, an expert in the field of electrical engineering and our SB mentor. The session began with a brief introduction to the IEEE IAS and its goals. Mr. Hari Govind M elaborated on the various benefits of being a member of the society and the different resources and tools available to member

The session also included a general Q&A segment, during which members were able to ask questions and clarify any doubts they had. The questions covered a range of topics, including industry trends, career opportunities, and technical challenges. Overall, the IEEE IAS orientation session was informative and engaging, providing members with a valuable opportunity to learn from an expert in the field and connect with fellow professionals.



#### **ALTERNATO**

Alternato, an idea submission event conducted by IEEE IAS SBC of NIT Calicut, mainly focussed on ideas to alter a product to bring out a better form or to combine the properties of two existing products so that it can be used in a much more effective way. The submission was open from 18-02-2022 to 25-02-2022 Aadarsh Bansal (Goa Institute of Management) is declared as the winner and Ritesh Rai (IIM Ranchi) and Christeena Benny (NIT Calicut) as the 1st and 2nd runner ups.



### ROBERT B MOORE LECTURE SERIES

IEEE IAS Students Chapter NIT Calicut in association with IEEE IA/IE/PELS Jt. Chapter Kerala presented a talk by Dr. Abdul Saleem Mir on "Dynamic state estimation as a tool for power system monitoring, control and protection". It was conducted on 18th February 2022. The event had 32 registrations with 9 IEEE members.



## DISTINGUISHED ALUMNI LEC-TURE SERIES

IEEE IAS Students Chapter NIT Calicut in association with the Department of Electrical Engineering presented a talk by Dr. K. V. Vidyanandan on the topic "Challenges in the Grid Integration of Renewables". The guest speaker is a faculty member at Power Management Institute (PMI), NTPC Limited and Alumnus of 1984 B. Tech Electrical. The talk was conducted on 19th February 2022. The event had 64 registrations with 32 IEEE members.



# Webinar - How to crack campus placement.

The Institute of Electrical and Electronics Engineers (IEEE) student branch at SNIT & IEEE IAS student branch chapter at SNIT has organized a vibrant webinar session on the topic: How to Crack Campus Placement on 19 February 2022. The Speaker for the webinar was Prof. Nandan S, Chair IEEE Kerala Young Professionals, Assistant professor Placement Officer, LBS Institute of Technology for Women. It was conducted via Google Meet platform. The program was started with welcome address by Ms. Sona PS, Student Member of IEEE SB SNIT. She welcomed the honorable speaker Mr. Nandan S. Then she addressed Asst. Prof. Ms. Karthika Nair, the Counselor of IEEE SB SNIT, Asst. Prof. Mrs. Sreelakshmy Nair, the Advisor of IEEE IAS SBC SNIT and finally welcomed all our participants to the session.

Later, the webinar session was taken by the speaker. The main topics discussed in the session were about types of recruitments, preparations to be done, what a typical recruitment steps are, how to prepare for technical test and tips for interviews. After the webinar, a doubt clearing section and a feedback section was conducted. At the end of the session Ms. Karthika Nair was called upon to handover the momento of appreciation to the venerable speaker. The webinar session came to a conclusion with the vote of thanks from Ms. Pravitha Praveen, Activity Lead of IEEE SB SNIT. The session was found incredibly good as it gained lots of positive feedback and appreciation.



## **Debate - Smart Grid Technology**

IEEE IAS SBC MESCE in collaboration with IEEE PES SBC MESCE conducted 'Smart Grid Technology' which included a session on Smart Grid and thereafter a Debate competition on the "application and relevance of Smart grid in India". The event was held at the main seminar hall of MESCE on 21st February 2022 at 4.30 pm. There were about 30 participants and 4 judges. The event began with a welcome address delivered by Navya Menon- Secretary IEEE PES SBC MESCE. The session was taken by Mohammed Shamil- Chairperson of IEEE PES SBC MESCE and by 5 pm the debate started. After 20 minutes of word war goodies were awarded on special mention, best performer and best team categories.



## Traction Motors For Electric Buses - #talk 1

IFFE IAS SCT SBC in association with IFFE PES SCTCE SBC conducted a webinar on March 1st 2022. The event was handled by Dr Boby Philip, Associate professor, Department of Electrical engineering, SCTCE Secretary of IEEE PES Kerala Chapter. The webinar was about a one and half hour session on the topic "Traction Motors for electric buses". The first thirty minutes was a brief review of EV technologies. He explained the design of the traction motor and some basic ideas about battery, and electrical machine fundamentals. He shared his experience working with KSRTC for the new project. There was also an open Question and Answer session.



## **Basics of Python**

An interactive session on "Basics of Python" was well organised by IEEE IAS SBC RIT on 6th March 2022. The speaker,

Mr. Abhijith Benny, a third-year student of the Department of Electronics and Communication Engineering, handled the session in an exam-oriented manner. The basics of Python, like variables and operators, were discussed with special focus on bitwise operators. Further, problems based on these topics were undertaken. Data structures such as list, tuple, dictionary and set were also explained in detail. Problems based on them were handled. A total of 35 students actively participated in the session.



### **SCRIBIT**

SCRIBIT was an event conducted by IEEE IAS SBC GEC Palakkad in collaboration with the ComSoc SBC GEC Palakkad regarding Science week from 7th to 9th March, 2022. The event mainly focused on bringing out different perspectives on the role of science in preventing and making war. A total of 19 participants actively took part in the competition.



### **AEROGRID**

To celebrate National Science Day, the In-*Applications* Society Student Branch organized a quiz competition "AEROGRID".It was conducted on 10th March 2022 and was hosted on an online platform Quizizz. The theme was "Aerospace". There were 74 participants, of which 47 were IEEE members and the other 27 were non-IEEE members. The top 3 participants who got the maximum right answers were declared as the winners. The event was a success and we received a good number of positive feedback.



## FOSTER - One-day hands-on session

IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur conducted a one-day hands-on session, FOSTER, aiming to familiarise students with many projects. On 11th March 2022, the session commenced by 1:00 PM with a participation of 20 students. It was a one-day hands-on session aimed to familiarise students with their projects and with an objective to develop new skills, innovative mindset and to explore deeper into their interest.

The session started with the introduction

to FOSTER its objective, aims and ad-

vantages to the participants. Rijo M Cherian Vaidyan, Swathy Sekhar, Robin Mathew Raju, Manjusha Manoj, Aparna Sivanandan all of them being the active volunteers of the IAS Society, as a team presented their project. They presented the same project with which they badged first prize in EMERGENCE - a project development session conducted by IEEE Industry Applications Society. Vishnu M, Chairperson IEEE IAS SBC CEC presented his project and he pointed out the relevance, objective and advantages of the project. The presentation was excellent providing organized lectures and slides showing various presentations related to projects and IAS which caught the attention of students and made it effective.At last based on the evaluation on various factors during EMERGENCE Rijo M Cheriyan Vaidyan, Swathy Sekhar, Robin Mathew Raju, Manjusha Manoj and

Aparna Sivanandan who were the winners of the hackathon were awarded with the cash prize.

The feedback received from entrants was worthwhile and appreciative. Indeed, it's the great efforts of the dedicated volunteers of the IEEE IAS SBC College of Engineering Chengannur that made such a session possible and a grand success. With the conviction and confidence that such events can be held better than the past in future we have once again been successful in the upliftment of our member's technical abilities.



## InSight

IEEE PELS SBC GCEK and IEEE IAS SBC GCEK, in collaboration with IEEE IA/IE/-PELS Jt. Chapter Kerala, conducted a membership development session titled "InSight - KNOW YOUR SOCIETY", session on benefits of IAS & PELS societies. The session accentuated the importance of being a member of IEEE IA/PELS societies and was successful in gathering the wide range of benefits of being a member of these societies. There were 50 registra-

tions for the session from which 40 of them have attended the meet. The session was handled by the eminent speaker Sooraj V Namboothiri (Student representative 2021, IEEE/IA/ IE/PELS Jt. Chapter Kerala). It was conducted on the Google meet platform. The session covered a huge area and was so interesting. The Speaker was highly effective in focusing on the main aim of the session. The students actively interacted with the Speaker and had positive feedback from its audience



## Traction Motors For Electric Buses - #talk 2

IEEE IAS SCT SBC conducted an event as a follow-up to the participant's request on the topic of Traction Motors for Electric Buses #talk 1 on March 12th. The event was handled by Dr Boby Philip, Associate professor, Department of Electrical engineering, SCTCE Secretary of IEEE PES Kerala Chapter. The webinar was about a one and half hour session. This session discussed the comparison of different motors and the main advantages of PMSMS.

He explained the taxonomy of AC

discussed research ideas. The event had a positive impact on the participants and saw participation from various states. We got a positive impact from the participants.



#### **CALLISTO**

A fun filled event conducted by IEEE IAS SBC RSET under the banner of Celestia, a series of events by IEEE SB RSET. The event happened for 2 days, 13th March and 15th March of 2022 in online mode.



## Workshop on Electric Vehicle Technology

The workshop on Electric Vehicles Technologies conducted by IEEE IAS SBC and IEDC Jyothi Engineering College in association with IEEE-SB and Department of Electrical and Electronics Engineering in collaboration with TATA IIIC on 13th April 2022 at TATA IIIC LAB of Jyothi Engineer ing College was started at 9:00am. In total there were 11 members to attend the workshop. It was a productive workshop where we got a brief idea about electric vehicles. The session was very interactive and helpful. The construction, components and working of an electric vehicle was instructed to us efficiently and effectively. As we all are Electrical Engineering students its sure that this session will be very helpful to all of us in our respective fields. The session included both practical as well as theory classes. The presenters was very knowledgeable and offered valuable information and tips. Moreover, the faculties did a great job in quiding us, on how to impart our theoretical knowledge and turn our innovative ideas into reality. The faculty members who were in charge of this session was very friendly and interactive and they made us more comfortable in each and every part of the session. By this session we got a wide information like how can the performance of electric vehicles be improved, what are the pros and cons of electric vehicles, what are the importance of electric vehicles in this era, how a basic electric vehicle works and so on. This session was very useful for youngsters.



### TRYDAN

Industrial Applications Society of IEEE SB GCEK conducted a quiz competition, TRYDAN, on 23rd April 2022. The questions of the quiz were based on Electric circuits and components. The competition was conducted exclusively for the IEEE



members of GCEK. 53 students participated in the event. Sayooj N of S6 EEE bagged the first prize and Hridya Prasanth of S4 ECA bagged the second prize.

### **MAGPIE**

IEEE IAS SBC GCEK released the third edition of its half-yearly newsletter, 'MAGPIE', on 23rd April at 8 PM. It was released on Substack. It was very well received and appreciated by the students and faculties of the college.



### **Electro Domesticos**

The Domestic exhibition named elecrodomesticos was conducted by IEEE -IAS SBC andcIEDC Jyothi Engineering College in association with Department of Electrical and Electronics Engineering on 29th April 2022 at S8 electrical class. It was an exhibition of various electrical devices like fuel gauge induction motor, slip ring induction motor, submerged motor its pump and its impellers, various types of switches, MCB, ELCB, typewriter,

different types of DVD players, oven, vacuum cleaner, motors of Mixi etc... The student coordinators present there was Mr. Renjith and Mr Anfaz. The construction, components and working of these electrical devices was instructed to us by coordinators efficiently and effectively. The presenters was very knowledgeable and offered valuable information and tips. Moreover the faculties did a great job in guiding, on how to impart our theoretical knowledge and turn innovative ideas into reality. The coordinators was very interactive and friendly.



### TINKERCAD WORKSHOP

A technical workshop conducted by IEEE IAS SBC RSET to teach students the basics of designing an electronic circuit using a simple tool by Autodesk called Tinkercad. The Workshop was conducted for 3 days, from 29th April to 1st May of 2022. The workshop was handled by M Abhishek and Hariprasad of S6 ECE B - RSET.



### Robo Show

The ROBOSHOW conducted by IEEE PELS Jyothi engineering college student branch on 30th April 2022 at Jyothi engineering college auditorium and was started at 10.00am. In total there were 40 students to attend the session .It was really productive and we got a breif idea about robots and their working .The robo-show was very interactive and helpful .The coding, construction, driving and working of robots was instructed to us efficiently and effectively . As we all are engineering students I'm sure that this workshop will be very helpful to all of us in our respective fields .This session included both practical and as well as theoretical classes .They introduced many new types of robots like dancing robot, water robot ,mini robot etc. And got some vital informations about how to systemise a robot .The presenters was very knowledgeable and offered valuable informations and tips.



### AKIASSC

IEEE IA/IE/PELS Joint Chapter Kerala and IEEE SB RIT jointly organized the All Kerala Industry Applications Society Student Conclave 2022 (AKIASSC'22) from 6th May to 8th May 2022 at Rajiv Gandhi Institute of Technology, Kottayam which included IV, field trip, workshops, talk sessions, cultural events.



#### **CROSS MINDS**

IEEE PELS SBC GCEK organized a puzzle competition to flash out the talents on puzzling out the enigma. The competition was conducted through Google forms on 8th May 2022 at 7 pm.The questions of the competition were based on the topic "Electric Vehicles". The competition had a total of 40 registrations in which 25 of them participated in the competition. The event was conducted for IEEE members of Government Engineering College Kannur. The first prize was bagged by Mathew Allen J of 2k19 EEE and the second prize was bagged by Jyotish P S of 2k20 CSE. The event received good feedback from its participants in terms of its relevance and organization.



#### **COMPLEXIT**

IEEE SB CE Perumon had conducted its first event COMPLEXITY, a riddle competition on Electronic Components on 9th May 2022 from 7:30 PM to 7:45PM through Google form. The event has got participation from both IEEE and non-IEEE members at the section level. The event was to analyse participant's

side. The event enhanced their critical thinking in an informative way.



### REVIENS 3.0

IEEE Student Branch College of Engineering, Trikaripur organized its National Level Annual Flagship event REVIENS 3.0 in collaboration with IAS, PES, WIE, CS SBCs from 13th to 15th May 2022. REVI-ENS 3.0 was a thriving three-day event which included worthwhile workshops, top-notch talks, galvanizing games, astounding activities and many more promising programs. A total of 214 delegates from various colleges namely GECK, VJEC, Bishop Jerome Institute etc. joined us in this great journey. REVIENS 3.0 flagged off on 13th May 2022. Delegates arrived around 2.00 PM and completed their registration process by 4:00 PM. 50 volunteers were the backbone of the event and they worked hard for the success of this event.

Inauguration Ceremony started by 5:00 PM with the welcome speech of Mr. Nambiar, Chair(2021 Vaishakh Execom), IEEE SB CETkr which was followed by Code of Ethics delivered by Ms. C V Anushka, Secretary; Inaugural address was delivered by Dr. Vinod Pot takulath, Principal, College of Engineering Trikaripur. Presidential Address by Dr. Naveena AK, HOD of Computer Science Department and Branch Counsellor of IEEE SB CETkr; Felicitation by Mr. Srikanth P, Assistant Professor EEE Department and Vote of thanks by Ms. Aiswarya N, Chair of IEEE SB CETkr. After the inaugural ceremony, all the delegates were taken for an ice-breaking session. Delegates actively participated in the gaming section. Hanan Shaah with his magical voice made the day more special. He conquered the heart and soul of every delegate with his euphonious voice.

Day 2 was reserved for three interesting and worthwhile workshops namely 'Total Station and Advanced Surveying', mainly focused on Civil and Architecture graduates. 'Web Mining' was for Computer Science and IT graduates and 'Image Processing and Robotics' was for Electronics and Electrical Engineering graduates. These workshops were handled by professional staff and the workshops began by 9:30AM. The Workshops were productive enough to improve and develop knowledge for the students vin their respective areas. Workshop contin ued till 4:00 PM and had two tea breaks and a lunch break in between. The day continued with some power packed games and followed by an interactive session by the much awaited guest RJ Shambu. His presence and words infused the delegates with confidence. Day 2 ended with a massive and rousing DJ night. The delegates were super excited. Day 3, the final day, was a mesmerizing experience for both delegates and volunteers. The day began with a wonderful talk by the most inspiring and stunning actor Ashwin Jose. The day was wrapped by noon after the lunch with a thank you note given by Vaishak P Nambiar, Chair (2021 Execom) IEEE SB CETkr. Feedbacks were also collected.



## TECHNOPHILIA- INTRODUCTION TO VISUAL CODE STUDIO

IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur as part of the series of events named as Technophilia conducted a session on the topic Introduction to Visual Studio Code handled by Alwin john, an active IEEE member and a prolific coder, on 17th of May 2022 from 8:00 to 9:00pm.

Alwin john commenced the session by introducing the Visual Studio Code and a demonstration on how to install the software. The speaker later discussed various tools present in the software and their functions. Later on, the speaker briefly explained how the software can be used as an alternative way for web development. He demonstrated how a browser extension can be created and implemented easily with the help of this software. The presentation of the lecture was excellent, with the lecture organized into slides showing the applications and advantages of this IDC on many common needs which made the task simply made the participants more interested and useful thus resulting with a lively question and answer session. The feedback received from the entrants was worthwhile and appreciative. The session was really beneficial for those who attended and marked it as a new way of innovation and confidence.



## PCB Designing Workshop

A PCB designing workshop was organized by IEEE IAS SBC GEC Palakkad as part of EXCELSIOR'22. The 2 days session conducted on 21st May 2022 to 22nd May 2022 was handled by Arjun R, a final year student of Electronics and Communication Department, GEC Palakkad. The workshop focused on designing PCBs by the delegates with help of the mentor. The workshop was very interesting and useful for the students to learn more about PCBs. A total of 26 delegates actively participated in the workshop.



# Workshop on IoT using Raspberry pi

IEEE Student Branch College of Engineering Karunagappally in association with NPSS /pels jt. chapter conducted a 2 days workshop on IoT using Raspberry pi. It was conducted on 23rd and 24th May 2022 from 4:00 pm to 5:00 pm IST. A total of 25 students registered for the workshop. The session was monitored by Joel Mathew V, Vice Chair, IEEE RAS SBC CEK.



#### SPECTRUM TALK

One edition of Spectrum Talk, the in-house meet-up of the SB Members was held on 24th May 2022 at the College Amphitheatre. IES Student Branch Chapter coordinated the meeting. IES SBC Vice chair Mr. Mani Kuruvilla welcomed the gathering. IES SBC Chair, Ms. K. K. Sukanya address the students. There was a time of games when the students played the game 'Grapevine' showing how communication is important in a team and the ill effects of poor as well as wrong communication. The students enjoyed the session. 20 students participated in the session.



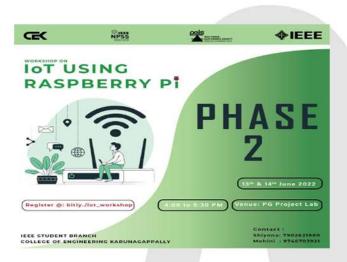
## **Environment Day Quiz**

IFFE IES LBSCEK in association with IFFE LBSCEK organized an Online Quiz Competition on the occasion of World Environment Day on June 5th to promote and enhance the knowledge of nature and the environment. The event was conducted online mode using the google forms facili ty at 8 pm on 5th June. The quiz comprised 25 questions with a time duration of 20 minutes. Overall, about 30 students actively participated and cooperated with this event. The winner of the guiz competition was Sherhin P. P. (GEC, Palakkad) and the first and second runner-ups were Ranjana (LBSCEK) and Aslah Saleel T. (LB-SCEK). All the winners were awarded cash prizes amounting to Rs 500. The participants were all excited and enthusiastic about displaying their skills and knowledge and thus making this event a success. Overall, this event was able gather intellectual minds in creating awareness of nature and earth as a part of Environment Day celebrations through active participation and volunteering by students and IES and IEEE members.

# Workshop on IoT using Raspberry pi PHASE 2

IEEE Student Branch College of Engineering Karunagapally in association with NPSS /pels jt. chapter CEK conducted phase 2 of the workshop on IoT using Raspberry pi. It was held on 13th and 14th June 2022 from 4:00 pm to 5:00 pm IST. A total of 30 students registered for the workshop. The session was handled by Mr Alister Clietus, Chair, IEEE SB CEK and

Joel Mathew V, Vice Chair, IEEE RAS SBC CEK.



### SPECTRUM TALKS

Two editions of spectrum talk were held in the month of June. The first was on 17th June, 2022. The programme was coordinated by the IES SB of LBSCEK and Women In Engineering Affinity Group LBSCEK. The theme of the day was 'Photonics'. IES Chair Ms.K. K. Sukanya and WIE Chair Ms. Celiya Theres spoke about the importance of Photonics and its research areas. The WIE Secretary, Ms. Nandana spoke on the occasion. The Branch Counsellor, Mr. Rensi Sam Mathew spoke about the UN Sustainable Goals and to align all their project works with these goals.

The second was on 24th June 2022. The programme was coordinated by the IES SBC and PES Student Branch Chapter. PES SB Vice Chair Ms. Fathima Nasha spoke about the importance of social media and its influence in students. The Branch Counsellor Mr. Rensi Sam Mathew took initiative to discuss about the 10 focus areas of SERB - INTEL Fund for Industrial Research Engagement.

#### **EMBIOT**

EMBIOT was a hands-on workshop on Internet of Things and Embedded Systems hosted by IAS IEEE MEC SB in collaboration with SPS IEEE MEC SB. The event officially started at 9AM on 18th June 2022, Saturday at SDPK Hall MEC. The number of participants was 47, who were mostly beginners in this subject, were given a simple explanation of the fundamental concepts related to this hands-on workshop on the Internet of Things and Embedded Systems at the beginning of the event. The participants were instructed to bring a laptop with the Arduino IDE al ready installed for the session, and after being divided into groups of four, they were provided a kit containing a NodeM-CU Amica, breadboard and other necessary sensors. Participants learned and operated several sensors, including LED, Light Dependent Resistor and Ultrasonic sensor by following the speaker's instructions. They also became acquainted with blynk, a platform for creating interfaces for controlling and monitoring hardware projects from iOS and Android mobile devices. At 4 PM, the event was successfully concluded, and participants had learned the fundamentals of the Internet of Things (IoT) as well as guidelines for creating projects using the Arduino platform. The speakers of the workshop were Amith Tony Joseph, Anand P S, Arun Jyothish, Bharath S.



### TECHNOPHILIA Cortex

IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur was gratified to conduct the second session of TECHNO-PHILIA, CORTEX - INTO THE WORLD OF MICROCONTROLLERS. The session was handled by AJITH V ANIL, current Chair person, IEEE RAS SBC CEC. The session commenced at 04:15 PM on 20th June 2022 with about 40 participants.

The session began with an attainable speech from Mr. Vishnu M, CHAIRPER-SON IEEE IAS SBC CEC, who introduced the speaker Ajith V Anil and given an overview of the overall session to the participants. The session was then handed over to the speaker. He clearly explained about the microprocessors and their basic components followed by the difference between the microprocessors and microcontrollers and their felicitous applications on different fields. Participants had a hands-on familiarization of different microcontrollers including components familiarization and working. He also discussed programmable

software used for programming micro-controllers.

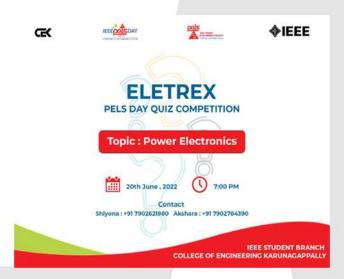
Moreover, the session included the familiarization of Tinker cad software. Speaker explained different tools and their uses and he also explained a new project on it and encouraged the participants to create their own projects using this software. At the end of the session, a Google drive link was provided to the participants to upload their projects which would be completed using Tinker cad. From the feedback it was evident that the session helped the students to brush through some basics of microcontrollers and to familiarize Tinker cad software and to create projects using it.



### **ELETREX**

IEEE Student Branch College of Engineering Karunagappally in association with the NPSS/PELS Jt. Chapter CEK arranged an online Quiz Competition as part of the PELS Day celebration. The competition link was provided at 7 pm and it was active up to 8:30 pm on 20th June 2022. The competition was coordinated on the topic POWER ELECTRONICS. The quiz section consisted of a total of 20 ques-

tions. The competition witnessed a lot of participants from all over Kerala. Certificates were given to the participants and in this quiz, the participants learned and practiced Power Electronics objectives to test their knowledge on the topic.



### IgNite - FLUXUS

IEEE PELS SBC GCEK celebrated PELS day under the title " IgNite". The first event conducted under this was a quiz competition on 20 th June 2022. The questions of the quiz were based on basic electronics. The competition was conducted in offline mode and students were allowed to participate as a team of 2. The guiz was held as two rounds in which those who had scored higher were permitted to round 2. 48 students participated in the guiz competition in which Mathew Allen J & Sayooj N of S6 EEE bagged the first prize and Mohammad Azlah Sadath & Farih Minan of S6 EC B bagged the second prize. The event received good praise from it's participants.



# Familiarization of led assembling for Execom members

As part led assembling session to be held at District jail, kanhangad IEEE IES SB Execom members—were given training in led assembling and soldering by Sreenivas Pai K. The session was conducted on 21st June. Members got to have a hand-on experience in knowing the components, soldering and assembling of its components.

### **ELETREX**

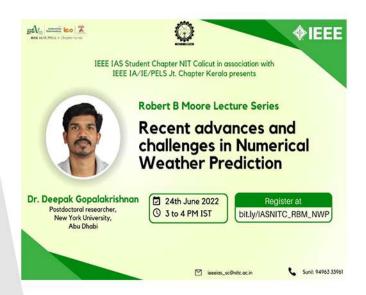
IEEE Student Branch College of Engineering Karunagappally in association with the NPSS/PELS Jt.Chapter CEK arranged a Circuit designing Competition as part of the PELS Day celebration on 24th June 2022 from 12:30 PM - 2:00 PM. 20 enthusiastic participants from college of engineering Karunagappally joined the competition to explore the domain of circuit designing. A Problem Statement was

given to them for Designing and implementing a tesla coil using following components,555 timer, 470 ohm ¼ watt resistor,680 ohm ¼ watt resistor,100 ohm ½ watt resistor,15 cm PVC pipe,10 AWG and 36 AWG wire (primary and secondary respectively),Breadboard and DC power supply. A winner was chosen from the participants and Rs 500 was awarded as the first prize, RS 250 was awarded as the second prize.



## ROBERT B MOORE LECTURE SERIES

IEEE IAS Students Chapter NIT Calicut in association with IEEE IA/IE/PELS Jt. Chapter Kerala section and Dept. of Electrical Engineering, NIT Calicut presented a talk by Dr. Deepak Gopalakrishnan on "Recent advances and challenges in Numerical Weather Prediction". It was conducted on 24th June 2022.



## LED assembling training held at District Jail

The Department of Electronics & Communication and IEEE Student Branch LBSCEK and IEEE IES LBSCEK jointly organised a LED Assembling Training at Hosdurg District Jail, Kasaragod on 25th May, 2022 as a part of helping prison inmates find self-employment through vo cational training and developing skills. This was conducted as a part of the Haritha Jail programme of Hosdurg District Jail through which many exemplary activities are carried out for the welfare and development of prison inmates. The event was inaugurated by the Principal of LBS College of Engineering, Dr. Muhammad Shukur.T, and was presided over by the Hosdurg District Jail Superintendent K. Venu. IEEE LBSCEK Branch Counsellor. Rensi Sam Mathew spoke on the benefits of the training session and finding employment opportunities. There were de tailed classes as well as hands-on practice provided and about 35 prison inmates participated enthusiastically. The classes

and workshops were given by IEEE and IES members, Sreenivas Pai, Mani Kuruvila, and Abhijith P while classes for women inmates were provided by K K Sukanya and Celiya Theres. The session involved LED assembling mainly hands-on practice and awareness talks on the benefits of the programme in finding employment as well as towards sustainable development.This gramme was conducted by IEEE SB, IES SB and District Jail authorities as a part of Haritha Jail programmes, through which our SB members were able to fulfil one of the sustainable development goals, "Affordable and Clean Energy" emphasising its future aspects. The authorities and attendees of the events provided a warm atmosphere for the student members and supported them to make the event a success through complete cooperation and participation and also made available food provisions for the guests. A memento was handed over to Mrs. Rema Superintendent of women's jail Kannur for meritorious service of 24 years on behalf of Kasaragod Jail authorities by Principal Dr. Moham Shekoor T med

## LED Training for the Women Inmates of the Prison

This was done by the IES and WIE members of IEEE SB. Five women inmates were trained on how to solder and assemble an LED lamp. The training was given so that the women inmates would later take this as an employment for their livelihood.



### Talk On Linkedin

The IAS/IES JT SBC CEA organized a webinar titled ' TALK ON LinkedIn'.The program was conducted online through Google meet on 25th June 2022 at 6.30 pm. The session was conducted by Miss Staji Wilson (systems engineer at TATA consultancy services). The aim of this event was to bring a clear picture on the social media platform 'Linkedin' and enhance the students' knowledge about this professional networking website. Miss Gopika Nair J (Secretary, WiE AG, IEEE SB CEA ) welcomed the guests . The speaker started the session by asking what LinkedIn is and what are its benefits for an engineer.LinkedIn is used for professional networking and career development. It allows job seekers to post their CVs and employers to post jobs. The speaker explained about LinkedIn and how one can use it. At the end of the session the speaker did a Q&A session and made sure that every participant had cleared their doubts about LinkedIn. The session was concluded by the vote of thanks given by Miss Aswathi Gopi (Secretary, IAS/IES jt SBC, IEEE SB CEA). The event was a great success with around 51 participants and got a positive feedback from the participants.



# Green Hydrogen In A Circular Economy

'Green Hydrogen in a Circular Carbon Economy Was a distinguished lecture program conducted by IEEE IAS/IES jt SBC of CEA. The session was conducted online through Google meet platform on 26th June 2022 at 6.00pm by miss Anupama Thakur(Postdoctoral Research Associate, Purdue School of Engineering and Technology, Indiana University-purdue University Indianapolis (IUPUI),USA and saw participants of almost 40 stu-

dents. The target behind the event is bringing a clear picture of Hydrogen-The clean Future fuel. The secretary of PES SBC CEA Ms Parvati welcomed the guest. The speaker started with the topic energy transition, solar energy harvesting systems like photovoltaic water splitting, PV solar cells, water splitting solar cells & so on.Then she move on Hydrogen & Green Hydrogen - its geological abundance, different colours of hydrogen. The session photoelectrochemical continues with water splitting.At the end of the session,the speaker did a Q&A session and made sure that every participant had cleared their doubts about the session.



# IgNite - Workshop on Solar & Electric vehicles

IEEE PELS SBC GCEK celebrated PELS day under the title "IgNite". The second event conducted under this was a Workshop on the topic Solar and electric vehicles. The event was scheduled on 26 June 2022 at 3 30 pm via Google meet. The event was scheduled on 26 June 2022 at 3 30 pm via Google meet. The event was open to all IEEE members. The session was held by Abhinav R, Junior Research fellow, Indian Institute of Technology Palakkad. The speaker covered each and every advantage of solar and electric vehicles within the limited time. 115 registrations were received out of which 78 attended the session. The event received good feedback from all its attendees. Participation certificates were provided to all active participants.



## **PELS Day Quiz Competition**

20th June is celebrated as World PELS day. As part of PELS day celebration, IEEE IAS SBC RIT conducted a quiz competition on 27th June on the topic Power Electronics. The quiz was conducted in two stages which took an hour. 38 students participated in the preliminary stage, among them 15 students were selected for the next stage. Both rounds consisted of 10 questions each. The quiz was open for all the students of RIT. It was a very informative and a knowledge

knowledge enriching competition for all the participants. The quiz focused on all levels which makes the competition more convenient to participants. By conducting the quiz, it helped the students to analyse the knowledge in power electronics and thus instilled a desire to learn deeply about the topic.



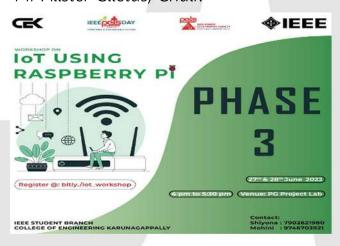
### **BITE 2 BRAIN CONTENT SERIES**

A content series based on recent technical advancements in the industrial fields all over the world was presented by IEEE IAS Student Chapter NIT Calicut. This series was conducted from June 27th 2022 to July 2nd 2022. This included six different posts with tech news and facts.



## Workshop on IoT using Raspberry pi PHASE 3

IEEE Student Branch College of Engineering Karunagapally in association with NPSS /pels jt. chapter CEK conducted phase 3 of the Hands on workshop on IoT using Raspberry pi as part of the PELS Day celebration on 27th and 28th June 2022 from 4:00 pm to 5:00 pm IST. A total of 30 students registered for the workshop. The session was handled by Mr Alister Clietus, Chair.



Mr Alister Clietus began phase 3 of the Workshop at 4:00 PM by delivering a summary of the parts covered in the first phase and then he started to teach the students more about the functioning of Raspberry Pi.

A hands-on workshop on IoT using Raspberry Pi could cover topics such as, Introduction to IoT and its applications, Overview of Raspberry Pi hardware and software, Setting up Raspberry Pi and connecting it to the internet, Interfacing sensors and actuators with Raspberry Pi, Programming Raspberry Pi to collect and process sensor data, Using cloud services to store and analyze IoT data, Building an IoT application using Rasp-

berry Pi and other components. The workshop could involve practical exercises and projects.

Overall, an IoT workshop using Raspberry Pi can be a great way to learn about the exciting possibilities of IoT technology and gain hands-on experience in building real-world IoT applications.

#### Career in EVs

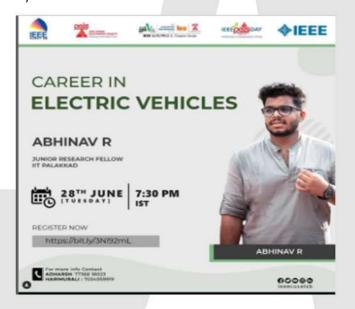
On June 28, 2022, IEEE SB Cusat organized a webinar titled "Career in EVs" in celebration of IEEE PELS Day. The session was held at 7:30 pm and was conducted on the Google Meet platform. The resource person for the session was Abhinav R, a Junior Research Fellow at IIT Palak kad and an eminent IEEE Young Professionals (YP) volunteer.

The session began with an introduction to the importance of power electronics in the field of electric vehicles (EVs). Abhinav R explained the fundamental principles of power electronics and their application in various aspects of EVs, including motor control, battery management, and charging infrastructure.

Abhinav R also shared his personal experience and journey in the field of EVs. He talked about the various career opportunities available in the industry, including research and development, product design, and testing and validation.

The presentation then moved on to cover the latest trends and advancements in the field of EVs, including the emergence of solid-state batteries, wireless charging technology, and autonomous driving systems. The session also included a Q&A segment, during which participants were able to ask questions and clarify their doubts. The questions covered a range of topics, including the scope of the EV industry, required skill sets, and available resources for career development.

Overall, the "Career in EVs" webinar was informative and engaging, providing participants with valuable insights into the field of power electronics and its application in EVs.



# Fundamentals of battery pack design

IEEE IAS SBC RIT organised a technical talk on "fundamentals of battery pack design" as a part of PELS day celebration. The talk helps the students to have a proper knowledge about battery pack design.

Technical talk on "Fundamentals Of Battery Pack Design" was organised by IAS SBC RIT on Wednesday 29th June 2022 at electrical seminar hall, RIT. The technical talk was handled by Akshay O R, Student S4 mechanical engineering, RIT. On account of the technical talk on "FUNDAMENTALS OF BATTERY PACK

DESIGN" he spoke briefly on process involved in battery pack design and also about the four types of design, need for battery pack, stages of battery pack design and major components of a battery pack.

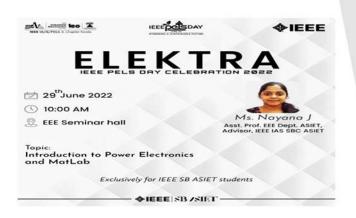
The technical talk was very interesting and gave the opportunity to discuss the battery pack design. The talk began at 4pm and ended by 5pm. The talk was attended by a total of 30 students. The session was very engaging, that every student consumed the best learning experience.

### **ELEKTRA**

The Industry Applications Society Chapter of IEEE Student Branch ASIET conducted ELEKTRA following the PELS Day Celebrations 2022 in collaboration with IEEE IA/IE/PELS Jt. Chapter Kerala. The event, held on June 29th, 2022, from 10:00 AM to 1:00 PM with 44 attendees in the power and simulation lab of ASIET, was intended to improve participants' knowledge of power electronics and circuit design using MATLAB through a hands-on workshop on the same.

The event was handled by Ms. Nayana J, Chapter Advisor, IEEE IAS SBC ASIET, who is also an Assistant Professor, EEE department, ASIET. The session began with an introduction to the Fundamentals of Power Electronics, which covered the basics of electronics and power electronics devices, and everyone was able to comprehend the topic from the ground up. Following this, a hands-on session on circuit designing using MATLAB was con-

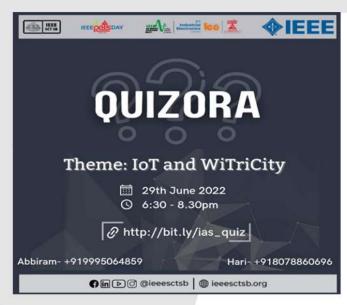
ducted in which the attendees were introduced to different tools within the software and were given the task of designing various circuits. The participants were divided into teams of 4, and circuits half-wave rectifiers such as full-wave rectifiers were displayed to them. The input-output waveforms were displayed, and the outputs were examined by the attendees. The event turned out to be an interactive one where the students raised several questions regarding the topic. The speaker was able to answer their queries and rectify their mistakes during circuit designing procedures. Each team was given the freedom to modify their circuits so as to produce and perform different waveforms and outputs, which peaked their enthusiasm. The session proved to be constructive towards the students and their knowledge of power electronics. The speaker succeeded in catering to the curious bunch, and the event concluded on a high note with a vote of thanks from Ms. Radhika Menon, Chairperson, IAS SBC ASIET. A feedback session, in which the participants provided their views on various aspects of the session, was also conducted at the end.



### **QUIZORA**

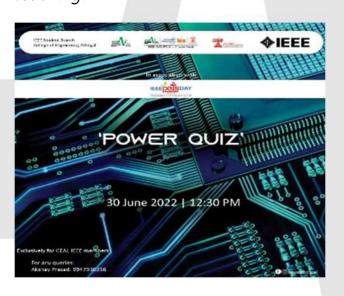
IEEE IAS SCT Student Branch Chapter conducted an online quiz on the topic "IoT and WiTricity" as part of the PELS Day celebration on 29th June 2022 at 7 PM.Thirty-two(32) students from various colleges participated in the contest there was a total of 30 multiple-choice questions, each having only one correct answer. The questions were based on IoT and WiTricity. The scoring was primarily based on correct answers. In case of a tie, the participant who answers faster gets more score.

R Ashwin, College of Engineering Chengannur and Vismaya. Mariam Engineering College bagged the first and second places respectively. Participants found the quiz exciting and were informed on the latest advancements in IoT and WiTricity.



### Power Quiz

IEEE IAS SBC CEAL as part of pels day organized an Inter college quiz competition "POWER QUIZ" exclusively for IEEE members in college auditorium on 30th June, 2022,12:30 pm with 50+ participants. The students showcased their brilliance by rapidly answering the questions. It was a very informative and knowledge enriching competition for the participants. Although, all the students actively participated, Sourav. S (s2 CS) bagged the first and Suraj (s6 CS) scored the second position respectively. It was a unique way of making the children learn about current affairs in different way and not just through books and classroom teaching.



## **Power System Simulation**

As part of PELS DAY Celebrations 2022, IEEE IAS SBC CEAL in collaboration with IEEE PELS SBC CEAL and IEEE PES SBC CEAL) is conducted webinar on Topic-Introduction to POWER SYSTEM SIMULATION (exclusively for IEEE members of CEAL) on 30 June 2022 at 7:30 PM.It was a virtual event google meet platform Certificates were provided to all the par

ticipants. Event was a great success with the active participation of members and the team worked for it.



### **TECHIFY**

As part of PELS DAY Celebration 2022, IEEE SB CE Perumon in collaboration with IEEE IA/IE/PELS Kerala Chapter organized a Quiz competition "TECHIFY" on the topic power electronics on 30 June 2022 at 7:30 pm through the platform Quizizz. The event was very successful and got active participation from both IEEE and non-IEEE members at the Section Level. The goal of the competition was to evaluate the knowledge of the participants and to make them familiar with the prospects of quizzes. The feedback of event was completely positive with admirable responses.



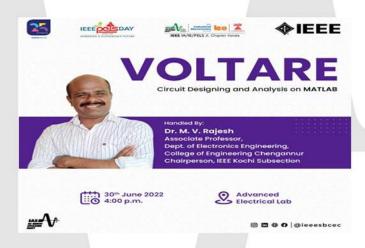
# VOLTARE - Circuit Designing And Analysis On MATLAB

As part of PELS DAY Celebrations 2022, IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur conducted VOLTARE, a session on Circuit Designing and Analysis on MATLAB on 30th June 2022 handled by Dr. M.V Rajesh, Chairperson of IEEE Kochi Subsection. The session started with a welcome address delivered by the current IAS vice-chair Miss Swathy Sekhar, giving a brief introduction to the session and the resource person to the audience.

The speaker commenced the session by introducing the programming platform that is MATLAB which is used to analyse and design systems. He showed them various commands for the execution of simple mathematical arrays and matrices and also the advantages of using this software platform which is very helpful for the participants in the future to implement

their innovative ideas. The session aimed to expose the participants to the use of MATLAB and its applications. It made sure the attendees understood the basics of using MATLAB as the speaker provided a visualization of it before the students.

The session concluded with the speaker talking about his experience in using MATLAB and its benefits. The feedback received from the attendees was worthwhile and appreciative and series of sessions based on the MATLAB will be provided for the students. The student's active role in this session enhanced the effectiveness of the session.



## Introduction to Figma Workshop

The IEEE SB, IES SB and Tinkerhub LBS jointly conducted "UI/UX using Figma" workshop on 30 june 2022, which aimed at giving an insight of the significance of UI/UX regarding the designing of a product. The session was handled by Mr. Hudaifa and it started with an introduction by the Tinkerhub LBS campus leads Mr. Sreedeep CV and Mr. Soraj. The session was attended by 24 participants.



### YP TALK ON MATLAB

IEEE PELS SBC GCEK in collaboration with IEEE Kerala Young Professionals, conducted a webinar on the topic "MATLAB Simulink". The speaker Mr Harigovind M, Young Professionals Kerala provided the audience a very clear idea about MATLAB Simulink. He explained that Simulink is one of the best platforms for Model Based Design. The main advantages about the Simulink, he mentioned, are the ability to model a nonlinear system which a transfer function is able to do.



#### **INFLUX 3.0**

INFLUX 3.0 was an Online Mock Placement Drive conducted for the third year students and exclusively to IEEE members from 2nd year to give them a first-hand experience of Placements, The event was conducted in collaboration with the Training Cell of the college. The event lasted for 8 days the first two days (July 2-3) consisted of the Group Discussion.

The Technical Aptitude round was conducted on the 5th of July and the Non-Technical Aptitude round was conducted on the 6th of July. The Coding round was held on July 7th and 8th and finally the Mock Interview rounds were held on the 9th and 10th of July

The Interviews were conducted by the alumni of the college for a duration of around 20 minutes, where they were tested on their core subject knowledge, and the projects they have mentioned in their resumes. Every participant was given the option to choose their field of interest (CS core, ECE-core, EBE-core, EEE-core, UI/UX, Data Science and Management) and get interviewed in the domain of their choice.

Each participant was also given feedback by the interviewer on where they had to focus more and make improvements. A total of 35 interviewers were there for the event which had 270 participants. The event was concluded by a closing ceremony where the interviewers give general feedback on the performance of the participants.



## Industrial Visit - EL Power Transformer

On receiving the letter of permission from EL Power Transformers Pvt Ltd, Kanjikode (Palakkad) 15 students with one faculty member of IEEE PELS SBC Jyothi Engineering College in collaboration with IEEE IAS SBC had went for a one day industrial visit. The IV had started at 9am from Jyothi Engineering college on July 2, 2022. EL Power Transformers Pvt Ltd is based in Kanjikode have started operating in 2009. It is a manufacturer of instrument transforms for Ht/Lt applications upto 22kv. Their products are used mainly for metering and protective application together with equipments such as meter and relay for the indoor and outdoor application in electrical systems for stepping down the current and voltage of a system to measurable values.

The designs are based on the better performance and suited for best customer satisfaction. Process parameters of each product is tested, monitored and recorded during manufacturing process to ensure quality in every part.



### Industrial Visit - SARK Cables

On receiving the letter of permission from SARK cables Pvt Ltd, Kanjikode (Palakkad) 15 students with one faculty member of IEEE PELS SBC Jyothi Engineering College in collaboration with IEEE IAS SBC had went for a one day industrial visit. The IV had started at 9am from Jyothi Engineering college on July 2, 2022 . SARK cables manufactures various types of cables like power cables, conhol cables, single core heavy duty cables, building and panel winding cables, submersible cables, muticore flexible cables, telephone cables etc. Sark Cables Pvt Ltd, an ISO 9001-2008 Company, promoted by a group of passionate technocrats, manufactures various types of cables. Sark Cables Started its operations in the year 1996 in Southern most part of India, Kerala.Sark Cables has the state of the art infrastructure in 3 strategic locations like, Palakkad, Thodupuzha, and Coimbatore which are well connected by Rail, Road and Airport. Sark Cables also succeeded in manufacturing import substitute requirements for various organisations. Sark Cables promises a revolution in continuous growth in Cable manufacturing and improved industrial scenario. By visiting sark cables we understood that the success factor of sark cables is it's ability to understand the specific requirements of it's customers, on the application of cables, and embracing them to manufacture better quality products at competitive cost. They showed and briefly plained about their manufacturing processes like insulation, shielding, armouring, outer sheathing etc. They have a testing laboratory to test quality of each and every products they have made.



## Fixed Wing Drone Workshop Phase- 1

The IEEE Industry Applications Society Student Branch Chapter College of Engineering Karunagappally organized a fixed wing drone workshop on the 4th of July 2022. The workshop was handled by Mohammed Niyaz - Chair, IEEE IAS SBC College of Engineering Karunagappally. This workshop was the pre-event of the upcoming fixed wing drone competition titled AEROTHON which is planned in the month of September. A total of 35 stu-

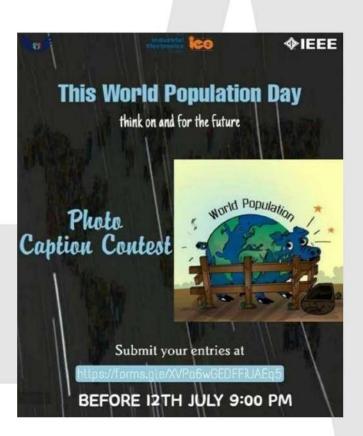
dents took part in the phase 1 of the workshop from different engineering disciplines . The workshop covered the basics of flight theory , explanation of different aircraft parts , flight control surfaces , types of drones , basics of fixed wing drones , applications of fixed wing drones etc . The stu dents were divided into 2 teams and were made to design and cut out the parts required to build a simple fixed wing drone out of a 4mm foam board material .

The students were very active and showed great interest in designing and assembling the various parts of the drone. The participants were also made aware of the advancing technologies that are incorporated into drones in the glooming industry. At the end of the workshop, the participants completed the initial drone body assembly including the main fuselage and wing . The second phase of the workshop will include the installation of the different components that are required to make the first flight of the prototype built . The participants shared positive feedback on the ses sion and were very excited for phase 2 workshop. They were very pleased with their performance and have inched towards their first fixed wing drone test flight.



## World Population Day Photo Caption Contest

As part of WORLD POPULATION DAY, IEEE IES Society of LBSCEK organized a Photo Caption Contest with the theme "Think on and for the future" on July 12th. 42 students participated.



### **Drone Mechanics**

As a part of the weekly technical talk IEEE IAS SBC RIT organised a technical talk based on the topic "Drone Mechanics" on 13th July 2022. The speaker, Mr. Nevin Seby, a second-year student of the Electronics and Communication Engineering Department handled the session. The session introduced the students to the fundamental requirements of a Drone Mechanics The speaker spoke at length about the

steps involved in the development process of a drone design. He explained in depth about the electrical, mechanical and thermal aspects of drone design and the battery management system. It was an informative session and the speaker handled it excellently.



## **Article Writing Competition**

Writing makes things happen. The IAS/ IES Jt SBC provides a chance to students and opportunity to develop ideas by an article writing competition on the topic 'electric vehicles'.

IAS/IES Jt SBC conducted an article writing competition on 14th July 2022 to 25th July 2022 through Google forms platform. It is a technical event and the topic is electric vehicles. Electric vehicles (EVs) are a promising technology for achieving a sustainable transport sector in the future, due to their very low to zero carbon emissions, low noise, high efficiency, and flexibility in grid operation and integration. The event has about more than 10 participants and the winners are Swathy Suresh (S2 EEE) and Avani Vijayamohan (S2 CSE).



## **Know The Day**

Know The Day is a series of posters released on technologically relevant days. The posters give a short and crisp note on the importance of that particular day. This was aimed to be an informative step to keep the students aware and improve their technical knowledge. Posters were released on July 16 (AI Appreciation Day), July 24 (National Thermal Engineer Day), August 19 (World Photography Day), October 11 (Ada Lovelace Day), October 29 (National Internet Day), and December 22 (National Mathematics Day).



### Workshop on Raspberry Pi

A Workshop and Talk session was conducted on the topic RASPBERRY Pi as a part of the third edition of Student Professional Awareness Summit SPAS 3.0 and collaborated with NPSS/PELS Jt.Chapter CEK.It was handled by Mr. Shibu V, Webcasting Coordinator, Kerala Legislative Assembly. He started the session at 7:00 PM and almost all the attendees joined the meeting without any delay. He gave an introduction on Raspberry Pi to the attendees and the session was too helpful for the beginners also. After the basic introduction about what Raspberry Pi is , Mr Shibu plains how a raspberry pi works.

He clearly explained the uses of raspberry pi like standalone computer, electronic projects, games etc. The basic programs using raspberry pi were shortly taken and many of the students asked for further sessions also. It was an interactive session so that the interested students could clear their doubts regarding the topic. The speaker gave the attendees time to ask their doubts. The attendees were so grateful to the speaker for his useful session. Overall it was an interesting session. The session ended at 9:00 PM.



# Session on Electrical Safety at Laboratory

IEEE IAS SBC CETkr conducted a session on 'Electrical Safety at Laboratory' with Mr. Anil K, the lab instructor of EEE Department of College of Engineering, Trikaripur on 26th July 2022 at 1:30 pm in main seminar hall of our college.

The session covered all aspects related to safety measures to take in the laboratories. Mr. Anil K handled the session in a much interesting way, introducing all the safety equipment and its uses, things that we should take care of while handling various instruments/equipment and he shared many laboratory experiences.

In between the session, the speaker asked few questions, and those who answered right, were awarded testers.

All participants actively participated in the session. The informative and exhilarating session ended up with an interactive Q & A session. There were about 84 participants and among them, 68 were IEEE members and 16 were non-IEEE members. Certificates were provided to all the participants for their active participation, and thanks giving poster was released to show the gratitude towards Mr. Anil K.



### LaTex Training

Behalf of S6 mini project presentation students was Introduced to LaTex software by Prof.Pramod under the auspices of IES SB and IEEE SB of LBSCEK. LaTex is a software used for document preparation and publications. This workshop was aimed at the enhancement of students' project preparations. Around 55 students were participated.



## Integrated Circuit-From Concept to Product

IEEE Student Branch, St. Joseph's College of engineering and Technology (IEEE SB SJCET)had decided to conduct a YP talk organized by IEEE IAS SBC SJCET in association with the Kerala Young Professionals. An interactive session was taken by Mr. Rony Alex Thomas[SOC Designer at Intel]. There was an active participation of 35 students from different colleges. The event was conducted on Google Meet platform on July 27th 2022 from 6:00pm to 7:00pm. The session was very helpful and effective. The objective of the event was to help students understand the basic con-

cept of ICs and to give an idea about the manufacturing and production of ICs. About 35 members participated in the session. Out of which 26 members were IEEE members and 09 were Non-IEEE members. The outcome was fruitful and the responses were good. The coordinators or ganized the event smoothly and were well cooperated by audience. The event was highly successful. The session ended by clearing the doubts of the attendees.



# Keskustelu 2022 - Debate on "Electric Vehicles vs Hybrid Vehicles"

The IEEE Industry Applications Society Student Branch Chapter College of Engineering Karunagappally in collaboration with IEEE Power and Energy Society Student Branch Chapter College of Engineering Karunagappally and IEEE SB CEK organized a debate session called "Keskus telu" on the topic "Electric Vehicles vs Hybrid Vehicles" held on 29th July 2022 in the google meet platform. A total of 30+students took part in the dynamic

debate which brought in various points and ideas with respect to the impact the two vehicles have on the environment. The current specifications and future modifications and capabilities were are also part of the debate. The inheritance of hybrid and electric powertrains from motorsports to road cars were also a major highlight in the session. The vast majority of the participants were involved in the session and was made more fruitful and interesting. Other major discussions were made on the powertrains , battery packs , regenerative braking and other technologies were also a major part of the discussion .The session was concluded within one hour with a short feedback session at the end.



# Introduction to IEEE Industry Application Society

IEEE Industry Application Society, Student Branch College Of Engineering Karunagappally conducted a webinar on Introduction to Industry Applications Society on 1 st August 2022 at 7 pm (+IST) by Er Akshay Krishnan, Software development Engineer, Carestack.

In the introductory part of the session, he

gave a brief introduction on himself and how IAS has helped him till the date. The perks of being an IAS member, his experience with IEEE IAS SB CEK, achievements of SB CEK in IAS domain were the prime matters explained. Attendees were so excited to deeply dive into the industrial world. He again recalled his experiences as former chair of SB CEK and how he achieved the most prestigious IAS AMTGP 2019. His presentation could hold all the attendees with utmost enthusiasm till the end.

He also discussed how volunteering in IEEE helps us in building ourselves as well as our career. His IEEE IAS experience was the most highlighted part wherein he discussed how a person can effectively utilize this platform to evolve as an industry equipped person. He also discussed various awards that members can achieve by being an active member of IAS. Benefits of IAS include numerous venues and tools for members to network, build valuable professional connections, and hone leadership skills. He further discussed joint chapters that connect IAS to various societies. He then added that IEEE IAS membership is more than what we receive—it's also about what we are giving back.

About 50 participants have shown their presence in the session. Participants could clear all their queries related to IAS. They gave enormous positive feedback on the session. Session ended with a vote of thanks by one of the student volunteers.

### R3: Extravaganza

An event with games conducted by IEEE IAS SBC RSET to help students use their

ability to think and apply knowledge to get output. The event consists of quiz, mind games which was a team event conducted in a hybrid mode. On 23rd August a quiz was conducted online and few teams were selected for the next round. Hybrid platform is used. The session was handled by Mr. Nitheesh Kurian - Asst Professor, DEC, RSET. On 24th August mind games were conducted in offline mode in college and 3 teams were selected as winners of the event.



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## PELS DISTINGUISHED LECTURE PROGRAM

IEEE PELS SBC GCEK conducted a distinguished lecture programme on the topic "Power Electronics for Precision Farming with Sustainable Development". The speaker of the event was Dr. Brij. N Singh who was the Technical Fellow, Power Electronics engineering in John Deere Inc.. USA. This distinguished lecture programme was conducted on Google meet platform on 3 rd September, 2022 at

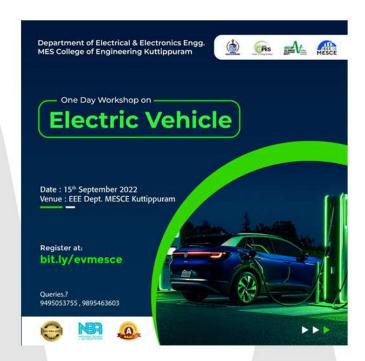
8:00PM. A total of 29 students registered for the event. The student members actively interacted with the speaker. Overall the event received positive feedback from the participants.



### **Electrical Workshop**

IEEE IAS SBC MESCE in collaboration with IEEE PES SBC MESCE and Department of Electrical and Electronics Engineering MES College of Engineering, Kuttippuram conducted a workshop on the topic "Electrical vehicles" on 15th September 2022, at the main seminar hall of EEE Department. The workshop was handled by Mr. Jaseem N Assistant Professor EEE Department. The workshop was limited to 15 students who are interested in this field. The future scopes of electric vehicles, its influence in futuristic world, rapid growth in this sector and various advantages and disadvantages of different types of EVs were discussed in the event.

The workshop included a hands-on lecture on the solar powered electric project which was present on the department, also the methods and principles used to modify the project was explained during the event. The event succeeded in gaining knowledge about Electric Vehicles.



# Interactive Session on Rooftop Solar Electricity Generation

IEEE IAS SCT Student Branch Chapter conducted an interactive talk session on the topic "Rooftop Solar Electricity Generation". The session was taken by Dr Ajith Gopi, Joint Chief Technical Manager ANERT, Govt. of Kerala Chairman, IEEE PES Kerala Chapter. The session took place in the ASAP Seminar Hall from 12 PM - 1 PM. It was quite informative covering topics including the importance of rooftop solar panels, the difference between grid-connected and off-grid solar plant points to be considered while choosing a solar panel or inverter etc.

## Technical session on the Design of a Multi-Mode Hybrid Inverter with Battery Storage

IEEE IAS SCT Student Branch Chapter conducted an interactive talk session on the

topic "Design of Multi-Mode Hybrid Inverter with Battery Storage". The session was taken by Dr Ajith Gopi, Joint Chief Technical Manager ANERT, Govt. of Kerala Chairman, IEEE PES Kerala Chapter. Participants have explained the Design of a Multimode hybrid inverter with battery storage for SCT College of Engineering Trivandrum as a model and as for similar institutions/industries to adopt. The program was attended by Professors and students of Sree Chitra Thirunal College of Engineering. The session was successfully coordinated by active volunteers.



#### **CADence**

CADence is an AutoCAD simulation submission event open to all students. It involves sketching and designing the plan, section view and elevation view of a building for the given specifications. The submission was open from 15-09-2022 to 30-09-2022.



## Design thinking competition

It was conducted on 16th September 2022. It was an activity to nourish the creative minds among IES and IEEE volunteers was carried out on the day as many days before. The activity is a case study supervised by branch councilor Rensi Sam Mathew. Volunteers who participated were divided into several groups and each group contained about two or three members. A detailed short passage about a tech city that is meant to be built on the banks of river Payaswani was given to each group and they were asked to give the top five parts of this prestigious project if they were the engineers of the same. Later each team had to speak out their answers to the rest of the teams. All the teams had shown interest in focusing on maintaining a clean and healthy atmosphere in the tech city along with using varieties of renewable energies. The session also helped the volun teers tackle a common psychological issue,' stage fear'.

#### CRACK IT

Power Electronics Society of IEEE SB GEC, Thrissur on behalf of National Engineer's Day celebration conducted an online Arduino debugging competition named "CRACK IT" on 18th September 2022. The questions were purely based on Arduino coding and debugging and allied areas of study. It was a single round event. It was conducted on a platform called Tinkercad in which the participants had to debug a total of three questions and upload the link of their solution in a google form. 14 students participated in this competition out of which, 11 of them were IEEE members.



## LED bulb Assembling Workshop Phase 2

IEEE SB and IES SB of LBSCEK conducted a 2nd Phase training program on Led Assembling for the inmates of Hosdurg Jail, Kasargod on Sep 24 as a part of helping prison inmates find self-employment through vocational training and developing skills. A study of the working of LED circuits was given. The LED Bulbs were assembled by the interns under the auspice of Sri. Rensi sam Mathew, Branch counselor IEEE SB LBSCEK was handed over to jail superintendent Sri. Venu.



#### FIX IT

SBC MESCE IEEE IAS conducted hands-on workshop named 'FIX IT' on 29th September at the Electrical workshop lab of EEE Department of MESCE. The event had around 32 participants and was focused on basic maintenance and repair of home appliances. The workshop covered disassembling and repairing appliances, lead by Mr. Ajay V, Technical Instructor from the EEE Department provided step-by-step guidance. The event started with an introduction to home appliances and the importance of maintaining them. The participants were then taken to the workshop lab where they were given hands-on training on how to disassemble and repair their assigned home appliances. The trainers were experienced technicians who provided step-by-step guidance to the participants, helping them under stand the repair process. The workshop was designed to be interactive and hands-on, giving participants the opportunity to get

hands-on experience on real appliances. The trainers emphasised the importance of following the proper procedure when reassembling the appliances to avoid damaging them further. The event ended with a quiz session, which tested the participants' understanding of the repair and maintenance of home appliances.

In conclusion, the hands-on workshop conducted by IEEE IAS SBC MESCE was a great success, providing participants with hands-on training on basic maintenance and repair of home appliances. The participants learned the importance of maintaining their appliances and gained practical experience in the repair process. The event was well received by the participants and was considered a valuable learning experience.



## Glean -Quote collection competition

A quote can act as an aide memories to focus us towards a specific goal or plan of

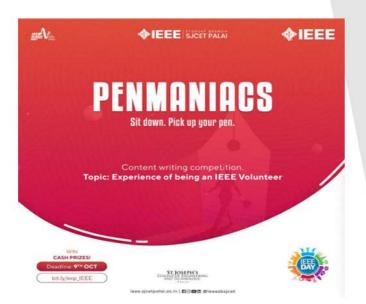
action.IEEE Robotics and Automation society and IAS/ IES Jt SB of IEEE SB CEA conducted a quote writing competition on the topic 'Robotics Everywhere'.The basic objective of the event was to give opportunity to make quotes and develop the technical writing skills as well as develop ideas of students all over Kerala.

'GLEAN' - is a quote writing competition conducted by RAS and IAS/ IES Jt SBC of IEEE SB CEA on 1st October to 10 October 2022. The topic of the competition was 'RoboticsEverywhere' and showed participants of 25. The relevance of the topic is advancements in robotics and develop ments continually taking place in the field of space exploration, health care, public safety, entertainment, defense, and more. These machines—some fully autonomous, some requiring human input—extend our grasp, enhance our capabilities, and travel as our surrogates to places too dangerous or difficult for us to go. The winners of the competition were declared on 15th October 2022. The prize went to Aiswarya S Kumar of College of engineering Adoor and Sivani of LBS Institute of Science And Technology for women. And the event was a great success.



#### **Penmaniacs**

IEEE Student Branch, St. Joseph's College of Engineering and Technology(IEEE SB SJCET) as a part of the IEEE Day Celebrations 2022 had decided to conduct an online content writing competition organized by IEEE IAS SBC SJCET. The event was conducted from October 5th to Octo ber 9th. The topic for the event was "Experience of being an IEEE Volunteer". This helped the students in sharing their joy of being an IEEE Volunteer. The objective of the evet was to encourage students to share their thoughts and experiences and to identify their writing skills. The primary objective of this session was to upskill the writing skills of our participants and to showcase people with exceptional writing skills. 04 members participated in the session and all of them were IEEE members. Entries were collected through google form. The outcome was fruitful and the re sponses were good. Got to identify good content writers. The event was well cooperated and the winner was selected based on the best content.



#### **POWERIT**

IEEE IAS SBC RIT conducted an online word puzzle competition, Powerit on 11th October 2022, as part of IEEE Day Celebration 2022. This competition encouraged its members to deepen their technical and non-technical knowledge. IEEE IAS SBC RIT organised an online word puzzle competition as part of IEEE Day Celebration 2022. The participants were filled with areat joy and vigour in solving the puzzle based on the clues provided. It was a time of learning integrated with enjoyment. Enthusiastic members joined in to make the event successful. They developed a keen interest in acquiring knowledge about anything that comes their way. The event concluded by giving away prizes during IEEE orientation session conducted for first year students.



Shark Tank 2022

IAS CUSAT SBC in collaboration with

the PES CUSAT SBC and PES RSET SBC conducted an ideathon named "Shark Tank". The topic was how to make the world more efficient. The event had two rounds - a draft proposal round and an idea pitching round, which took place from 11th October 2022 to 13th October 2022, and was conducted on the Google Meet platform. The event received an overwhelming response from the students, with 30 teams registering for the event. The participants were required to submit their draft proposals within the given time frame, and the chairs of the respective student branches judged the proposals. The top 10 teams were then shortlisted to move on to the second round, where they presented their ideas to the judges in a pitching round.

The second round was conducted in a highly interactive manner, with the teams presenting their ideas and answering questions from the judges. The ideas presented were diverse and covered a wide range of topics related to the field of engineering, renewable energy, and automa tion, design etc. After careful evaluation, the judges declared the winners of the event. The event had a prize pool of 2000 rupees, which was distributed among the winning teams. The ideathon provided a valuable platform for students to showcase their innovative ideas and gain rec ognition for their work. It also provided an opportunity for participants to connect with experts in the field and learn from their experiences.

## STEAM Workshop

IEEE Day encourages members together to

share ideas and be inspired to achieve their technological goals. Eu-Reka is an initiative to raise the level of literacy of STEAM through empowering and encouraging the 'Young Generation' as an 'Ambassador of Education'.

On behalf of this programme, IEEE and IES Volunteers (Sreenivas Pai, Sukanya, Abhijith and Rithika) interacted with school students of Durga Higher Secondary Students, Kanhangad.

The workshop is aimed to make youngsters aware of the needs and expectations of the students towards the class of education as well as to work towards educational inclusiveness by reducing the disparity between urban and rural level literacy rates. The event conducted at DHSS Kanhangad on 12 th october.

#### DISENO

The event was conducted on 13th October 2022 to 15th October 2022. The competition was about a question and the participants have to design a product apt for the question.The question was to "Design a product which helps you encounter boredom during classroom. Product shouldn't be taken away by the teacher when used in his/her presence. Make sure that product is student as well as teacher friendly.". Round 1 was in the form of Google Form,the participant had to upload the abstract of their product and out of 24, 6 participants uploaded their abstract. After evaluation 5 participants were shortlisted for Round 2. Round 2 was in the form of Google meet .In this round participants presented their product briefly and we had 2 judges ,they cross questioned the participants. After the evaluation of judges we had 3 winners who had given 1st,2nd,3rd positions.



#### TECH SNAP

Tech Snap was an event conducted to showcase photography skills of participants. It was hosted by IEEE IAS SBC RSET. The event was conducted on 13th October at 7pm virtually through Google Meet. Tech Snap was coordinated by Clerin George, Christina Paul, Heithal Paul and Nedha Fathima. Participants were asked to upload tech-related photographs prior to the meet through a Google Form. We had a total of 10 participants who performed very enthusiastically. They were asked questions about their uploads. Participants were judged on their photography and presentation skills. The event was a huge success.



#### **GOOGLER**

The event Googler took place at 6 pm on 14 October 2020. It was hosted by IEEE IAS SBC RSET. The event was anchored by Rinkle Rose and was conducted through google meet. The Aim of the event is to possess the ability of a participant to use a search effectively to find answers for questions as fast as possible.



### IEEE DAY EVENTS BY IES SBC LBSCEK

On behalf of IEEE DAY 2022, IEEE IES SB LBSCEK in association with IEEE SB LBSCEK conducted a competition consisting a total of 5 contests, which includes a photography contest, an online collage-making contest, an online movie quiz, a creative corner, and an offline debate. Students participated as a team of five. 8,5 and 3 points were awarded to first, second, and third position holders of each contest, respectively. The 2 teams with the most points after the 4 online events faced off against each other in a debate competition, which was the final. The final took place on 14th October, Friday.

#### STANDARDS DAY

The Institute of Electrical and Electronics Engineers (IEEE) Student branch at SNIT in association with IEEE Kerala YP organized a session on Standards Day. The Speaker for the webinar was Mr.

Madhusoodhanan Nair M, Associate Engineer, Electrical Section, Enathu, Adoor. It was conducted on EEE

Seminar Hall, SNIT, Adoor. The event discusses the vision of Standards day and the programs conducted based on this was make a quote competition, quiz competition, speech competition. It was conducted nicely and in a good manner.

## RTL Design and Verification

The IEEE IAS SBC MESCE and ECE department of MESCE successfully conducted a two hour online workshop on "RTL Design and Verification" on 16th and 23rd October, 2022. The workshop was attended by 80 delegates and was graced by the presence of the keynote speaker, Mr. Jayakrishnan V R, a Full Chip Verification Engineer at Google, Bangalore and a 2006 alumni of MESCE.

The topic of the workshop was RTL Design and Function Verification, which is a critical aspect of the chip design process. Mr. Jayakrishnan expertly guided the delegates through the intricacies of RTL design, covering aspects such as RTL coding, simulation, debug and verification. The participants were highly engaged and participated in the interactive Q&A sessions which followed the talk.

The workshop was well-received by the participants and provided them with a comprehensive understanding of RTL design and verification. The hands-on experience that the participants gained will certainly prove to be valuable in their future careers. The event was a great success and the feedback received from the participants was overwhelmingly positive. In conclusion, the IEEE IAS SBC MESCE and ECE department of MESCE College of Engineering are to be commended for their efforts in organising and conducting this workshop. The event was a great platform for the students to interact with industry experts and gain practical knowledge in their field of study.

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#### **THINKPHILE**

IEEE PELS SBC GCEK conducted an analytical problem solving competition on the topic "Mobile Phone - an environmental disaster". The competition was conducted

offline on 18 October 2022, at 4:15 pm. Topic was given on the spot and students were allowed to participate as a team of two. The competition had a total of 31 registrations in which 20 of them participated in the competition. The event was conducted to make the participants creative and come up with as many solutions within a short span of time. The first prize was bagged by Shwetha K C and Keerthana M K of S3 EC A. The second prize was shared by Nikhil Das V & Sneha P of S5 EC A and AswanthRaj E & Harikrishnan K M of S5 ME. The event received good feed back from its participants in terms of its relevance and organization.



#### **EXEMPLAR**

IEEE IES conducted an online technical event where the participants were asked to design an electronic device with added improvisation from their imagination and ideas to make a unique product design. The event was conducted from 20th October 2022 to 24th October 2022. It was a national level event with plenty of active participants. The goal of the event was to

access the designing skills of the participants.



#### IMPELZ - SESSION ON MATLAB

IEEE PELS SBC GCEK in collaboration with IEEE IAS SBC GCEK, conducted a three day event focused on Matlab titled IMPELS. Familiarizing the MATLAB platform and organizing events related to the same were the goal of the event. SESSION ON MATLAB was the second event conducted under IMPELZ and the session was handled by Ms Haritha M E and Ms Jijina C, S7 EEE students GCE Kannur. The session accentuated the worldwide use of MATLAB for a range of applications in industry and academia including deep learning, machine learning, image and video process ing, control systems etc. It was a live demonstration session on the usage of MATLAB platform. There were 25 participants who actively interacted with the Speakers and had positive feedback from its audience.



#### **EXEMPLAR**

#### IMPELS - MATLAB BOOTCAMP

IEEE PELS SBC GCEK in collaboration with IEEE IAS SBC GCEK, conducted a three day event focused on Matlab titled IMPELS. Familiarizing the MATLAB platform and organizing events related to the same were the goal of the event. MATLAB BOOTCAMP was the first event and the session was handled by Prof. Amal S Kannan, Assistant professor from the ECE Dept of GCE Kannur. Microcontroller Lab of GCEK remained as venue for the session. There were 20 participants who actively interacted with the Speaker and had positive feedback from its audience. The session covered a huge area and was so interesting.

## Bluetooth Technology

Weekly Technical Talk 2.0 is a series of technical talks happening every week, initiated by IEEE IAS SBC RIT, which provides an opportunity for students of RIT to deliver a talk on their interesting technical topic. IEEE IAS SBC RIT organised the third session of Weekly Technical Talk 2.0 on Bluetooth Technology by Ms. Sreelakshmi C R of S5 EEE. The event was successful with the active participation of about fifteen students as the topic was interesting. The event aimed at providing a platform for enthusiasts to become potential speakers.

## Design & Engineering Workshop During Student Induction Programme

IEEE SB and IES SB of LBSCEK organized a workshop for the Student Induction Programme 2022 - First year Orientation Session on the topic: Design and Engineering Workshop. The programme was conducted in the forenoon for the CSE and IT branches and in the afternoon for the ECE, EEE, CE and ME students.

#### **NOW YOU SEE ME**



The event was conducted on 28th October 2022 & 29th October 2022. An event to showcase knowledge and skills conducted

showcase knowledge and skills conducted by IEEE IAS SBC RSET. The event consists of two rounds, Preliminary round - technical quiz and Final round. Event is coordinated by Nathasha and Neeraj.

#### CAMP'22

# Getting Placed in an Electrical Core Job

IEEE IAS SBC RIT successfully conducted the CAMP'22, a Career Mentoring Program consisting of a series of webinars and talks initiated and organised by IEEE IAS SBC RIT. The first session of CAMP'22 is "Getting Placed in an Electrical Core Job" by Mr. Sabarinath M, Graduate Engineering Trainee, TPSSL and Ms. Adheena V Abraham, Graduate Engineer Trainee, GE Aerospace. The event happened on 29th October 2022 from 8.00 PM - 9:30 PM, virtually through Google Meet, aimed at providing career guidance for students focusing on electrical core job placements. The first session of CAMP'22, "Getting Placed in an Electrical Core Job" by Mr. Sabarinath M, Graduate Engineering Trainee, TPSSL, and Ms. Adheena V Abraham, Graduate Engineer Trainee, GE Aerospace, for students dreaming of getting a place in a core electrical job was successfully or ganised by IEEE IAS SBC RIT on 29th October 2022 from 8.00 PM - 9:30 PM, virtually through google meet. IEEE SB RIT proudly conducted the session as both the speakers are RIT Alumni. The session had a total of 81 enthusiastic participants. Ms. Diya K, S3 ECE opened the session by delivering the welcome address. Mr. Vipindev Adat Vasudevan, a Postdoctoral Associate at

Massachusetts (MIT), and an alumnus of RIT was the Guest at the event.

Mr. Sabarinath M began his speech by questioning the myths related to core electrical jobs that had been prevalent. He continued his speech by sharing his experience of facing a campus placement procedure, aptitude test, technical, and HR interview. He also mentioned the opportuni ties in the electrical engineering field. He explained his preparation strategy and tips for cracking exams and interviews. He also advised the students to maintain professionalism in words and actions. Ms. Adheena started her speech by explaining the importance of hard work and practice in making dreams come true. Adheena mentioned the industrial requirements and what they expect graduates to contribute. She pointed out the areas to be covered before giving an aptitude test, a technical test, and a technical interview. She also guided the students to prepare a proper resume. Both speakers shared their work experience. The event motivated the students to pursue their dream. Participants become aware of various job opportunities in electrical engineering. The session contributed to the professional development of participants. The session was very inter active and had the active participation of 81 students from different SBCs. Guided students interested in core electrical engineering jobs. The session received positive feedback and was a success.

# Industrial World of Electronics Engineers

The second talk session of CAMP'22, on "Industrial World of Electronics Engi-

ineers" by Ms. Liya Ann Thomas, Associate Engineer, TechM Cerium Systems, and Ms. Melna S Monson, Graduate Engineering Trainee, HCL, was organized by IEEE IAS SBC RIT on 30th October 2022, from 8 PM to 9 PM, virtually through Google Meet, aimed at providing career guidance for students focusing on electronics core job placements.

IEEE IAS SBC RIT conducted the second talk session of CAMP'22, on "Industrial World of Electronics Engineers" by Ms. Liya Ann Thomas, Associate Engineer, TechM Cerium Systems, and Ms. Melna S Monson, Graduate Engineering Trainee, HCL on 30th October 2022, from 8 PM to 9 PM, virtually through Google Meet. The session had the active participation of 50 electronics core placement enthusiastic students from different colleges across Kerala. Mr. Shyam, S1 EEE welcomed the participants and speakers to the session. Mr. Vipindev Adat Vasudevan, a Postdoctoral Associate at Massachusetts (MIT), and an alumnus of RIT was the Guest at the event. The talk mainly concentrated on the core job opportunities in the field of electronics. Ms. Liya started the session by sharing her experience in pursuing her dream of getting a campus placement. She then detailed the campus placement procedures of TechM Cerium Systems and specified the requirements of the industry and what they expect from an engineering graduate. Her tips to crack aptitude tests, technical tests, and interviews are very useful. The first speaker concluded her speech by giving a brief introduction to the Industrial World of Electronics Engineers. Ms. Melna talked about her experience while preparing for a core job. She mentioned various electronics core job opportunities, and the technical areas to be focused on and detailed the placement procedure of HCL, the speaker then shared her experience as a Graduate Engineering Trainee at HCL. Her way of attempting aptitude exams and interviews is very inter esting. Both speakers talked about the importance of having a good resume and advised the participants to avoid common mistakes while preparing for a core job, highlighting the importance of perseverance and self-motivation. The talk motivated the students to work hard to achieve their dreams. They both talked about their IEEE volunteering experience and how IEEE membership benefited them in their journey. Motivated and guided students interested in core electronics engineering jobs. The session received positive feedback and was a success. The students become aware of IEEE membership benefits.

#### What is Robotics

Weekly Technical Talk 2.0 is a series of technical talks happening every week, initiated by IEEE IAS SBC RIT, which provides an opportunity for students of RIT to deliver a talk on their interesting technical topic. IEEE IAS SBC RIT organized the third session of Weekly Technical Talk 2.0 on "What is Robotics" by Nihal K of S3 EEE. The event was successful with the active participation of about 35 students as the topic was interesting. The event aimed at providing a platform for enthusiasts to become potential speakers. The fourth session of Weekly technical talk 2.0 on " What is Robotics" by Nihal K of S3 EEE was well organised by IEEE IAS SBC RIT on 3rd

November 2022, at the Electrical seminar hall, RIT, from 4 PM to 5 PM. Ms. Malavika, The Chairperson of IEEE IAS SBC RIT, introduced the speaker before the participants. The talk was an answer to all basic questions related to robotics. The positive feedback received from the participants shows the success of the event.

The talk created interest among the participants to gain more knowledge on robotics and to do further research on the topic. Motivated the students to be a speaker for upcoming sessions of weekly technical talks. Weekly technical talks will surely help the students to identify their domain of interest and to share their knowledge with their fellow students. It also boosted the confidence of the speaker and participants to continue their journey to acquire knowledge in various technical fields. Mr. Blesson Tomy, Secretary of IEEE IAS SBC RIT, thanked the students and speaker for their participation in the Weekly Technical Talk.

After the talk, Malavika took a membership development session. The vision and mission of IEEE, volunteering opportunities, past and future events of IEEE IAS SBC RIT, and various membership benefits of both IEEE and IAS have been stated in the session. She also shared her experience of virtually attending the IAS Annual Meetina 2022 and what made IEEE IAS SBC RIT achieve the IAS CMD Outstanding student branch chapter award and 3rd rank in IAS CMD Most Happening chapter award. Which made the students aware of the importance of having an IEEE IAS member ship and motivated them to become IEEE volunteers. Motivated the students to contribute to their field of interest.

### **MATLAB Xploration**

MATLAB Xploration was an online session initiated by IEEE IAS SBC RIT in collaboration with IEEE RAS SBC RIT, which provided an opportunity for students of RIT and delegates from other colleges to know and understand about MATLAB and its operations. The session was handled by Master Abhiram Hareendran, fourth year EEE student . The event was successful with the active participation of about 202 students as the topic was interesting. The event aimed at providing a basic idea on how the software works and its importance in the engineering field. The first pre-event of REX 3.0 MATLAB Xploration was well organized by IEEE IAS SBC RIT and IEEE RAS SBC RIT on 3rd November 2022, at the google meet platform, from 7 PM to 8 PM. Master Joe Abel Vincent, The Vice Chairperson of IEEE IAS SBC RIT, introduced the speaker before the participants. The ses sion was an answer to all basic questions related to MATLAB and its operation. The positive feedback received from the participants shows the success of the event.

The talk created interest among the participants to gain more knowledge on MATLAB and to do further research on the topic. It also boosted the confidence of the participants to continue their journey to acquire knowledge in various technical softwares. Mr. Blesson Tomy, Secretary of IEEE IAS SBC RIT, thanked the students and speaker for their participation in the online session. Introduced the students to the world of MATLAB and its operations and contributions in the engineering field.

# **RESONANCE**: Logo Design Competition

A logo designing competition was organized as a pre-event of RESONANCE which is a blend of technology, knowledge and fun, hosted by IAS IEEE MEC SB in collaboration with IAS IEEE RSET SB. Event was open only to students of Model Engineering College, Thrikkakara and Rajagiri School of Engineering Technology, Kakkanad. From numerous entries, Aadhila Rahman from RSET was declared as the winner and is awarded with a cash prize of Rs. 500/-.



#### **EMERGENCE 2.0**

The first major event of IEEE IAS after the pandemic was EMERGENCE, a pathway for creating innovative projects through comprehensive training. The event consisted of 3 phases — ASSIMILATE, INNOVATE and CREATE. The second edition EMERGENCE 2.0, which was an All Kerala techno-managerial conclave was conducted from 5th November to 6th November

ber 2022 at the College of Engineering Chengannur. The event comprises three parallel workshops based on nurturing the technical skills of participants. The event also provides hackathons, industrial visits, cultural events, talk sessions, managerial training and internship opportunities. The event enables the participants with technical knowledge as well as soft skills. Being an inter-collegiate event, EMERGENCE 2.0 provides a platform for professional networking and enables them to maintain an amicable professional attitude. Registration for the event started at 8:45 am IST on 5th November 2022. Volunteers lead the delegates to the registration area where three registration desks are assigned for the respective workshop tracks. The registration portal was closed at 9:30 am IST with a delegate count of 100.

During the inaugural ceremony Mr Vishnu M (Chairperson, IEEE IAS SBC CEC) delivered an overview of Emergence 2.0. The presidential address was delivered by Dr M V Rajesh (Chapter Advisor, IEEE SBC CEC) where he interacted with the delegates and presented the importance of IEEE, IEEE IAS and its benefits and motivated them to actively participate and utilize the essence of the event to its maximum. Honourable Chief Guest Prof. Mohammed Kasim (Vice Chairperson, IEEE Kerala Section) and Dr Bijuna Kunju (Chairperson, IEEE IA/IE/PELS Jt. Chapter Kerala) and other dignitaries together inaugurated the conclave by lighting the lamp. Prof. Muhammed Kasim and Dr Bijuna Kunju delivered the inaugural address and they inspired young minds with their enlightened words. They all pointed out the importance of IEEE in both professional and personal development.

As a token of gratitude, a momento was presented to the chief quests by Dr M V Rajesh. The inaugural ceremony was concluded with a vote of thanks delivered by Ms Heba Phillip (Secretary, IEEE SB CEC). The event comprised of Industrial visits to ALIND Switchgear division, Mannar and Traco Cable Company Limited, Thiruvalla and 3 workshops on IOT Candle workshop, Introduction to PVSyst and rapid prototyping. All the 3 workshops were done in collaboration with Quadratech Innovations and Technologies. An The 3 workshop comprised of hackathons and the winners of the same were given internship opportunities. Th event also comprised of multiple talk sessions by eminent personalities and a cultural eve.





#### INDUSTRIAL VISIT

An industrial visit to BHORUKA POWER LIMITED CORPORATION Manjandka, Karike 571247, Coorg district Karnataka -Mini hydrel station on November 5, 2022. It was well organized by IEEE SB and IEEE IES SB of LBSCEK in accordance with yearly Industrial visit for IEEE team Aimed to understand production of electricity, transmission, control system, maintenance, technology works and experience. Forty-three IEEE student members and two faculties Mr Rensi Sam Mathew, Branch councillor IEEE LBSCEK and Miss Mary Reena, Branch Advisor of IEEE LBSCEK. On saturday morning, all members are gathered at LBSCEK. The bus left from college by 8:45 Am went to the Karnataka border in college bus, after the border jeep are arranged for travel facility. The permission granted by Mr Maxim, HR Bhoruka power corporation limited. We arrived at hydro power plant by 10:30 Am. After normal security check all members enter to the plant.Mr Sreenivas pai, Chairman of IEEE divided the whole team into two each of 22 members and a faculty for guidance. One team move towards plant and another team move towards contol section.



#### Werkstatt

IEEE Student Branch, St. Joseph's College of Engineering and Technology(IEEE SB SJCET) conducted a hands-on offline workshop "WERKSTATT" on the topic "Introduction to Computer Hardware and Troubleshooting" organized by IEEE IAS SBC SJCET in collaboration with IEEE WIE AG SBC SJCET on 5th November,2022 from 2:30pm - 4:30 pm. The workshop was taken by Mr. Aneesh Sankar, Lab Instructor .The workshop was arranged at the MCA Lab. The objective of the event was to help students gain information about their way of work and to let them know how things take place. About 32 members participated in the session. Out of which 26 members were IEEE members and 06 were Non-IEEE members. outcome was fruitful and the responses were good. Students enjoyed learning together. The coordinators organized the event smoothly and were well cooperated by the participants.



#### YP TALK

The Institute of Electrical and Electronics Engineers (IEEE) Student branch at SNIT in association with IEEE Kerala YP organized a webinar session on Python: The Beginners guide on November 6, 2022. The Speaker for the webinar was Mr. Midhun S, Co-founder, Revertech IT Solutions. It was conducted via Google Meet platform. The main topics discussed in the session were basic concept of python. The webinar was engaging, inspiring and informative for students. 27 students were participated.



## Workshop on Home Automation

IEEE SB College of Engineering Karunagappally in association with the IEEE RAS SB CEK, IEEE SSCS SBC CEK & IEEE PELS SBC CEK has organized a session based on Home Automation on the 8th and 9th of November 2022. The session was handled by Mr.Joel Mathew V, Vice Chair, IEEE RAS SBC CEK.

As a starting, he took a class about the modern technologies, IoT its applications, usage, etc and then he talked about home automation, how is it done etc. All the attendees become curious to know about it. The next day he showed a demonstration about it and it was intersting. It was an interactive session and the participants cleared their doubts regarding the session. There were about 60+ participants and all were very enthusiastic to learn more.



## IMPELZ - QUIZ ON MATLAB

IEEE IAS SBC GCEK in collaboration with IEEE PELS SBC GCEK, conducted a three day event focused on Matlab titled IMPELS. Familiarizing the MATLAB platform and organizing events related to the same were the goal of the event. MATLAB Quiz was the third event conducted under IMPELZ which focussed on testing the skills in MATLAB. The quiz was held via Google form on 11 November 2022 at 7.30

pm. The questions of the quiz were purely based on matlab debugging. There were a total of 54 registrations and 39 of them participated in the competition. The event was conducted exclusively for IEEE members. Rinshina M K of Government College of Engineering Kannur grabbed the First prize, second prize was bagged by Abbiraam K of SCTCE, Trivandrum and the third prize won by Fathima Shada Sulaiman of Government College of Engineering Kannur. The event received good feedback from the participants.



#### CAMP'22

IEEE IAS SBC RIT successfully conducted the CAMP'22, a Career Mentoring Program consisting of a series of webinars and talks initiated and organized by IEEE IAS SBC RIT. The third session of CAMP'22 is "Research as a career path and higher studies abroad" by Er. Vipindev Adat Vasudevan, Postdoctoral Associate at Massachusetts Institute of Technology (MIT). The event happened on 19th November 2022 from 8.30 PM - 9:30 PM, virtually through Google Meet, aimed at providing career guidance for students focusing on Research as a career path and higher studies abroad.

The third session of CAMP'22, "Research as a career path and higher studies abroad" by Er. Vipindev Adat Vasudevan, Postdoctoral Associate at Massachusetts Institute of Technology (MIT), for students dreaming of Research as a career path and higher studies abroad was successfully organized by IEEE IAS SBC RIT on 19th November 2022 from 8.30 PM - 9:30 PM, virtually through google meet. IEEE SB RIT proudly conducted the session as the speakers are RIT Alumni. The session had a total of 50 enthusiastic participants. Ms. Gopika, S3 ECE opened the session by delivering the welcome address.

Er. Vipindev Adat Vasudevan gave a broad idea on the application procedures, Statement of Purpose and the wide opportunities that lie after studies. He was joined by a few of his friends to give deep insights from their life experiences. They created an opportunity to handle individual prob lems personally. This session enabled many to channelize flame in them to chase their dreams.. He explained his preparation strategy and tips for cracking exams and interviews. He also advised the students to maintain professionalism in words and actions. Many enthusiastic members joined, to make the event successful. . Participants become aware of various job and research opportunities abroad. The session contributed to the professional development of participants. The session was very interactive and had the active participation of 50 students from different SBCs.

### IAS Distinguished Lecture Program

IEEE IA/IE/PELS Jt. CHAPTER KERALA in association with IEEE IAS SBC COLLEGE OF ENGINEERING ATTINGAL successfully hosted the Distinguished Lecturer Program, on the topic "CubeSat ELECTRICAL POWER SUB-SYSTEM (EPS) ARCHITECTURE "on 19th November 2022 at college auditorium.

The resource person for the session was Dr. Vinod Khadkikar, IEEE Fellow Professor, EECS Department, Khalifa University, Abu Dhabi, UAE.

The session was intended to give the students a fair idea about CubeSat electric power system. The discussion started with the question "What is CubeSat" to assess the knowledge of the students and to break the ice. The distinguished speaker spoke at length on the topic. He also shared his screen to give more clarification on what he said. This provided students an opportunity to provide input to and exchange ideas and give individual feedback on issues of importance to this topic. Participants raised many questions and provided comments regarding the Webinar' scope and how it connects with the broader picture. Some students even clarified their doubts in a one-on-one conversation. The distinguished speaker ensured that he patiently answered all the questions elaborately. In total 200 students attended the session.

#### **WEAKEST LINK**

The Weakest link was an event conducted by IEEE IAS SBC RSET as part of Bazinga, a series of events conducted by both IEEE SB RSET and IEEE SB GECT on November 19, 2022. The event is basically a treasure hunt containing different tasks. Points will be given to teams performing well in respective tasks. A team contains 2 to 3 members. The event consists of two rounds. Event was coordinated by IEEE IAS SBC RSET Execom members and 15 Volunteers.



# Cybersecurity Workshop and Arduino Project Building Series

IAS CUSAT SBC in collaboration with RAS CUSAT SBC, Decentralized Organized Projects (DOP) CUSAT, and Tinkerhub CUSAT organized an ongoing workshop on "Cybersecurity Workshop and Arduino Project Building Series". The main mission of the workshop was to familiarize students with recent advances in technology and make them industry relevant. The event is open only to IEEE CUSAT members and CUSAT students.

The workshop started on November 19,

2022, and is scheduled to take place every Monday, Tuesday, Wednesday, and Thursday from 4.30 pm to 6.00 pm. The event aims to provide participants with hands-on experience in building Arduino projects and developing their skills in cybersecurity.

The workshop has received an overwhelming response, with more than 350 registrations. The event has been well-structured and organized, with the sessions being conducted by experienced students of our SB. The workshop covers a wide range of topics related to cybersecurity and Arduino project building, including secure programming, network security, robotics and data privacy. The sessions are designed to be interactive and engaging, with participants being given the opportunity to ask questions and clarify doubts. The use of real-life examples and case studies has been effective in helping participants understand the practical applications of the concepts being taught.

The workshop has been a valuable learning experience for participants, providing them with the opportunity to develop their skills and knowledge in a rapidly evolving field. The collaboration between the various student branches and departments of CUSAT has been highly effective in bringing together students from different disciplines and providing them with a comprehensive learning experience.

The "Cybersecurity Workshop and Arduino Project Building Series" has been a highly successful event, providing participants with a valuable learning experience and helping them develop their skills and knowledge in a rapidly evolving field. The workshop has been well-received by participants and has received positive feedback for its organization, structure, and content.



#### TOP OF THE FORM



Top of the form was an event conducted by IEEE IAS SBC RSET as part of Bazinga, a series of events conducted by both IEEE SB RSET and IEEE SB GECT on November 20, 2022. The aim of the event is to give an opportunity for students to think out of the box to solve questions in mind games. The event consists of mind games like logo identification, Audio and Video recognition. Students were formed as a team of 2 to 3 and participated, any team who failed to answer the question were given tasks. The event was coordinated by IEEE IAS SBC RSET Execom members and 5 volunteers.

#### XENIUM

To train the students with skills required in Industry, the Industry Applications Society Student Branch Chapter of IEEE SB AJCE organized a PCB Training. It was conducted from 22nd November to 25th November 2022 and was hosted on an online and offline. The initial session was taken offline and further training was given online via recordings. The resource person was Reno S. There were 45 participants, of which 35 were IEEE members and the other 10 were non-IEEE members. The event was a success and we received a good number of positive feedback.



## **Basic Arduino Workshop**

The event was held at the SAINTGITS Centre for Innovation and Entrepreneurship

(SCIE) on 23rd November 2022 from 9:30 am to 4:30 pm. A total of 37 participants were present. The workshop was led by Karthik Prakash T SCIE student in charge and Electrical head of SAE E-Baja team. The session dealt with basic Arduino programming and familiarization of the Arduino Uno board architecture. The students were introduced to different kinds of sensors and their uses. The workshop concluded with a small project where the participants showcased the skills they had just learned. The mini-projects were judged by the presenter and a small token of app ciation was given to the team that could showcase an innovative and practical model.



# Introduction to Kalman Filter with Target Tracking

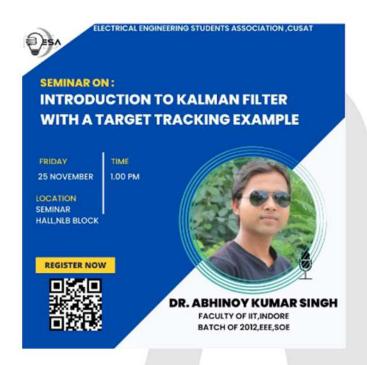
On November 25, 2022, IAS CUSAT SBC collaborated with EESA CUSAT and Dr.

Abhinoy Kumar Singh, faculty at IIT Indore and an alumnus of the EEE branch of SOE CUSAT from 2008-2012, to conduct a seminar titled "Introduction to Kalman Filter with Target Tracking". The seminar was held from 1 pm to 3 pm and was conducted offline in Seminar Hall at NLB block, SOE.

The session began with an introduction to Kalman filter, a mathematical algorithm that is widely used in signal processing and control applications. Dr. Abhinoy Kumar Singh explained the basic principles of Kalman filter, including its application in target tracking, and its advantages over other signal processing techniques.

The presentation then moved on to cover the various aspects of target tracking using Kalman filter, including target models, measurement models, and the estimation process. Dr. Abhinoy Kumar Singh also shared his experience in using Kalman filter for target tracking in various research projects. The seminar was highly interactive and Dr. Abhinoy Kumar Singh was able to provide valuable insights and guidance to the participants.

Overall, the "Introduction to Kalman Filter with Target Tracking" seminar was informative and engaging, providing participants with a valuable opportunity to learn from an expert in the field and gain practical experience in using the algorithm for signal processing and control. The collaboration with EESA CUSAT and Dr. Abhinoy Kumar Singh was highly successful in bringing together students and made it accessible to a wider audience. The seminar provided a great platform for participants to connect with an expert in the field and gain knowledge that will help them in their research projects and career development.



## **Empeiria**

The Industry Applications Society Chapter of IEEE SB ASIET conducted EMPEIRIA as a platform to increase presentation skills and cultivate methods to captivate the audience. This was intended to improve the knowledge of participants about one's method of delivery of speech during class, a presentation, a seminar, etc. The event was held through an online platform on 26th November 2022 with 50 attendees.

The session was informative and went into great detail on the platforms for conducting presentations. The class was taught by Miss Shivali K. A., the mentor of IEEE SB ASIET. The speaker also mentioned the applications to utilize while creating presentations, the necessity of inputting images and classic tables, flowcharts, and various other imagery tools to capture the attention of the viewers. One must also pay attention to the size of the text, how to fill the page without overwhelming the audience, and the requirement of contrast be-

tween the images or visual aid and the text. Additionally, the presentation creator must also pay attention to the font size, and type to exhibit a degree of professionalism and class to the viewers. The event turned out to be an interactive one, where the students raised several questions regarding the topic. The speaker was able to answer their queries and further their understanding of the topic.

The session proved beneficial to the students, and they were able to further their theoretical understanding of the method of presentation and delivery. The speaker was successful in catering to a curious bunch of students. A feedback session, in which the participants provided their views on various aspects of the session, was also conducted at the end.



## LED Lamp Assembling Workshop

IEEE IAS SBC MESCE in collaboration with the Department of EEE & Association of Electrical and Electronics Engineering, MES College of Engineering, Kuttippuram organized a two-hour workshop aimed at stirring ideas and lighting up notions in the minds of the delegates. The workshop was held from 2:30 PM to 4:30 PM and covered different specification areas.

The workshop began with a very interesting, interactive ice-breaking session led by Ms. Pramod. During this session, Ms. Pramod shed light on the various possibilities and opportunities for engineers of different streams and gave a detailed explanation of the working of a LED bulb. He explained how everything we see has some sort of workshop involved in it and how it is assembled in an easy-to-understand manner.

The workshop was modular and neatly explained, making it easy for even delegates with no previous knowledge or experience to understand and connect. The workshop also encouraged delegates to make things instead of buying them. At the end of the session, students were shown how the LED bulb lights up.

The workshop was concluded by 4:30 PM. Overall, it was a successful event that provided valuable insights and knowledge to the delegates.

In conclusion, the workshop organized by IEEE IAS SBC MESCE and Department of EEE, MES College of Engineering, Kuttip-puram was a well-organized and informative session aimed at providing an interactive learning experience for the delegates.

## **Goal Setting**

IEEE SB JEC in association with IEEE-IAS SB JEC conducted a session on soft skill training on the topic 'Goal Setting ' lead by Mr. Jithin K Jose on 3rd December 2022 from 9AM to 4PM. It was a fun event with vari-

ious group activities. Jithin Sir told us many inspirational stories that happened in his life. He showed us that goal setting is the process of taking active steps to achieve your desired outcome. Maybe your dream is to become a teacher, musician, doctor or anything else. Each of these dreams involves setting and reading small goals. He also told us the importance of setting a goal in our life. That is setting goals give you long term vision and short term motivation. It focuses your acquisition of knowledge and helps you to organize your time and your resources so that you can make the most of yours life. The session also includes the importance of time management. The session was very interactive and helpful for the students like us.

#### RESONANCE: IOT WORKSHOP



IoT Workshop was an event conducted by IEEE IAS SBC RSET as part of RESONANCE, a tie up by both IEEE IAS SBC RSET and IEEE IAS SBC MEC on December 3, 2022. The Workshop was handled by Students of MEC,

a total of 37 participants had attended the workshop. Students were introduced to a popular platform called Arduino and helped them to program an Arduino board. students were formed into groups and distributed electronics kits that can be helpful for learning IoT hands-on.

## **Speed Typing Competition**

IEEE IAS SBC GEC Palakkad conducted a Speed Typing Competition on 8th December 2022, which focused on encouraging students to develop their typing skills. Typing remains a fundamental skill, and it is still one of the most important computer skills you can learn. Learning to type fast and accurately will help you in many ways in life, and it should be considered an essential skill for anyone who sees themselves working with a computer in some capacity. A total of 26 students actively participated in the competition. The winners were judged based on accuracy and the count of words per minute.



## Luminous Career Opportunities in Sunless Land

Career guidance on "Luminous Career Opportunities in Sunless Land," which was conducted by the IEEE IAS SCT Student Branch. The speaker was Dr Vishnu Nandan, a remote scientist, spoke about the luminous career opportunities in a sunless land. The event took place on December 9th, 2022, in the seminar hall, from 4 pm to 6 pm.

Dr Vishnu Nandan opened the event by introducing himself and his background as a remote scientist. He then went on to discuss the significance of sunless land and its impact on various industries, including agriculture, energy, and communication. Throughout the talk, Dr Nandan provided valuable insights into the various career paths available in this field and the skills required to succeed. He also discussed the opportunities for research and innovation in sunless land and the impact it could have on society. The talk was followed by a question and answer session where participants had the opportunity to ask Dr Nandan about their specific career-related concerns and doubts. In conclusion, the career guidance event on "Luminous Career Opportunities in Sunless Land" organized by the IEEE IAS SCT Student Branch was a success. It provided valuable insights into the luminous career opportunities in sunless land and the skills required to succeed in this field. The attendees were impressed by the talk, and the event was an excellent opportunity for them to learn about this growing field and the opportunities available to them.



## Sold Out! -Marketing Competition



Saintgits IEEE IAS chapter conducted a marketing competition Sold Out on December 9th, 2022. The event was held at the seminar hall of the EEE department. The Competition started by 12:50 pm and had 8 participants in total.

Students were given a choice between bottle and Notebook and could put their creativity and out of the box imagination to market the product in under 2 minutes.

## RESONANCE: 3D PRINTING WORKSHOP

3D printing Workshop was an event conducted by IAS IEEE MEC SB as part of RES-ONANCE, a tie up by both IAS IEEE MEC SB and IAS IEEE RSET SB on 10 December 2022. The Workshop was handled by Students of RSET, a total of 25 participants had attended the workshop. The partici pants were instructed to bring a laptop with the Fusion 360 software already installed for the session. The session began with a tour of the software, and then participants were guided to design models using the same after. They were asked to design a keychain with their names en graved and then were printed using 3D printers.



#### **IPRECON**

2022 IEEE International Power and Renewable Energy Conference (IPRECON) is the 3rd edition of India's first IEEE IAS Club of 6 Technical Paper Conference organized by IEEE Student Branch College of Engineering Karunagappally (IEEE SB CEK), technically sponsored by IEEE IAS, IEEE PES and IEEE PELS. IPRECON provides a platform for students and professionals from all around the world to share their findings in the fields of Power, Renewable Energy and Computing Technologies. With the theme "Engineering the sustainable world with Renewable Energy Resources through ingenious computing technologies", the conference will be held on the 16th, 17th and 18th December 2022 in College of Engineering Karunagappally, Kollam, Kerala, India.



#### **DAYLIGHT**

IEEE IAS SBC MESCE, in collaboration with IEEE PES SBC MESCE, IEEE PES Kerala Chapter, and supported by IEEE Malabar Subsection conducted DAY-LIGHT a one day solar workshop on 16th

December 2022, at the main seminar hall of EEE Department. The main aim of the workshop was to provide an intensive hands-on workshop to the students through which they will get to know the ins and outs of Solar Power.

The workshop includes both theory and practical session on the solar panels planted on the terrace of the EEE Department. The workshop was limited to 35 students. The workshop started with a welcome speech by Ms. Navya Menon P (Secretary, IEEE PES SBC MESCE). Dr. Nafeesa K, HOD, EEE Department MESCE delivered the inaugural address and felicitation was delivered by Sajna N K (Chapter Advisor, IEEE IAS SBC MESCE). The first theory session was handled by Dr. Nafeesa K, and the second session was handled by Ms. Sajna N K. Afternoon session stu dents were provided with a hands on workshop on the solar panels planted on the terrace of EEE Department.

This session was handled by the lab instructors of EEE Dept Mr. Ajay V, Mr. Idirees Shafi A, Mr. Pramod Kumar MP. The workshop succeeded in gaining knowledge about solar panels and its advantages or relevance in our daily life. The workshop was concluded with a vote of thanks by Mr. Shamil Chairperson IEEE PES SBC MESCE. Certificates for the participants and the tutors were also distributed during this session.



## Dig-Bug

As a part of Lollapalooza 3.0 Industrial Applications Society of IEEE SB GCEK conducted a Matlab Debugging competition, Dig-Bug, on 23rd December 2022. The competition was conducted exclusively for the IEEE members of GCEK and held in an offline mode. 13 students participated in the event. Pooja Lakshmi C from the team Pirates bagged the first prize, Agath Hemachandran from the team Trailblazers and Jithin Chandran E from Phoenix bagged the second and third prizes respectively.



### Relevance of 5G

The talk session on "Relevance of 5G," was conducted by K Abbiram, the current IEEE IAS SCT SB Vice Chair, and hosted by IEEE IAS SCT Student Branch. The event took place on December 26th 2022, through a virtual platform, Google Meet. Abbiram opened the talk session by introducing 5G technology and its key features, such as increased speed, lower latency, and improved network capacity. He then went on to discuss the various applications of 5G, including the Internet of Things (IoT), virtual reality, autonomous vehicles, and smart cities. Abbiram highlighted the po tential benefits of 5G, such as improved efficiency, reduced costs, and increased innovation. Throughout the talk, Abbiram also addressed common misconceptions about 5G and provided insights into the current state of 5G deployment and adoption.



The talk session provided a comprehensive overview of the relevance of 5G and its potential impact on various industries.

Abbiram's expertise and engaging presentation made the event informative and enjoyable for the audience. The use of virtual technology allowed for a convenient and an accessible platform for participants to join from their own location.

## **Student Execom 2023**





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